

CITY OF GARDENA GENERAL PLAN, ZONING CODE & ZONING MAP AMENDMENT PROJECT

PUBLIC REVIEW DRAFT ENVIRONMENTAL IMPACT REPORT

Prepared for:

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Community Development Department
Development Services
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Gardena, CA 90247

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D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm





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Public Review Draft Environmental Impact Report

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Appendix H – Transportation Analysis

Appendix I – Tribal Consultation/Correspondence



1.0 EXECUTIVE SUMMARY

1.1 PURPOSE

This Draft Environmental Impact Report (Draft EIR) was prepared in accordance with and in fulfillment of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines. As described in CEQA Guidelines Section 15121(a), an EIR is a public information document that assesses the potentially significant environmental impacts of a project. CEQA requires that an EIR be prepared by the agency with primary responsibility over the approval of a project (the lead agency). The City of Gardena (City) is the lead agency for the proposed City of Gardena General Plan, Zoning Code & Zoning Map Amendment Project (herein referred to as “Land Use Plan and Zoning Amendment Project” or “Project”). Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development where feasible and have the obligation to balance economic, environmental, and social factors.

This Draft EIR has been prepared according to CEQA requirements to evaluate the potential environmental impacts associated with the implementation of the Land Use Plan and Zoning Amendment Project. This Draft EIR also discusses alternatives to the Project and proposes mitigation measures that would offset, minimize, or otherwise avoid potentially significant environmental impacts. This Draft EIR is intended to provide decision-makers and the public with information that enables consideration of the environmental consequences of the Land Use Plan and Zoning Amendment Project, and has been prepared in accordance with CEQA (California Public Resources Code [PRC] § 21000 *et seq.*) and the CEQA Guidelines (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3).

1.1 PROJECT SUMMARY

PROJECT LOCATION

The City of Gardena is located in the South Bay region of Los Angeles County, refer to [Figure 3-1, *Regional Location*](#) in [Section 3.0, *Project Description*](#). The City is approximately 13 miles south of downtown Los Angeles and is an urban community encompassing 5.7 square miles. The City is situated near four major freeways: Harbor (I-110), San Diego (I-405), Century (I-105), and Artesia (SR-91). Surrounding communities are Hawthorne and Los Angeles County to the north and west, Torrance to the south and west, and Los Angeles to the south and east.

PROJECT BACKGROUND

This Land Use Plan and Zoning Amendment Project is a result of the City’s recent adoption of the 6th Cycle Housing Element for 2021 – 2029 (Housing Element). Housing element law requires local governments to adequately plan to meet their existing and projected housing needs, including their share of the regional housing needs allocation (RHNA) (California



Government Code Sections 65580-65588) based on a Regional Housing Needs Plan (RHNP) developed by councils of government. The Southern California Association of Governments (SCAG) determined that the City of Gardena will need to accommodate the development of 5,735 units during the 8-year planning period.

Government Code Section 65583(a)(3) requires local governments to prepare an inventory of land suitable for residential development, including vacant sites and sites having the potential for redevelopment, and an analysis of the relationship of zoning on these sites to public facilities and services. The inventory of land suitable for residential development shall be used to identify sites that can be developed for housing within the planning period. The Gardena Housing Element contained Inventory Sites that accommodated its RHNA allocation along with an approximate 22 percent buffer for affordable units, as recommended by the Department of Housing and Community Development.

Because the City has limited vacant or underutilized properties within the existing residential and mixed-use zones to accommodate the RHNA number, the Housing Element requires that almost all of the Inventory Sites be provided with one of four housing overlays and that certain amendments be made to the Gardena Zoning Code, in part to provide for ministerial approval of affordable projects and also to provide objective zoning standards.

The Housing Element identified 122 sites (468 parcels consolidated) that are considered viable for housing development (the Inventory Sites). Except for two sites which are identified for rezoning to a very high residential density, all the other sites are slated to receive one of four housing overlays. The Housing Element included a program requirement from HCD that the City amend the Land Use Plan and adopt an urgency ordinance by February 15, 2023, implementing the housing overlay zones, rezoning for the Inventory Sites, and provide that any project with a minimum of 20 percent affordable housing be ministerially approved. The City informed HCD that it was studying additional non-inventory sites to be rezoned (Non-inventory Sites) to create better development patterns and opportunities and was preparing an EIR to study all of the changes. As a result, the program further provided that within one year of the adoption of the urgency ordinance, the City was to complete the rezoning of the overlay zones, which would include a CEQA analysis.

On February 15, 2023, the City Council adopted Resolution No. 6620 updating the Land Use Plan, including changes to the Land Use Map, Urgency Ordinance No. 1847¹ amending the

¹ In addition to the Urgency Ordinance, the same changes to the Zoning Code and Zoning map were also made by Ordinance No. 1848 which was introduced on February 15, 2023 and adopted on February 28, 2023.



Zoning Code and revising the Zoning Map, and Resolution No. 6621 adopting a color palette for buildings, fences, and walls. The Resolution and Ordinance also rescinded the Artesia Corridor Specific Plan, changed the land use designation for five of the six areas in the Specific Plan, and rezoned all six Specific Plan areas.

This EIR examines the potential environmental impacts associated with the land use and zoning changes, including text amendments, previously made in connection with the Housing Element implementation (as described above), as well as potential environmental impacts associated with the proposed land use and zoning changes to the Non-inventory Sites and additional Zoning Code text amendments, not previously considered. As the City Council will reaffirm its previous actions, for purposes of this EIR and analysis, all actions will be described as if they are new; refer to Section 3.4.6, Approach to the Analysis for additional discussion. However, it is noted that if the City Council does not approve the entire Project, as defined and analyzed in this EIR, the City Council would need to take an affirmative action to rescind changes to the Land Use Map, Zoning Code, and Zoning Map that were previously approved with the exception of pre-permit and post-permit requirements which will remain in place regardless.

PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124(b), the EIR project description must include “[a] statement of objectives sought by the proposed project”. The statement of objectives should include the underlying purpose of the project and may discuss the project benefits. Additionally, the City has identified the following Project objectives:

Implement Housing Element programs: Several of the programs described in the City’s 6th Cycle Housing Element are intended to increase residential development potential to make Gardena’s share of regional housing development goals attainable and to implement state law. The implementation of the Housing Element programs is achieved through a combination of Land Use Element, zoning text, and zoning map amendments, as well as the adoption of new policies and procedures. The implementation of these various amendments and changes is the objective of this project.

Create consistency between general plan and zoning: Recent court decisions and amendments to state law provide that where there is a conflict between density allowed in the general plan and zoning, the general plan will prevail. In order to insure that properties will not be developed at a higher density than originally anticipated by the City’s zoning, new land use designations and zoning designations are being created to resolve inconsistencies.

Preservation of multi-family lots for higher density: To assist the City in reaching its RHNA numbers and providing as much housing as possible, minimum densities are imposed.



Provide opportunities for a mix of housing at varying densities: To meet the needs of current and future Gardena residents, maintain existing residential land use and zoning designations, while creating and applying new and modified land use and zoning designations throughout the City that allow for housing at varying densities.

Provide opportunities to align housing production with state and local sustainability goals: Contribute toward the reduction of vehicle miles traveled (VMT) and greenhouse gas emissions by allowing for infill residential and mixed-use development at higher densities in proximity to areas served by transit, jobs, and services.

PROJECT CHARACTERISTICS

The Project amends the Land Use Plan, including the Land Use map, Zoning Code, and Zoning Map, and rescinds the Artesia Corridor Specific Plan (ACSP).

Land Use Plan Amendment

The amended Land Use Plan of the Community Development Element of the General Plan would include the addition of new land use designations shown in Table 1-1, Proposed Land Use Designations and Corresponding Zones. These additional land use designations are a readoption of the February 2023 actions.

Section 3.0, Figure 3-6, Land Use Changes (February 2023) Proposed for Readoption, shows the land use changes that are being readopted and Figure 3-7, Additional Proposed Land Use Changes, shows the additional land use changes that are being included in this action. Figure 3-8, Combined General Plan Land Use Policy Map Amendments (Readoption and Adoption), is a combination of both maps, illustrating all land use changes considered within this EIR. Figure 3-9, Proposed Gardena General Plan Land Use Policy Map, shows the land uses of all parcels within the City, incorporating the proposed changes illustrated in Figure 3-8.

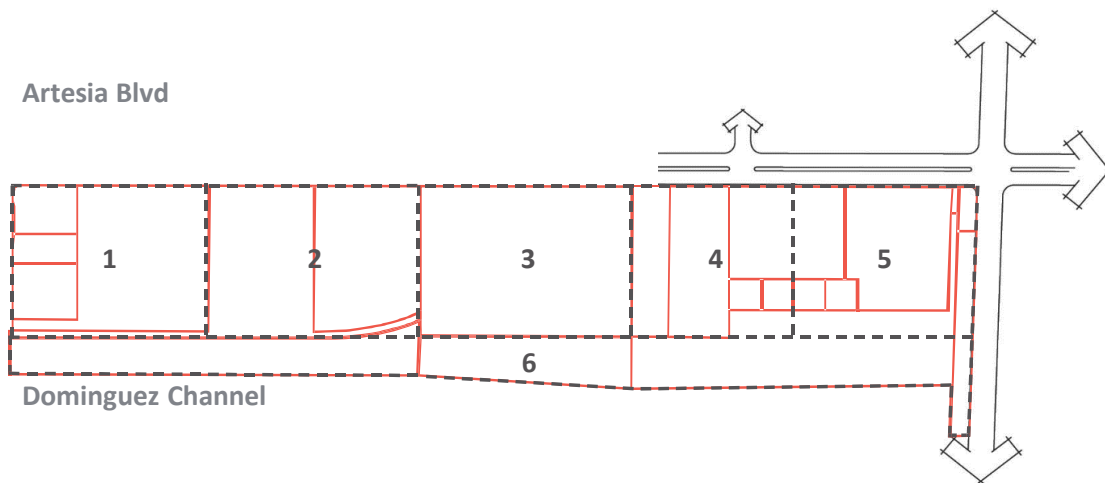


Land Use Plan Update

In addition to the new designations to be added to the Land Use Plan update shown in [Table 1-1](#), additional changes will be made to the Land Use Plan as described below. Except for the necessary changes to the technical information to reflect the changes in land use designation of the additional properties, this is a readoption of the February 2023 actions.

- The middle level of stepped density will be deleted in the High Density Residential and Mixed-Use Overlay areas so that all lots which are at least 0.5 acre will be allowed a density of up to 30 dwelling units/acre.
- Additional policies are added to address the implementation of the Housing Element.
- The General Plan Land Use Policy Map will be amended to apply new land use designations, as shown on [Figure 3-8](#), and described below²:
 - The Project proposes to rescind the ACSP and amend the General Plan Land Use Policy Map as set forth below:

Artesia Corridor Specific Plan Areas



² A list of parcels and their existing and proposed land use designations are provided in Appendix C, General Plan Land Use Policy Map Amendments.



Specific Plan Area	General Plan Land Use		Zoning		Land Use
	Existing	Proposed	Existing	Proposed	
1	Specific Plan	Commercial	Artesia Corridor Specific Plan	General Commercial (C-3)	No change from existing commercial use
2	Specific Plan	Very High Density Residential	Artesia Corridor Specific Plan	Very High Density Residential (R-6)	Inventory Sites which will allow 51 -70 du/acre.
3/4	Specific Plan	Artesia Mixed Use	Artesia Corridor Specific Plan	Artesia Mixed-Use (AMU)	No change from existing mixed-use; applies new General Plan land use category and zone
4/5	Specific Plan	Specific Plan (No Change)	Artesia Corridor Specific Plan	1450 Artesia Specific Plan ³	Proposed mixed-use industrial/commercial/self-storage project. Residential to remain as legal non-conforming.
5 ¹ /6	Specific Plan	Public/ Institutional	Artesia Corridor Specific Plan	Official (O)	No change from existing use
<p>Note:</p> <p>1. This portion of Area 5 is comprised of the railroad right-of-way.</p>					

- The proposed Housing Overlay designations will be applied to numerous sites designated for non-residential uses; the base land use designation would remain unchanged.
- The General Plan Land Use Policy Map will be amended to re-designate several sites in conjunction with the Zoning Map amendment (described below) to

³ The applicant for a project at 1450 Artesia Boulevard requests approval to adopt a new specific plan (the 1450 Artesia Specific Plan), a zone text Amendment, a zone map Amendment, a development agreement, site plan review, and lot line adjustment. A project-specific EIR is currently being prepared for this proposed project which is identified as a cumulative project within this EIR. Refer to Section 4.0, Basis of Cumulative Analysis.



eliminate split-zoned properties and re-designate other properties to match the existing uses, densities, or intensities that already occur on the property.

- Technical information will be updated throughout the Land Use Plan.

Zoning Code Amendments

In addition to the new zones to be added to the Zoning Code as shown in Table 1-1, additional text changes will be made to the Zoning Code as described below. The underlined changes are ones that were not previously added.

- Add new zoning designations with development standards for the following zones: Very High Density Residential (R-6); Medium Density Overlay (HO-3); High Density Overlay 30 (HO-4); High Density Overlay 50 (HO-5); Very High Density Overlay 70 (HO-6); and Artesia Mixed Use (AMU).
- Add new objective Residential Design Standards.
- Add a new chapter on Design Review for residential development.
- Eliminate the possibility of single-family homes in the R-3 zone and set a minimum density of 12 du/acre.
- Eliminate the mid-range density in the R-4 and MUO zones so that all properties in these zones with a minimum size of 0.5 acre will be allowed to develop at up to 30 units per acre in order that sites of 0.5 acre to 1.0 acre can be counted towards sites suitable for affordable housing.
- Reduce the minimum lot size to develop an MUO designated property with residential to 0.5 acre rather than 1 acre.
- Eliminate the minimum dwelling unit size in the MUO zone, as called for in the Housing Element.
- Amend landscape regulations for all properties in the City to comply with water efficiency regulations and add requirements for allowed planting types and sizes.
- Add language regarding drainage and paving requirements for all types of development.
- Add requirements for submittal of technical reports needed for residential development projects.
- Add standard requirements for residential development projects, including requirements for security and lighting plans for residential development projects, and providing pet relief areas in multifamily residential developments.
- Amend required findings for Site Plan Reviews.
- Add standard regulations regarding tribal cultural resources treatment agreements for those developments where cultural resources are found on site.
- Amend section on satellite antennas to be compliant with law.
- Update the uses allowed in the Home Business zone.
- Adding new definitions.



Zoning Map Amendments

The Gardena Zoning Map will be amended to apply the new zones to specific parcels within the City and to eliminate split-zoned properties and rezone other properties to match the existing uses, densities, or intensities that already occur on those properties, as described below⁴:

- The Project proposes to rescind the ACSP and amend the Zoning Map as described above. The proposed Housing Overlays will be applied to numerous sites designated for non-residential uses where the base zone will remain unchanged.
- The Zoning Map will be amended to re-zone several sites in conjunction with the General Plan Amendment (described above) to eliminate split-zoned properties and re-zone other properties to match the existing uses, densities, or intensities that already occur on the property.

Section 3.0 Figure 3-10, Zoning Changes (February 2023) Proposed for Readoption, shows the zoning changes that are being readopted and Figure 3-11, Additional Proposed Zoning Changes, shows the additional zoning changes that are being included in this action. Figure 3-12, Combined Zoning Changes (Readoption and Adoption), is a combination of both maps, illustrating all zoning changes considered within this EIR. Figure 3-13, Proposed Gardena Zoning Map, shows the zoning of all parcels within the City, incorporating the proposed changes illustrated in Figure 3-12.

Specific Plan Amendments

The Project proposes to readopt the rescission of the ACSP and the parcels would be re-designated and re-zoned, as described above.

Development Potential

The Gardena Land Use Policy Map and Zoning Map will be amended to apply the new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development when compared to existing conditions. There is no increased development capacity for those parcels to be redesignated or rezoned only to resolve inconsistencies with existing on-site conditions. Some of the site-specific redesignations and modifications proposed to the land use categories and corresponding zones (refer to Table 1-1) would result in reductions in allowed residential densities and residential development potential when

⁴ A list of parcels and their existing and proposed zone classifications are provided in Appendix D, Zoning Map Amendments.



compared to the existing General Plan land use and land use categories; however, overall the proposed Project would provide for increased residential densities and increased residential development potential (refer to Table 1-2 and Table 1-3) and would be in compliance with the Housing Crisis Act.

Table 1-2, *Proposed Residential Development Potential*, identifies the number of new residential units that could occur within each land use designation based on the density assumptions and acreages provided.

**Table 1-2
Proposed Residential Development Potential**

Proposed Land Use Designations	Density Assumption (du/ac)	Total Acres	Total Units
Medium Density Residential	17	3.1	52.7
High Density Residential	23	1.15	26.45
Very High Density Residential	51	7.61	388.11
Home Business/Medium-Density Overlay	17	17.63	299.71
Home Business/High-Density Overlay 50	31	1.82	56.42
Commercial/Medium-Density Overlay	17	15.13	257.21
Commercial/High-Density Overlay 30	23	36.53	840.19
Commercial/High-Density Overlay 50	31	86.09	2,668.79
Commercial/Very High-Density Overlay 70	51	52.53	2,679.03
Neighborhood Commercial/High-Density Overlay 50	31	11.73	363.63
Industrial/Medium-Density Overlay	17	11.90	202.30
Industrial/High Density Overlay 30	23	60.98	1,402.54
Industrial/High-Density Overlay 50	31	56.70	1,757.70
Industrial/Very High-Density Overlay 70	51	37.03	1,888.53
Public/Institutional/High-Density Overlay 50	31	1.44	44.64
Religious Institution Overlay ²	--	--	200
Total			13,128¹

Source: City of Gardena, November 22, 2022.

Notes: du/ac = dwelling unit per acre

1. Number does not equate due to rounding.

2. A Religious Institution Overlay is not currently being proposed; however the analysis considers the potential for a future overlay and assumes 50 sites could receive the overlay with an average of 4 DU/site.



Approach to the Analysis

Although the proposed Project does not involve site-specific development, the intent is to provide adequate sites for residential development to accommodate the City's RHNA and to allow for additional residential development opportunities should they arise. To allow for new residential development, it is assumed existing on-site uses will be removed and residential development, consistent with the development assumptions identified in Table 1-2, will occur. The assumptions used in this EIR are consistent with the assumptions that were used in the recently adopted 6th Cycle Housing Element and assumes every Inventory Site, as well as the Non-inventory sites, will actually be developed with residential uses only; non-residential development would not occur. However unlikely, the assumptions in this EIR present a possible development potential. Table 1-3, Proposed Project Net Development Potential, identifies the net change in development that could occur with implementation of the proposed Project.

Additionally, although no Religious Institution Overlay is being proposed at this time for either the Land Use Plan or zoning, the City committed in its Housing Element to explore the feasibility of establishing a Religious Site Housing Overlay. The anticipated development potential associated with the future implementation of the overlay is included within the development potential and accounted for within this EIR; refer to Section 3.4.5, Development Potential, above. It is anticipated that approximately 50 sites may have the potential for this overlay; therefore, for purposes of this EIR, it is assumed that an average of four housing units could be developed per site, resulting in a total of approximately 200 residential uses; refer to Section 3.4.5, Development Potential, above.

As indicated in Table 1-3, the proposed Project could result in the following when compared to existing conditions:

- 154 fewer single-family dwelling units;
- 12,167 additional multiple-family dwelling units; and
- 7,544,381 fewer square feet of non-residential development.



**Table 1-3
Proposed Project Net Development Potential**

Land Use	Development	
	Dwelling Units	Building Square Feet
Existing Land Uses to be Removed		
Single-Family Residential	-154	
Multiple-Family Residential	-961	
Non-Residential Development		-7,544,381
New Residential Development Potential		
Single-Family Residential	0	
Multiple-Family Residential	13,128	
Non-Residential Development		0
Net New Development Potential		
Single-Family Residential	-154	
Multiple-Family Residential	12,167	
Non-Residential Development		-7,544,381
Source: City of Gardena, November 22, 2022.		

1.2 ENVIRONMENTAL IMPACTS

The City determined that a Program EIR should be prepared pursuant to the California Environmental Quality Act Guidelines (CEQA Guidelines). The environmental issues identified by the City for assessment in the Program EIR are:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems



Section 5.0, *Environmental Analysis*, of this EIR provides a description of potential environmental impacts of the Project. After implementation of identified mitigation measures, most of the potentially significant impacts associated with the proposed Project would be reduced to a less than significant level. However, the impacts listed below could not be feasibly mitigated and would result in a significant and unavoidable impact with implementation of the Project.

Air Quality

- The Project would not be consistent with AQMP Consistency Criteria No. 1 and No. 2 and would therefore conflict with or obstruct implementation of the applicable air quality plan resulting in a significant project and cumulative project impact.
- Project implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts during construction activities.

Public Services

- Project implementation would 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.
- Project implementation would result in a cumulatively considerable contribution to the increase in 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.

1.3 SUMMARY OF PROJECT ALTERNATIVES

Section 15126.6 of the CEQA Guidelines requires the identification and evaluation of a range of reasonable alternatives designed to feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. In addition, CEQA requires a comparative evaluation of the merits of the alternatives.

Pursuant to Section 15126.6(f)(1) of the CEQA Guidelines, factors that may be taken into account when addressing the feasibility of alternatives include site suitability, economic viability, availability of infrastructure, general plan consistency, other plan 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.

This EIR includes three alternatives as discussed below.



- Alternative 1 – “No Project/Existing General Plan” Alternative
- Alternative 2 – “Proposed Project With Inventory Sites Only” Alternative
- Alternative 3 – “Proposed Project With Fewer Non-inventory Sites” Alternative

ALTERNATIVE 1: NO PROJECT/EXISTING GENERAL PLAN

As required by CEQA Guidelines Section 15126.6(e), under Alternative 1, the City would not implement the Land Use Plan and Zoning Amendment Project. This Alternative assumes the City Council would not approve the entire Project, as defined and analyzed in this EIR, and would therefore take an affirmative action to rescind changes to the Land Use Map, Zoning Code, and Zoning Map that were previously approved in February 2023.

Specifically, the approvals associated with Resolution No. 6620 updating the Land Use Plan, including changes to the Land Use Map, Urgency Ordinance No. 1847⁵ amending the Zoning Code and revising the Zoning Map, and Resolution No. 6621 adopting a color palette for buildings, fences, and walls would be rescinded, thereby reverting back to the General Plan, Zoning Code, and Zoning Map in effect prior to February 15, 2023. The exception would be the pre-permit requirements (Municipal Code Section 18.42.200), which include providing a geotechnical investigation; compliance with air quality objective standards; provision of demolition and construction waste recycling plans; compliance with the noise ordinance and noise reduction techniques; submittal of a sewer capacity study; and submittal of a Phase I Environmental Site Assessment under specific conditions, and post-permit requirements (Municipal Code Section 18.42.210) including compliance with all mitigation measures in the mitigation monitoring program for the City’s General Plan and implementation of mitigation measures to specifically address paleontological resources, tribal cultural resources, and migratory birds established under Urgency Ordinance No. 1847, which amended Title 18 of the Gardena Municipal Code. These requirements would continue to be required under this Alternative.

Additionally, this Alternative would not result in land use and zoning changes to the Non-inventory Sites to allow for additional residential development or amendment of the Zoning Map to eliminate split-zoned properties or re-zone other properties to match the existing uses, densities, or intensities that already occur on the property. This Alternative assumes development of the Project Area would occur in accordance with the development potential

⁵ In addition to the Urgency Ordinance, the same changes to the Zoning Code and Zoning map were also made by Ordinance No. 1848 which was introduced on February 15, 2023 and adopted on February 28, 2023.



assumed in the General Plan Community Development Element's Land Use Plan as it existed in March 2021, which would not be consistent with the adopted 2021-2029 Housing Element.

ALTERNATIVE 2: PROPOSED PROJECT WITH INVENTORY SITES ONLY

Alternative 2 would implement all components of the Project, but without applying the Housing Overlays to the Non-inventory Sites. The land use designations and zoning for the Non-inventory Sites would remain unchanged from existing conditions. Alternative 2 would continue to implement the Housing Element through changes to the land use designations and zoning for the 122 Inventory Sites, consistent with the proposed Project. The proposed amendments to the Land Use Plan of the Community Development Element including technical updates, proposed Zoning Code amendments, including new zoning designations with development standards, and Zoning Map amendments to apply the new zones and to eliminate split-zoned properties and rezone other properties to match the existing uses, densities or intensities, and to rescind the Artesia Corridor Specific Plan (ACSP) would also occur under Alternative 2. Overall, Alternative 2 would allow for reduced residential development potential when compared to the Project; refer to Table 1-4, Net Development Potential By Alternative.

ALTERNATIVE 3: PROPOSED PROJECT WITH FEWER NON-INVENTORY SITES

Alternative 3 would implement all components of the Project, but fewer Non-inventory Sites would be included; therefore, fewer sites would receive Housing Overlays. Alternative 3 would continue to implement the Housing Element through changes to the land use designations and zoning for the 122 Inventory Sites, consisting of 468 parcels, and would provide additional housing opportunities within 672 Non-inventory Sites, consistent with the proposed Project (130 fewer Non-inventory Sites when compared to the Project). The proposed amendments to the Land Use Plan of the Community Development Element including technical updates, proposed Zoning Code amendments, including new zoning designations with development standards, and Zoning Map amendments to apply the new zones and to eliminate split-zoned properties and rezone other properties to match the existing uses, densities or intensities, and to rescind the Artesia Corridor Specific Plan (ACSP) would also occur under Alternative 3. Overall, Alternative 3 would allow for reduced residential development potential when compared to the Project; refer to Table 1-4.



**Table 1-4
Net Development Potential By Alternative**

Alternatives	Dwelling Units		Non-Residential Development (square feet)
	Single-Family Development	Multi-Family Development	
Proposed Project	-154	+12,167	-7,544,381
Alternative 1: No Project/Existing General Plan	0	+2,563	+3,626,289
Alternative 2: Proposed Project With Inventory Sites Only ¹	-26	+7,436	-4,413,275
Alternative 3: Proposed Project With Fewer Non-inventory Sites ¹	-146	+10,371	-6,087,399
Source: City of Gardena, November 22, 2022.			

1.4 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

In accordance with the CEQA Guidelines, this EIR focuses on the Project’s significant effects on the environment. The CEQA Guidelines defines a significant effect as a substantial adverse change in the physical conditions, which exist in the area affected by the proposed project. A less than significant effect is one in which there is no long or short-term significant adverse change in environmental conditions. Some impacts are reduced to a less than significant level with the implementation of General Plan Update policies and actions, mitigation measures, and/or compliance with regulations.

The environmental impacts of the proposed Project, the impact level of significance prior to mitigation, the proposed mitigation measures to mitigate an impact, and the impact level of significance after mitigation are summarized in Table 1-5, Summary of Environmental Impacts and Mitigation Measures.



**Table 1-5
 Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.1 Aesthetics			
Would the project have a substantial adverse effect on a scenic vista?	Less Than Significant Impact.	No mitigation measures are required.	--
In an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, have a substantial adverse effect on a scenic vista?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact.	No mitigation measures are required.	--
5.2 Air Quality			
Would the project conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant Impact.	Refer to Mitigation Measures AQ-1 through AQ-7, below.	Significant and Unavoidable Impact.



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>Would the project result in a cumulative 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?</p>	<p>Potentially Significant Impact.</p>	<p>AQ-1: <u>Dust Control</u>. The construction plans and specifications and construction permitting for future development projects shall ensure to the satisfaction of the City of Gardena Community Development Department that the following dust suppression measures in the SCAQMD CEQA Air Quality Handbook will be implemented by the construction contractor to reduce the project's emissions:</p> <ul style="list-style-type: none"> • Revegetate disturbed areas. • Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph. • Sweep all streets once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water). • Install "shaker plates" prior to construction activity where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment prior to leaving the site. • Pave, water, or chemically stabilize all onsite roads. 	<p>Significant and Unavoidable Impact.</p>



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<ul style="list-style-type: none"> Minimize at all times the area disturbed by clearing, grading, earthmoving, or excavation operations. <p>AQ-2: <u>Tier 4 Construction Equipment</u>. Construction plans and specifications and construction permitting shall include to the satisfaction of the City of Gardena Community Development Department the requirement that for construction equipment greater than 150 horsepower (>150 HP), the construction contractor shall use off-road diesel construction equipment that complies with Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 4 emissions standards during all construction phases and will ensure that all construction equipment be tuned and maintained in accordance with the manufacturer’s specifications.</p> <p>AQ-3: <u>Low VOC Paints</u>. Construction plans and specifications and construction permitting shall include to the satisfaction of the City of Gardena Community Development Department the requirement that “Super-Compliant” low VOC paints</p>	



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>which have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD’s Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC.</p> <p>AQ-4: <u>Electric Construction Equipment</u>. Construction plans and specifications and construction permitting shall state to the satisfaction of the City of Gardena Community Development Department that the construction contractor shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site, if available rather than electrical generators powered by internal combustion engines.</p> <p>AQ-5: <u>Alternative Fueled Construction Equipment</u>. Construction plans and specifications and construction permitting shall require to the satisfaction of the City of Gardena Community Development Department that the construction contractor use alternative fueled, engine retrofit technology, after-treatment products (e.g., diesel oxidation catalysts, diesel particulate filters), and/or other</p>	



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>options as they become available, including all off-road and portable diesel-powered equipment.</p> <p>AQ-6: <u>Construction Equipment Maintenance</u>. Construction plans and specifications and construction permitting shall require to the satisfaction of the City of Gardena Community Development Department that construction equipment be maintained in good operation condition to reduce emissions. The construction contractor shall ensure that all construction equipment is being properly serviced and maintained as per the manufacturer’s specification. Maintenance records shall be available at the construction site for City verification.</p> <p>AQ-7: <u>Construction Vehicle Maintenance Plan</u>. Prior to the issuance of any grading permits, the applicant and/or building operators shall submit construction plans and a construction vehicle management plan to the City of Gardena Community Development Department denoting the proposed schedule and projected equipment use. The construction vehicle management plan shall include such things</p>	



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		as: idling time requirements; requiring hour meters on equipment; documenting the serial number, horsepower, age, and fuel of all onsite equipment. The plan shall include that California state law requires equipment fleets to limit idling to no more than 5 minutes. Construction contractors shall provide evidence that low emission mobile construction equipment will be utilized, or that their use was investigated and found to be infeasible for the project as determined by the City. Contractors shall also conform to any construction measures imposed by SCAQMD and the City of Gardena Community Development Department.	
Would the project expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant Impact.	Refer to Mitigation Measures AQ-1 through AQ-7.	Significant and Unavoidable Impact.
Would the project, combined with other related cumulative projects, result in a cumulatively considerable net increase of	Potentially Significant Impact.	Refer to Mitigation Measures AQ-1 through AQ-7.	Significant and Unavoidable Impact.



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			
Would the project, combined with other related cumulative projects, expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact.	No mitigation measures are required.	--
5.3 Biological Resources			
<p>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?</p> <p>Would the project a have 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</p>	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>Service?</p> <p>Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>			
<p>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?</p>	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>--</p>
<p>Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</p>	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>--</p>
<p>Would the project, combined with other related cumulative projects, 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?</p> <p>Would the project, combined with other</p>	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>--</p>



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>related cumulative projects, a have 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?</p> <p>Would the project, combined with other related cumulative projects, have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>			
<p>Would the project, combined with other related cumulative projects, 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?</p>	Less Than Significant Impact.	No mitigation measures are required.	--
<p>Would the project, combined with other related cumulative projects, conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</p>	Less Than Significant Impact.	No mitigation measures are required.	--
5.4 Cultural Resources			
Would the Project cause a substantial	Potentially Significant	CUL-1: Applicants for future proposed	Less Than



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>adverse change in the significance of a historical resource pursuant to §15064.5?</p>	<p>Impact.</p>	<p>projects involving sites with intact extant building(s) more than 45 years old shall provide a historic resource technical study, prepared by a qualified architectural historian meeting Secretary of the Interior Standards, evaluating the significance and data potential of the resource under CEQA. If significance criteria are met, detailed mitigation recommendations shall be required as part of the technical study. Development of mitigation measures shall consult <i>The Secretary of the Interior’s Standards for the Treatment of Historic Properties</i> to provide guidance for the preservation, rehabilitation, restoration, and reconstruction of historic buildings. When referring to these guidelines, the direct and indirect impacts of the project on a historic resource shall be considered to determine an appropriate treatment for a historic property.</p> <p>In the event a historic building/structure is recommended eligible for listing (as the result of the technical study) but will be demolished or partially demolished as the result of the project, the drafting of a Historic American Building Survey-like (HABS-like) or Historic American</p>	<p>Significant Impact with Mitigation Incorporated.</p>



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>Engineering Record-like (HAER-like) may be recommended as part of mitigation. If a <i>listed</i> historic building or structure will be demolished or partially demolished as the result of the project a full HABS or HAER document shall be prepared. Consultation with California SHPO shall be required to determine the level of documentation required on a case-by-case basis to be determined in consultation with the City of Gardena Community Development Department and a qualified architectural historian meeting Secretary of the Interior Standards.</p>	
<p>Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</p>	<p>Potentially Significant Impact.</p>	<p>CUL-2: Applicants for future proposed ground disturbing projects shall be required to either: (1) provide a technical cultural resources assessment consisting of a record search, survey, background context and project specific recommendations performed by a qualified archaeologist meeting Secretary of the Interior Standards to the City of Gardena for review and approval; or if Applicants choose not to provide a technical cultural resources assessment (2) provide documentation to the City of Gardena demonstrating full-time monitoring by an archaeologist and a Native American monitor. If resources are</p>	<p>Less Than Significant Impact with Mitigation Incorporated.</p>



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		known or reasonably anticipated, the recommendations shall provide a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, provide a treatment plan for potential resources that includes data to be collected, requires professional identification, other special studies as appropriate, requires curation at a repository for artifacts meeting significance criteria, requires a comprehensive final mitigation compliance report including a catalog of specimens with museum numbers and an appendix containing a letter from the museum stating that they are in possession of the materials.	
Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of an archaeological resource	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
pursuant to §15064.5?			
Would the project, combined with other related cumulative projects, disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant Impact.	No mitigation measures are required.	--
5.5 Energy			
Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, conflict with or obstruct a State or local plan for renewable energy or energy efficiency.	Less Than Significant Impact.	No mitigation measures are required.	--
5.6 Geology and Soils			
Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
involving: <ul style="list-style-type: none"> 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. 			
Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> Strong seismic ground shaking or seismic-related ground failure, including liquefaction? 	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project result in substantial soil erosion or the loss of topsoil?	Less Than Significant Impact.	No mitigation measures are required.	--
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, lateral spreading, subsidence, liquefaction or collapse or 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?	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</p>	<p>Potentially Significant Impact.</p>	<p>GEO-1: Applicants for future proposed projects with planned impacts in undisturbed or native sediments (i.e., sediments that have not been moved or displaced since they were naturally deposited) ranked moderate or above shall be required to either (1) provide a technical paleontological assessment consisting of a record search, survey, background context and project specific recommendations performed by a qualified professional paleontologist who meets the standards set forth by the Society of Vertebrate Paleontology or (2) agree to monitoring all excavations below five feet. If resources are known or reasonably anticipated, the recommendations shall provide a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, provide a fossil recovery protocol that includes data to be collected, require professional identification, radiocarbon dates and other special studies as appropriate, require curation at a local curation facility such as the John D. Cooper Center operated by the County of Orange for fossils meeting significance criteria, require a comprehensive final mitigation</p>	<p>Less Than Significant Impact with Mitigation Incorporated.</p>



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		compliance report including a catalog of fossil specimens with museum numbers and an appendix containing a letter from the museum stating that they are in possession of the fossils.	
Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking or seismic-related ground failure, including liquefaction?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects result in substantial soil erosion or the loss of topsoil?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other	Less Than Significant	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
related cumulative projects 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 or 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?	Impact.		
Would the project, combined with other related cumulative projects directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less Than Significant Impact.	No mitigation measures are required.	--
5.7 Greenhouse Gas Emissions			
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the Project, combined with other related cumulative projects, generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
emissions of greenhouse gases?			
5.8 Hazards and Hazardous Materials			
Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, create a	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			
Would the project, combined with other related cumulative projects, create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.9 Hydrology and Water Quality			
Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less Than Significant Impact.	No mitigation measures are required.	--
<p>Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:</p> <ul style="list-style-type: none"> • Result in substantial erosion or siltation on- or off-site; • Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; • Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide 	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
substantial additional sources of polluted runoff; or <ul style="list-style-type: none"> • Impede or redirect flood flows? 			
In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
manner which would: <ul style="list-style-type: none"> • Result in substantial erosion or siltation on- or off-site; • Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; • Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or • Impede or redirect flood flows? 			
Would the project, combined with other related cumulative projects, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less Than Significant Impact.	No mitigation measures are required.	--
5.10 Land Use and Planning			
Would the project physically divide an established community?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project cause a significant	Less Than Significant	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
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.		
Would the project, combined with other related cumulative projects, physically divide an established community?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, 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?	Less Than Significant Impact.	No mitigation measures are required.	--
5.11 Noise			
Would the project generate 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?	Potentially Significant Impact.	NOI-1: Prior to issuance of a grading permit, a project applicant shall contract for a site-specific noise study for a parcel within 500 feet of a sensitive use. The noise study shall be performed by an acoustic consultant experienced in such studies, and the consultant's qualifications and methodology to be used in the study must be presented to City staff for consideration. The site-specific acoustic study shall specifically identify potential project impacts upon off-site sensitive uses due to construction. Mitigation shall be required if noise levels exceed 65 dBA.	Less Than Significant Impact with Mitigation Incorporated.



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Would the project generate excessive groundborne vibration or groundborne noise levels?	Potentially Significant Impact.	NOI-2: Applicants for future proposed projects whose construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings shall be required to prepare a vibration impact study which would be required to include a detailed mitigation plan to avoid any potential significant impacts to existing structures due to groundborne vibrations, based on the California Department of Transportation’s Construction Vibration Guidance Manual.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, generate 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?	Potentially Significant Impact.	Refer to Mitigation Measure NOI-1.	Less Than Significant Impact with Mitigation Incorporated.
Would the project, combined with other related cumulative projects, generate excessive groundborne vibration or groundborne noise levels?	Potentially Significant Impact.	Refer to Mitigation Measure NOI-2.	Less Than Significant Impact with Mitigation Incorporated.
5.12 Population and Housing			
Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
new homes, and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			
Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, 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)?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the Project combined with other related cumulative projects displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Less Than Significant Impact.	No mitigation measures are required.	--
5.13 Public Services			
Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
objectives for any of the public services: Fire protection?			
Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Police protection?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Schools?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the Project 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 governmental facilities,	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Other public facilities?</p>			
<p>Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Parks?</p> <p>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?</p> <p>Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</p>	<p>Potentially Significant Impact.</p>	<p>No mitigation measures are available.</p>	<p>Significant and Unavoidable Impact.</p>



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>Would the Project, combined with other relevant cumulative projects, 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire Protection, Police Protection, Schools, and other Public Facilities.</p>	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>--</p>
<p>Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Parks?</p> <p>Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that</p>	<p>Potentially Significant Impact.</p>	<p>No mitigation measures are available.</p>	<p>Significant and Unavoidable Impact.</p>



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>substantial physical deterioration of the facility would occur or be accelerated?</p> <p>Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</p>			
5.14 Transportation			
<p>Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?</p>	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>--</p>
<p>Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?</p>	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>--</p>
<p>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)?</p>	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>--</p>
<p>Would the project result in inadequate emergency access?</p>	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>--</p>
<p>Would the project, combined with other related cumulative projects, conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?</p>	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>--</p>



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Would the project, combined with other related cumulative projects, conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, result in inadequate emergency access?	Less Than Significant Impact.	No mitigation measures are required.	--
5.15 Tribal Cultural Resources			
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p> <ul style="list-style-type: none"> Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>5020.1(k)?</p> <ul style="list-style-type: none"> 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? 			
<p>Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p> <ul style="list-style-type: none"> Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in 	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>--</p>



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>Public Resources Code section 5020.1(k)?</p> <ul style="list-style-type: none"> 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? 			
5.16 Utilities and Service Systems			
<p>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?</p> <p>Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?</p>	Less Than Significant Impact.	No mitigation measures are required.	--
<p>Would the Project require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could</p>	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>cause significant environmental effects?</p> <p>Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</p>			
<p>Would the Project require or result in the relocation or construction of new or expanded stormwater facilities, the construction or relocation of which could cause significant environmental effects?</p>	Less Than Significant Impact.	No mitigation measures are required.	--
<p>Would the Project require or result in the relocation or construction of new or expanded electrical, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?</p>	Less Than Significant Impact.	No mitigation measures are required.	--
<p>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?</p> <p>Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?</p>	Less Than Significant Impact.	No mitigation measures are required.	--
<p>Would the project, combined with other</p>	Less Than Significant	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
related cumulative projects, 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, or have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Impact.		
Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects, or result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded stormwater facilities, the construction or relocation of which could cause significant environmental effects?	Less Than Significant Impact.	No mitigation measures are required.	--
Would the project, combined with other related cumulative projects, require or	Less Than Significant Impact.	No mitigation measures are required.	--



Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
result in the relocation or construction of new or expanded electrical, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			
Would the project, combined with other related cumulative projects, 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, and comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less Than Significant Impact.	No mitigation measures are required.	--



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2.0 INTRODUCTION AND PURPOSE

The California Environmental Quality Act (CEQA) specifies that before a public agency decides to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the Project’s potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment. The State CEQA Guidelines are located within the California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, Sections 15000-15387, while the CEQA Statute is codified as Public Resources Code Sections 21000-21189.70.10.

2.1 PURPOSE AND TYPE OF EIR

An Environmental Impact Report (EIR) is intended to provide decision-makers and the public with information concerning the potential environmental impacts of a proposed project, possible ways to reduce or avoid the possible significant environmental impacts, and identify alternatives to the project. An EIR must also disclose significant impacts that cannot be avoided; growth inducing impacts; effects found not to be significant; as well as significant cumulative impacts of all past, present, and reasonably anticipated future projects.

The City of Gardena is the Lead Agency under CEQA and is responsible for preparing this Program EIR for the City of Gardena General Plan, Zoning Code & Zoning Map Amendment Project (State Clearinghouse Number 2023040334) (herein referred to as “Land Use Plan and Zoning Amendment Project” or “Project”). This Program EIR has been prepared in conformance with CEQA (California Public Resources Code Section 21000 et seq.), CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.), and the rules, regulations, and procedures for implementation of CEQA. The principal CEQA Guidelines sections governing content of this document are Sections 15120 through 15132 (Contents of Environmental Impact Reports), and Section 15168 (Program EIR).

The purpose of this Program EIR is to review the existing conditions, analyze potential environmental impacts, and identify feasible mitigation measures to avoid or lessen the Project’s potentially significant effects. For more detailed information regarding the proposed Project, refer to [Section 3.0 Project Description](#).

As referenced in the CEQA Guidelines Section 15121(a), as an information document, the EIR will:

- Inform decision-makers and the public generally of the significant environmental effects of a project;
- Identify possible ways to minimize the significant effects of a project; and
- Describe reasonable alternatives to a project.



The mitigation measures that are identified must be adopted as “Conditions of Approval” to minimize the significance of impacts resulting from the Project. In addition, this Program EIR is the primary reference document in the formulation and implementation of a mitigation monitoring program for the Project.

CEQA Guidelines Section 15091 requires a public agency make one or more written findings for each of the significant environmental effects of the project prior to approving or carrying out a project for which an EIR has been certified which identifies one or more significant environmental effects. The possible findings are:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the final EIR.

The City of Gardena (which has the principal responsibility for processing and approving the Project) and other public (i.e., responsible and trustee) agencies that may use this Program EIR in the decision-making or permit process will consider the information in this Program EIR, along with other information that may be presented during the CEQA process.

Environmental impacts are not always able to be mitigated to a level considered less than significant; in those cases, impacts are considered significant and unavoidable impacts. In accordance with Section 15093(b) of the CEQA Guidelines, if a public agency approves a project that has significant impacts that cannot be mitigated (i.e., significant unavoidable impacts), the agency shall state in writing the specific reasons for approving the project, based on the Final EIR and any other information in the public record for the project. This is termed, per Section 15093 of the CEQA Guidelines, a “statement of overriding considerations.”

This document analyzes the environmental effects of the Land Use Plan and Zoning Amendment Project to the degree of specificity appropriate to the current proposed actions, as required by Section 15146 of the CEQA Guidelines. The analysis considers the activities associated with the Project to determine the short-term and long-term effects associated with their implementation. This Program EIR discusses both the direct and indirect impacts of this Project, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects at a programmatic level.



This EIR has been prepared as a Program EIR in accordance with CEQA Guidelines Section 15168, which states the following:

- a) General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:
 1. Geographically,
 2. As logical parts in the chain of contemplated actions,
 3. In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
 4. As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

- b) Advantages. Use of a program EIR can provide the following advantages. The program EIR can:
 1. Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,
 2. Ensure consideration of cumulative impacts that might be slighted in a case- by-case analysis,
 3. Avoid duplicative reconsideration of basic policy considerations,
 4. Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and
 5. Allow reduction in paperwork.

- c) Use with Later Activities. Subsequent 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.
 2. If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures 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.
 3. An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.
 4. Where the subsequent 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 operations were covered in the program EIR.



5. A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent 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.
- d) Use with Subsequent EIRs and Negative Declarations. A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program. The program EIR can:
1. Provide the basis in an Initial Study for determining whether the later activity may have any significant impacts.
 2. Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.
 3. Focus an EIR on a subsequent project to permit discussion solely of new effects which had not been considered before.

2.2 COMPLIANCE WITH CEQA

PUBLIC REVIEW OF THE DRAFT EIR

In accordance with CEQA Guidelines Sections 15087 and 15105, this Draft EIR is circulated for a 45-day public review period. The public is invited to comment in writing on the information contained in this document. Persons and agencies commenting are encouraged to provide information that they believe is missing from the Draft EIR within the purview of CEQA and the CEQA Guidelines. All comment letters received will be responded to in writing, and the comment letters, together with the responses to those comments, will be included in the Final EIR.

Comment letters should be sent to:

Amanda Acuna, Senior Planner
City of Gardena, Community Development Department
1700 West 162nd Street
Gardena, CA 90247-3730
Email: aacuna@cityofgardena.org

FINAL EIR

The Final EIR will consist of the Draft EIR (under separate cover and incorporated by reference), revisions to the Draft EIR (if any), responses to all written comments addressing environmental concerns raised in the comments of responsible trustee agencies, the public, and any other reviewing parties, and the Mitigation Monitoring and Reporting Program. After the Final EIR is completed, and at least ten days prior to the certification hearing, a copy of the response to



comments made by public agencies on the Draft EIR will be provided to the commenting agencies and parties.

2.3 EIR SCOPING PROCESS

NOTICE OF PREPARATION

In compliance with Section 15082 of the CEQA Guidelines, the City of Gardena provided opportunities for various agencies and the public to participate in the environmental review process. During preparation of the Draft EIR, efforts were made to contact various Federal, State, regional, and local government agencies, and other interested parties to solicit comments on the scope of review in this document. This included the distribution of a Notice of Preparation (NOP) (State Clearinghouse Number 2023040334) to various agencies and interested parties. As allowed under CEQA Guidelines Section 15063(a), the City did not prepare an Initial Study since it was determined that an EIR would be required for the Project. The purpose of the NOP was to formally announce the preparation of a Draft EIR for the proposed Project and, that, as the Lead Agency, the City was soliciting input regarding the scope and content of the environmental information to be included in the EIR. The NOP provided preliminary information regarding the anticipated range of impacts to be analyzed within the EIR. In addition, notice of an EIR Scoping Meeting for the Project was included in the NOP.

Pursuant to CEQA Guidelines Section 15082, the City of Gardena circulated the NOP directly to public agencies (including the State Clearinghouse Office of Planning and Research), organizations, and interested parties. An electronic copy of the NOP was also made available on the City's website. The NOP was made available on April 13, 2023, with the 30-day public review period concluding on May 12, 2023. The City extended the public review period, accepting comments until 4:30 PM on May 19, 2023.

A EIR Scoping Meeting was held on April 27, 2023 at 6:00 PM in the City Hall Council Chambers. Information regarding the scoping meeting was included in the NOP, as described above. The intent of the meeting was to share information regarding the proposed Project and the environmental review process and to receive comments regarding the scope and content of the environmental analysis to be addressed in the EIR. A summary of the proposed Project and the CEQA process was presented at the meeting. A recording of the presentation was made available on the City's website. An overview of the Scoping Meeting was included as an agenda item and provided at the City of Gardena City Council meeting on May 9, 2023 with additional opportunity to provide comments on the scope and content of the EIR.

The NOP is provided as Appendix A, Notice of Preparation, and the NOP comment letters are provided as Appendix B, Notice of Preparation Comment Letters.

A summary of the primary environmental issue areas and where in the Draft EIR the issues are addressed, are provided in [Table 2-1, Summary of NOP Comments](#):



**Table 2-1
Summary of NOP Comments**

Commenter	Comment Summary	Location Addressed in Draft EIR
Mariya Wrightsman	Expresses concern about the Project creating environmental damage with reference to specific environmental topical areas.	Section 5.2, Air Quality; Section 5.6, Energy; Section 5.7, Greenhouse Gas Emissions; Section 5.10, Land Use and Planning; Section 5.11, Noise; Section 5.12, Population and Housing; Section 5.13, Public Services; Section 5.14, Transportation;
Native American Heritage Commission	Provides recommendations for cultural resources assessments and recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the Project Area as early as possible to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.	Section 5.15, Tribal Cultural Resources
County of Los Angeles Fire Department	No comments	N/A
Southern California Association of Governments	Provides informational resources and recommendations to ensure consistency of the proposed Project with Connect SoCal (the adopted 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy).	Section 5.10, Land Use and Planning



Table 2-1 (continued)
Summary of NOP Comments

Commenter	Comment Summary	Location Addressed in Draft EIR
Vera Povetina	Expresses concern about potential impacts resulting from additional dwelling units within the City, including impacts related to noise, air pollution, infrastructure, water, gas, electricity, internet, schools, parks, crime and fire risk.	Section 5.2, Air Quality; Section 5.11, Noise; Section 5.13, Public Services; Section 5.14, Transportation; Section 5.16, Utilities and Service Systems

2.4 FORMAT OF THE EIR

The Draft EIR is organized into the following sections:

Section 1.0, Executive Summary, provides summaries of the Project description, environmental impacts, and mitigation measures.

Section 2.0, Introduction and Purpose, provides CEQA compliance information.

Section 3.0, Project Description, provides a detailed Project description indicating Project location and setting, Project characteristics, objectives, phasing, and associated discretionary actions required.

Section 4.0, Basis of Cumulative Analysis, describes the approach and methodology for the cumulative analysis.

Section 5.0, Environmental Analysis, contains a detailed environmental analysis of the existing conditions, potential Project impacts, recommended mitigation measures, and possible unavoidable adverse impacts for the following environmental topic areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions



- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

Section 6.0, Other CEQA Considerations, discusses the potential long-term implications of the proposed action and irreversible changes on the environment that would be caused by the proposed Project, should it be implemented. The Project’s growth-inducing impacts, including the potential for economic or population growth are also discussed.

Section 7.0, Alternatives to the Proposed Action, describes a reasonable range of alternatives to the Project or its location that could avoid or substantially lessen the Project’s significant impacts and still feasibly attain the Project’s basic objectives.

Section 8.0, Effects Found Not To Be Significant, provides an explanation of potential impacts that have been determined not to be significant and are therefore not discussed in detail in the EIR.

Section 9.0, Organizations and Persons Consulted, identifies all Federal, State, and local agencies, other organizations, and individuals consulted.

Appendices, contains the Project’s technical documentation.

2.5 INCORPORATION BY REFERENCE

Pertinent documents relating to this EIR have been cited in accordance with CEQA Guidelines Section 15150, which encourages incorporation by reference as a means of reducing redundancy and the length of environmental reports. The following documents are incorporated by reference into this EIR. Except for the Connect SoCal RTP/SCS, information contained within these documents has been utilized for each section of this EIR. Copies of these documents are available for review at the City of Gardena, Community Development Department, located at 1700 West 162nd Street, Gardena, California 90247-3730, and on the City’s website:

<https://cityofgardena.org/planning-and-zoning/>

The Connect SoCal RTP/SCS can be found at:

<https://scag.ca.gov/read-plan-adopted-final-connect-socal-2020>

A brief synopsis of the scope and content of these documents are provided below.



- City of Gardena General Plan 2006, adopted April 25, 2006. The City adopted the comprehensive Gardena General Plan 2006 (General Plan) in 2006. The City of Gardena has chosen to consolidate a number of state mandated elements into three elements (Community Development, Community Resources, and Community Safety). Subsequently, the Community Development Element’s Land Use Plan was updated in June 2012, March 2013, March-April 2021, and February 2023¹; and the Circulation Plan was updated in July 2020. The 2021-2029 Housing Element was adopted in January 2022, and readopted in February 2023. In February 2022, the Public Safety Plan was updated and a new Environmental Justice Element was adopted. The Gardena General Plan is comprised of the following Elements and Plans:
 - Community Development Element
 - Land Use Plan
 - Economic Development Plan
 - Community Design Plan
 - Circulation Plan
 - Housing Element
 - Community Resources Element
 - Open Space Plan
 - Conservation Plan
 - • Community Safety Element
 - Public Safety Plan
 - Noise Plan
 - Environmental Justice Element
 - Implementation
 - Implementation Program

The General Plan constitutes the City’s overall plans, goals, and objectives for land use within the City’s jurisdiction. The General Plan is based upon the following core visions for the City: City of Opportunity; Safe and attractive place to live, work and play; Community that values ethnic and cultural diversity; Strong and diverse economic base.

¹ The February 2023 update was in response to a Housing Element program requirement from the State’s Department of Housing and Community Development that the City adopt the Housing Element and adopt an urgency ordinance by February 15, 2023, implementing the housing overlay zones, rezoning for the Housing Element Inventory Sites, and providing that any project with a minimum of 20 percent affordable housing be ministerially approved. These actions also required an update to the Land Use Plan of the City’s General Plan. On February 15, 2023, the City Council adopted Resolution No. 6620 updating the Land Use Plan, including changes to the Land Use Map, Urgency Ordinance No. 1847 amending the Zoning Code and revising the Zoning Map, and Resolution No. 6621 adopting a color palette for buildings, fences, and walls. Resolution No.6620 and the Ordinance also rescinded the Artesia Corridor Specific Plan, changed the land use designation for five of the six areas in the Specific Plan, and rezoned all six Specific Plan areas; refer to Section 3.0, Project Description, for additional discussion.



It evaluates the existing conditions and provides long-term goals and policies necessary to guide growth and development in the direction that the community desires. Through its Goals, Objectives, Policies, and Programs, the General Plan serves as a decision-making tool to guide future growth and development decisions.

- *City of Gardena General Plan 2006 Final Environmental Impact Report, SCH No. 2005021125, April 2006.* The City of Gardena General Plan 2006 Final Environmental Impact Report (General Plan FEIR) analyzed the potential environmental impacts that would result from implementation of the Gardena General Plan. The General Plan FEIR forecast 22,329 dwelling units, approximately 18.9 million square feet of nonresidential land uses and a resulting population of 63,799 persons at the City’s buildout. Buildout was estimated to occur over 20 years. The purpose of the General Plan FEIR is to identify, evaluate and, if required, propose mitigation measures for significant environmental impacts that may be associated with the adoption of the GP; it was concluded that significant and unavoidable impacts concerning Transportation and Traffic could occur. The significant and unavoidable impacts were specific to levels of service (LOS) operations at study area roadway segments and intersections. Pursuant to SB 743 (signed into law on September 27, 2013), transportation impact analysis as part of CEQA compliance no longer allows for the consideration of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significance.
- *Gardena Municipal Code.* The Gardena Municipal Code regulates municipal affairs within the City’s jurisdiction including, without limitation, zoning regulations (codified in Gardena Municipal Code Title 18). The Municipal Code is the primary method used for implementing the General Plan’s Goals, Objectives, and Policies. Gardena Municipal Code Title 18, Gardena Zoning Code, specifies the appropriate location and use of buildings and structures for residential and non-residential uses and regulates development standards, such as height, building size, and open space to promote the public health, safety and general welfare.
- *City of Gardena Climate Action Plan, December 2017.* In cooperation with the South Bay Cities Council of Governments, the City of Gardena developed a Climate Action Plan (CAP) to reduce Greenhouse Gas (GHG) emissions within the City. The City’s CAP serves as a guide for action by setting GHG emission reduction goals and establishing strategies and policy to achieve desired outcomes over the next 20 years. The CAP is designed to identify 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 advances these goals and streamlines City efforts to deploy specific initiatives and programs that target the reduction of GHG emissions, while integrating these efforts with the other priorities such as economic development, regional mobility and connectivity, and improving the local air and water quality.
- *City of Gardena Emergency Operations Plan, 2016.* The City of Gardena Emergency Operations Plan (EOP) addresses the planned response to an actual or threatened extraordinary incident, disaster, or emergency associated with natural, technological, and



human caused hazards, or a national security emergency in or affecting the City. The operational concepts reflected in this plan focus on potential large-scale incidents, disasters, or emergencies that can generate unique situations requiring extraordinary responses and resources. The EOP outlines the roles and responsibilities assigned to City employees for response and short-term recovery activities, and is flexible enough for use to address all hazards. The EOP has been designed to include the City of Gardena as part of the Los Angeles County Operational Area, and incorporates concepts and principles from the California Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS), and the Incident Command System (ICS) into the City's emergency operations.

- Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal), September 3, 2020. The Southern California Association of Government's (SCAG's) Regional Council approved and fully adopted Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy). Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders.

Connect SoCal considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2020 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving a 19 percent reduction by 2035 compared to the 2005 level. Connect SoCal's overall land use pattern reinforces the trend of focusing new housing and employment in infill areas well served by transit.

Adopted 2020 RTP/SCS Growth Forecasts provide population, household, and employment data for 2045. The socio-economic estimates and projections are used by federal and State mandated long-range planning efforts such as the RTP, Air Quality Management Plan, Regional Transportation Improvement Program, and the Regional Housing Needs Assessment (RHNA). SCAG's Adopted 2020 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.



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3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

Located in the South Bay region of Los Angeles County, 13 miles south of downtown Los Angeles, Gardena is an urban community encompassing 5.7 square miles. Gardena is situated near four major freeways: Harbor (I-110), San Diego (I-405), Century (I-105), and Artesia (SR-91). Surrounding communities are Hawthorne and Los Angeles County to the north and west, Torrance to the south and west, and Los Angeles to the south and east. Figure 3-1, Regional Location, shows the location of Gardena in relation to the region.

The City of Gardena Land Use Plan, Zoning Code & Zoning Amendment Project (herein referred to as “Land Use Plan and Zoning Amendment Project” or “Project”) proposes changes to the land use designation and zoning for parcels located throughout the City of Gardena (City). Textual changes to the Land Use Plan of the City’s General Plan and Zoning Code will also be made that will apply to properties throughout the City. For purposes of the EIR, the project location is referred to as the “Project Area”. The parcels proposed for changes to their existing land use designations are identified on Figure 3-2, Parcels Proposed for Changes to General Plan Land Use, and the parcels proposed for changes to their existing zone are identified on Figure 3-3, Parcels Proposed for Changes to Zones.

3.2 PROJECT BACKGROUND

This Land Use Plan and Zoning Amendment Project is a result of the City’s recent adoption of the 6th Cycle Housing Element for 2021 – 2029 (Housing Element). Housing element law requires local governments to adequately plan to meet their existing and projected housing needs, including their share of the regional housing needs allocation (RHNA) (California Government Code Sections 65580-65588) based on a Regional Housing Needs Plan (RHNP) developed by councils of government. The Southern California Association of Governments (SCAG) determined that the City of Gardena will need to accommodate the development of 5,735 units during the 8-year planning period.

Government Code Section 65583(a)(3) requires local governments to prepare an inventory of land suitable for residential development, including vacant sites and sites having the potential for redevelopment, and an analysis of the relationship of zoning on these sites to public facilities and services. The inventory of land suitable for residential development shall be used to identify sites that can be developed for housing within the planning period. The Gardena Housing Element contained Inventory Sites that accommodated its RHNA allocation along with an approximate 22 percent buffer for affordable units, as recommended by the Department of Housing and Community Development.



Because the City has limited vacant or underutilized properties within the existing residential and mixed-use zones to accommodate the RHNA number, the Housing Element requires that almost all of the Inventory Sites be provided with one of four housing overlays and that certain amendments be made to the Gardena Zoning Code, in part to provide for ministerial approval of affordable projects and also to provide objective zoning standards.

The Housing Element identified 122 sites (468 parcels consolidated) that are considered viable for housing development (the Inventory Sites). Except for two sites which are identified for rezoning to a very high residential density, all the other sites are slated to receive one of four housing overlays. The Housing Element included a program requirement from HCD that the City amend the Land Use Plan and adopt an urgency ordinance by February 15, 2023, implementing the housing overlay zones, rezoning for the Inventory Sites, and provide that any project with a minimum of 20 percent affordable housing be ministerially approved. The City informed HCD that it was studying additional non-inventory sites to be rezoned (Non-inventory Sites) to create better development patterns and opportunities and was preparing an EIR to study all of the changes. As a result, the program further provided that within one year of the adoption of the urgency ordinance, the City was to complete the rezoning of the overlay zones, which would include a CEQA analysis.

On February 15, 2023, the City Council adopted Resolution No. 6620 updating the Land Use Plan, including changes to the Land Use Map, Urgency Ordinance No. 1847¹ amending the Zoning Code and revising the Zoning Map, and Resolution No. 6621 adopting a color palette for buildings, fences, and walls. The Resolution and Ordinance also rescinded the Artesia Corridor Specific Plan, changed the land use designation for five of the six areas in the Specific Plan, and rezoned all six Specific Plan areas.

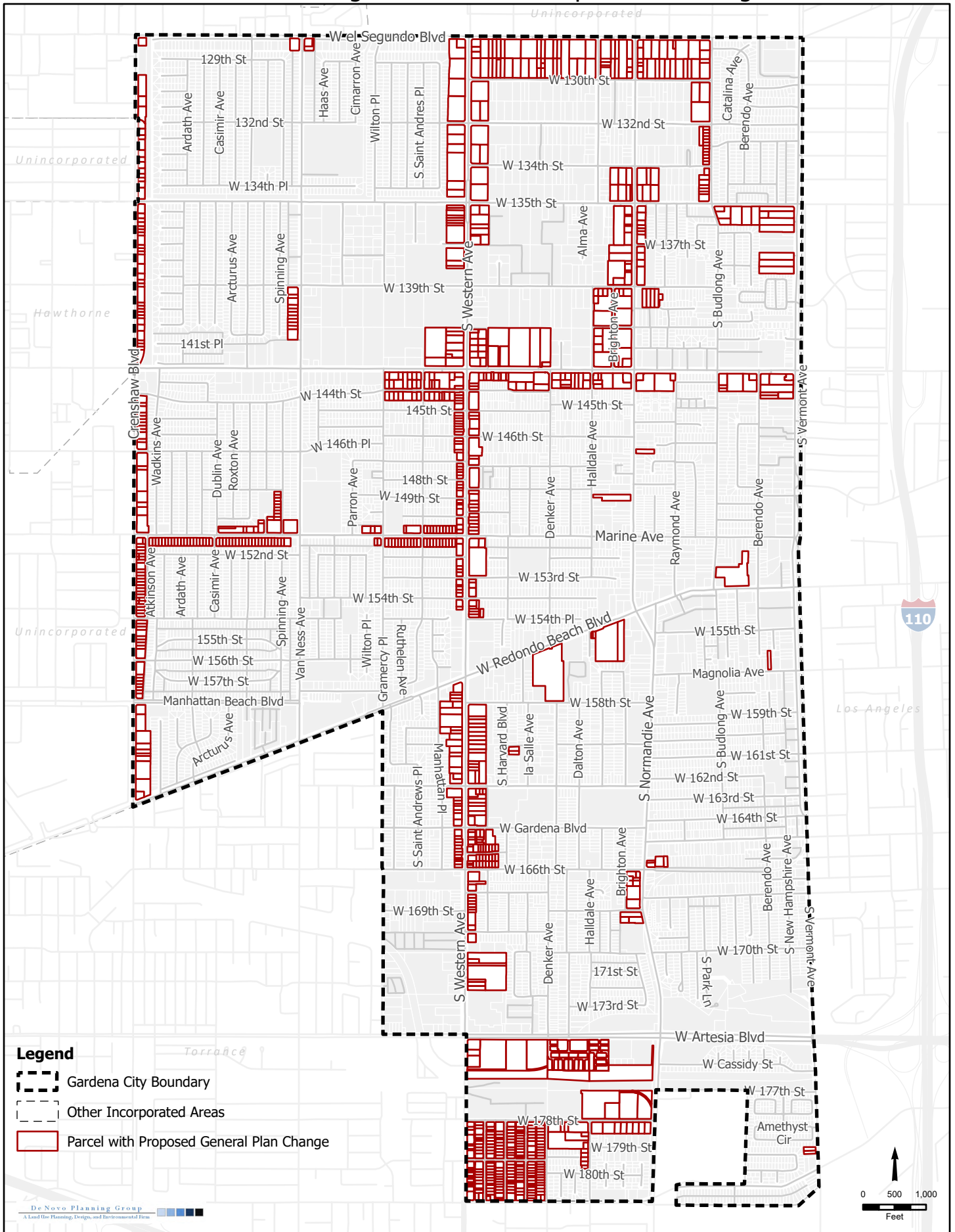
This EIR examines the potential environmental impacts associated with the land use and zoning changes, including text amendments, previously made in connection with the Housing Element implementation (as described above), as well as potential environmental impacts associated with the proposed land use and zoning changes to the Non-inventory Sites and additional Zoning Code text amendments, not previously considered. As the City Council will reaffirm its previous actions, for purposes of this EIR and analysis, all actions will be described as if they are new; refer to Section 3.4.6, Approach to the Analysis for additional discussion. However, it is noted that if the City Council does not approve the entire Project, as defined and analyzed in this EIR, the City Council would need to take an affirmative action to rescind changes to the Land Use Map, Zoning Code, and Zoning Map that were previously approved with the exception of pre-permit and post-permit requirements which will remain in place regardless.

¹ In addition to the Urgency Ordinance, the same changes to the Zoning Code and Zoning map were also made by Ordinance No. 1848 which was introduced on February 15, 2023 and adopted on February 28, 2023.

Figure 3-1. Regional Location



Figure 3-2. Parcels Proposed for Changes to General Plan





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3.3 ENVIRONMENTAL SETTING

3.3.1 GENERAL PLAN ELEMENTS

The Gardena General Plan is currently presented as a collection of “elements” or subject categories, including the Community Development Element, Housing Element, Environmental Justice Element, Community Resources Element, and Community Safety Element. The Community Development Element is comprised of the Land Use Plan; Economic Development Plan; Community Design Plan; and Circulation Plan. The Land Use Plan describes land use designations, including maximum densities and intensities, acreage, and development capacities by land use designation. The General Plan Land Use Policy map identifies a land use designation, with overlays if applicable, for each parcel of land in the City and illustrates the general distribution of land uses throughout the City.

General Plan Elements must be internally consistent and Specific Plans and zoning must be consistent with the General Plan.

3.3.2 GENERAL PLAN LAND USE AND ZONING

General Plan Land Use Designations

The parcels proposed for General Plan Land Use amendments have a wide range of designations including General Commercial, Neighborhood Commercial, Industrial, Mixed Use, and Specific Plan. Refer to Figure 3-4, Existing General Plan Land Uses. See also, Appendix C, General Plan Land Use Policy Map Amendments.

Zoning Districts

The parcels proposed for zone amendments have a correspondingly wide range of zones and are comprised of a mix of residential and non-residential uses. Some of the parcels have split zoning and some have a Mixed-Use Overlay (MUO) that allows both commercial and residential development. Refer to Figure 3-5, Existing Zoning. See also Appendix D, Zoning Map Amendments.

3.3.3 EXISTING ON-SITE DEVELOPMENT

Parcels proposed for changes to the existing land use and zoning contain a mix of development uses, as shown in Table 3-1, Existing On-Site Development, below. Many of the sites contain aging structures or vacancies.

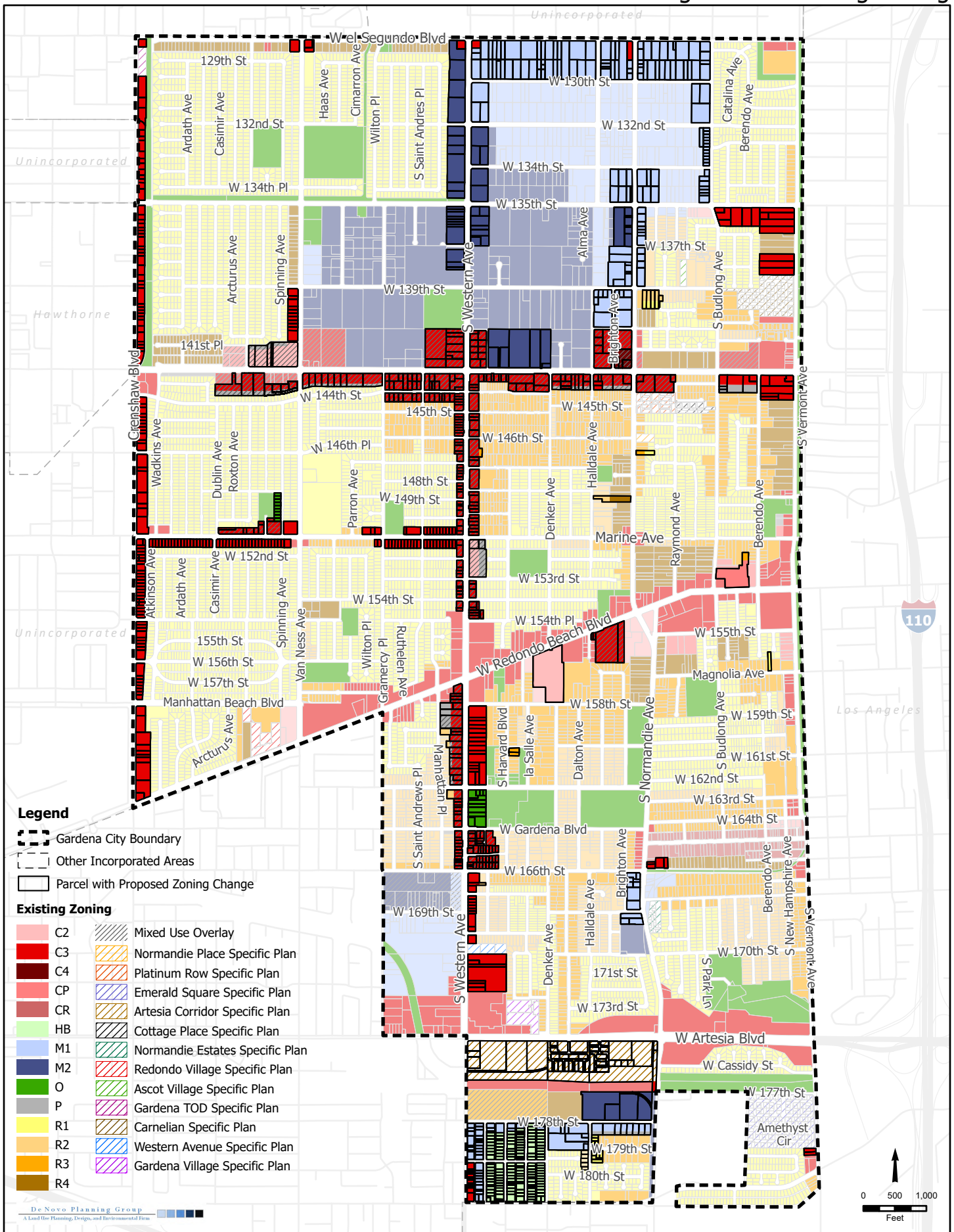
Table 3-1 provides a summary of the existing development associated with the parcels which are currently developed with 7,544,381 square feet of non-residential uses, 154 single-family dwelling units, and 961 multi-family dwelling units.



**Table 3-1
Existing On-Site Development**

Land Use	Development	
	Dwelling Units	Building Square Feet
Single-Family Residential	154	
Multiple-Family Residential ¹	961	
Commercial ²		2,048,845
Education		45,161
Government and Utilities Facilities		1,300
Office		224,225
Office/Industrial		38,770
Hospital		214,782
Industrial ³		4,914,486
Religious		55,758
Transportation, Communication, Utilities		1,054
Total	1,115	7,544,381
Source: City of Gardena, November 22, 2022. Notes: 1. Includes residential units associated with Mixed Residential and Commercial 2. Includes currently vacant commercial buildings 3. Includes currently vacant industrial buildings		

Figure 3-5. Existing Zoning





3.4 PROJECT CHARACTERISTICS

The Project amends the Land Use Plan, including the Land Use map, Zoning Code, and Zoning Map, and rescinds the Artesia Corridor Specific Plan (ACSP), as described below.

3.4.1 LAND USE PLAN AMENDMENTS

The Project proposes to amend the Land Use Plan of the Community Development Element of the General Plan with the addition of new land use designations, as described below. Other technical updates will be added to reflect changes that have occurred since 2006. Additionally, new zones will be created to provide consistency with the Land Use Plan update. Table 3-2, Proposed Land Use Designations and Corresponding Zones, shows the changes by way of ~~strikeout~~ for deletions and underline for additions. These additional land use designations are a readoption of the February 2023 actions.

Figure 3-6, Land Use Changes (February 2023) Proposed for Readoption, shows the land use changes that are being readopted and Figure 3-7, Additional Proposed Land Use Changes, shows the additional land use changes that are being included in this action. Figure 3-8, Combined General Plan Land Use Policy Map Amendments (Readoption and Adoption), is a combination of both maps, illustrating all land use changes considered within this EIR. Figure 3-9, Proposed Gardena General Plan Land Use Policy Map, shows the land uses of all parcels within the City, incorporating the proposed changes illustrated in Figure 3-8.



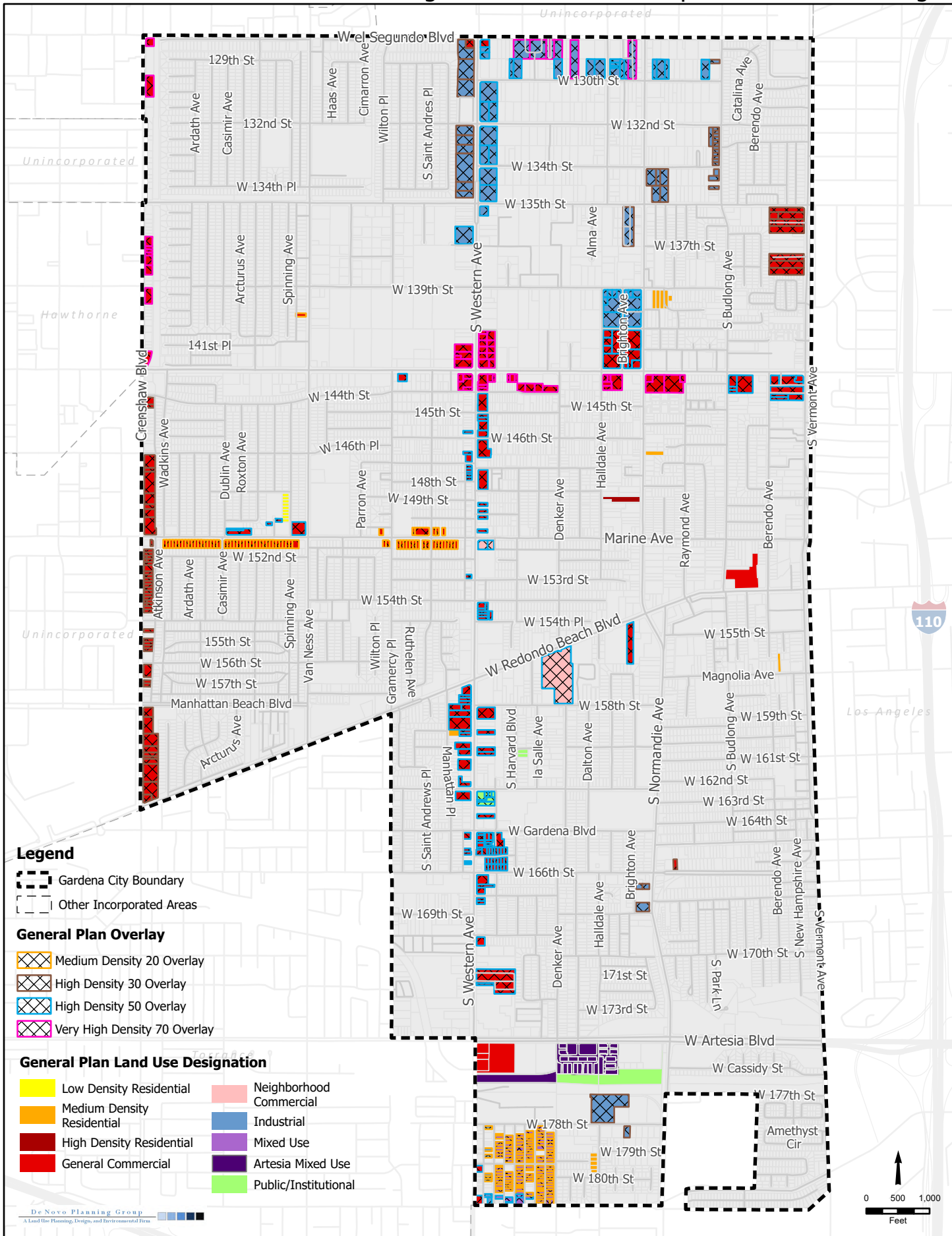
**Table 3-2
Proposed Land Use Designations and Corresponding Zones**

Land Use Designation	Density ¹ (in du/ac)	Zoning
Residential Designations		
<u>Single Family Residential</u>	9 (max 1 per lot)	R-1 <u>Single Family Residential</u>
Low Density Residential	17 (max 2 per lot)	R-1 Single Family Residential R-2 <u>Low Density Multiple Family Residential</u>
Medium Density Residential	12 - 17	R-2 Low Density Multiple Family Residential R-3 <u>Medium Density Residential</u>
High Density Residential	20 - 25 20 - 30	R-4 <u>High Density Residential</u> < 0.5 acres ≥ 0.5 acres
<u>Very High Density Residential</u>	<u>51 - 70</u>	R-6 <u>Very High Density Residential</u>
Home Business Mixed Use	9 (max 1 per lot)	H-B <u>Home Business</u>
Overlay Designations		
<u>Mixed Use Overlay</u>	<u>20 - 25</u> <u>20 - 30</u>	<u>MUO Mixed Use Overlay</u> < 0.5 acres ≥ 0.5 acres
<u>Medium Density Overlay</u>	<u>12 - 20</u>	<u>HO-3 Medium Density Overlay</u>
<u>High Density Overlay 30</u>	<u>21 - 30</u>	<u>HO-4 High Density Overlay 30</u>
<u>High Density Overlay 50</u>	<u>31 - 50</u>	<u>HO-5 High Density Overlay 50</u>
<u>Very High Density Overlay 70</u>	<u>51 - 70</u>	<u>HO-6 Very High Density Overlay 70</u>
Mixed Use Designations		
Commercial Residential Mixed Use	24 - 34	C-R <u>Commercial Residential</u>
Artesia Mixed Use	<u>17</u>	AMU <u>Artesia Mixed Use</u>
Non-Residential Designations		
Neighborhood Commercial	0.5	C-2 <u>Commercial</u> P <u>Parking</u>
General Commercial	0.5 - 2.75	C-P <u>Business and Professional Office</u> C-3 <u>General Commercial</u> C-4 <u>Heavy Commercial</u> P <u>Parking</u>
Industrial	1.0 - 2.0	M-1 <u>Industrial</u> M-2 <u>General Industrial</u>
Public/Institutional	N/A	O <u>Official</u>

Note:

1. Density excludes ADUs and potential implementation of SB9 (2022) units on single family lots.

Figure 3-7. Additional Proposed Land Use Changes



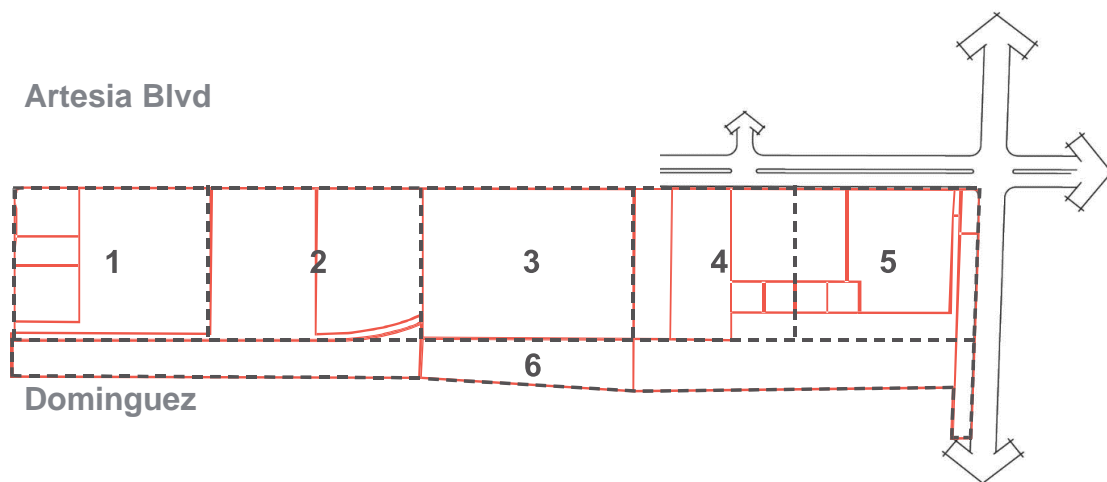


3.4.2 LAND USE PLAN UPDATE

In addition to the new designations to be added to the Land Use Plan update shown in [Table 3-2](#), additional changes will be made to the Land Use Plan as described below. Except for the necessary changes to the technical information to reflect the changes in land use designation of the additional properties, this is a readoption of the February 2023 actions.

- The middle level of stepped density will be deleted in the High Density Residential and Mixed-Use Overlay areas so that all lots which are at least 0.5 acre will be allowed a density of up to 30 dwelling units/acre.
- Additional policies are added to address the implementation of the Housing Element.
- The General Plan Land Use Policy Map will be amended to apply new land use designations, as shown on [Figure 3-8](#), and described below²:
 - The Project proposes to rescind the ACSP and amend the General Plan Land Use Policy Map as set forth below:

Artesia Corridor Specific Plan Areas



² A list of parcels and their existing and proposed land use designations are provided in Appendix C, General Plan Land Use Policy Map Amendments.



Specific Plan Area	General Plan Land Use		Zoning		Land Use
	Existing	Proposed	Existing	Proposed	
1	Specific Plan	Commercial	Artesia Corridor Specific Plan	General Commercial (C-3)	No change from existing commercial use
2	Specific Plan	Very High Density Residential	Artesia Corridor Specific Plan	Very High Density Residential (R-6)	Inventory Sites which will allow 51 -70 du/acre.
3/4	Specific Plan	Artesia Mixed Use	Artesia Corridor Specific Plan	Artesia Mixed-Use (AMU)	No change from existing mixed-use; applies new General Plan land use category and zone
4/5	Specific Plan	Specific Plan (No Change)	Artesia Corridor Specific Plan	1450 Artesia Specific Plan ³	Proposed mixed-use industrial/commercial/self-storage project. Residential to remain as legal non-conforming.
5 ^{1/6}	Specific Plan	Public/ Institutional	Artesia Corridor Specific Plan	Official (O)	No change from existing use
<p>Note:</p> <p>1. This portion of Area 5 is comprised of the railroad right-of-way.</p>					

- The proposed Housing Overlay designations will be applied to numerous sites designated for non-residential uses; the base land use designation would remain unchanged.
- The General Plan Land Use Policy Map will be amended to re-designate several sites in conjunction with the Zoning Map amendment (described below) to eliminate split-zoned properties and re-designate other properties to match the existing uses, densities, or intensities that already occur on the property.

- Technical information will be updated throughout the Land Use Plan.

³ The applicant for a project at 1450 Artesia Boulevard requests approval to adopt a new specific plan (the 1450 Artesia Specific Plan), a zone text Amendment, a zone map Amendment, a development agreement, site plan review, and lot line adjustment. A project-specific EIR is currently being prepared for this proposed project which is identified as a cumulative project within this EIR. Refer to Section 4.0, Basis of Cumulative Analysis.



3.4.2 ZONING CODE AMENDMENTS

In addition to the new zones to be added to the Zoning Code as shown in Table 3-2, additional text changes will be made to the Zoning Code as described below. The underlined changes are ones that were not previously added.

- Add new zoning designations with development standards for the following zones: Very High Density Residential (R-6); Medium Density Overlay (HO-3); High Density Overlay 30 (HO-4); High Density Overlay 50 (HO-5); Very High Density Overlay 70 (HO-6); and Artesia Mixed Use (AMU).
- Add new objective Residential Design Standards.
- Add a new chapter on Design Review for residential development.
- Eliminate the possibility of single-family homes in the R-3 zone and set a minimum density of 12 du/acre.
- Eliminate the mid-range density in the R-4 and MUO zones so that all properties in these zones with a minimum size of 0.5 acre will be allowed to develop at up to 30 units per acre in order that sites of 0.5 acre to 1.0 acre can be counted towards sites suitable for affordable housing.
- Reduce the minimum lot size to develop an MUO designated property with residential to 0.5 acre rather than 1 acre.
- Eliminate the minimum dwelling unit size in the MUO zone, as called for in the Housing Element.
- Amend landscape regulations for all properties in the City to comply with water efficiency regulations and add requirements for allowed planting types and sizes.
- Add language regarding drainage and paving requirements for all types of development.
- Add requirements for submittal of technical reports needed for residential development projects.
- Add standard requirements for residential development projects, including requirements for security and lighting plans for residential development projects, and providing pet relief areas in multifamily residential developments.
- Amend required findings for Site Plan Reviews.
- Add standard regulations regarding tribal cultural resources treatment agreements for those developments where cultural resources are found on site.
- Amend section on satellite antennas to be compliant with law.
- Update the uses allowed in the Home Business zone.
- Adding new definitions.



3.4.3 ZONING MAP AMENDMENTS

The Gardena Zoning Map will be amended to apply the new zones to specific parcels within the City and to eliminate split-zoned properties and rezone other properties to match the existing uses, densities, or intensities that already occur on those properties, as described below⁴:

- The Project proposes to rescind the ACSP and amend the Zoning Map as described above. The proposed Housing Overlays will be applied to numerous sites designated for non-residential uses where the base zone will remain unchanged.
- The Zoning Map will be amended to re-zone several sites in conjunction with the General Plan Amendment (described above) to eliminate split-zoned properties and re-zone other properties to match the existing uses, densities, or intensities that already occur on the property.

Figure 3-10, Zoning Changes (February 2023) Proposed for Readoption, shows the zoning changes that are being readopted and Figure 3-11, Additional Proposed Zoning Changes, shows the additional zoning changes that are being included in this action. Figure 3-12, Combined Zoning Changes (Readoption and Adoption), is a combination of both maps, illustrating all zoning changes considered within this EIR. Figure 3-13, Proposed Gardena Zoning Map, shows the zoning of all parcels within the City, incorporating the proposed changes illustrated in Figure 3-12.

3.4.4 SPECIFIC PLAN AMENDMENT

The Project proposes to readopt the rescission of the ACSP and the parcels would be re-designated and re-zoned, as described above.

⁴ A list of parcels and their existing and proposed zone classifications are provided in Appendix D, Zoning Map Amendments.



3.4.5 DEVELOPMENT POTENTIAL

The Gardena Land Use Policy Map and Zoning Map will be amended to apply the new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development when compared to existing conditions. There is no increased development capacity for those parcels to be redesignated or rezoned only to resolve inconsistencies with existing on-site conditions. Some of the site-specific redesignations and modifications proposed to the land use categories and corresponding zones (refer to Table 3-2) would result in reductions in allowed residential densities and residential development potential when compared to the existing General Plan land use and land use categories; however, overall the proposed Project would provide for increased residential densities and increased residential development potential (refer to Table 3-3 and Table 3-4) and would be in compliance with the Housing Crisis Act.

Table 3-3, *Proposed Residential Development Potential*, identifies the number of new residential units that could occur within each land use designation based on the density assumptions and acreages provided.



**Table 3-3
Proposed Residential Development Potential**

Proposed Land Use Designations	Density Assumption (du/ac)	Total Acres	Total Units
Medium Density Residential	17	3.1	52.7
High Density Residential	23	1.15	26.45
Very High Density Residential	51	7.61	388.11
Home Business/Medium-Density Overlay	17	17.63	299.71
Home Business/High-Density Overlay 50	31	1.82	56.42
Commercial/Medium-Density Overlay	17	15.13	257.21
Commercial/High-Density Overlay 30	23	36.53	840.19
Commercial/High-Density Overlay 50	31	86.09	2,668.79
Commercial/Very High-Density Overlay 70	51	52.53	2,679.03
Neighborhood Commercial/High-Density Overlay 50	31	11.73	363.63
Industrial/Medium-Density Overlay	17	11.90	202.30
Industrial/High Density Overlay 30	23	60.98	1,402.54
Industrial/High-Density Overlay 50	31	56.70	1,757.70
Industrial/Very High-Density Overlay 70	51	37.03	1,888.53
Public/Institutional/High-Density Overlay 50	31	1.44	44.64
Religious Institution Overlay ²	--	--	200
Total			13,128¹
<p>Source: City of Gardena, November 22, 2022. Notes: du/ac = dwelling unit per acre 1. Number does not equate due to rounding. 2. A Religious Institution Overlay is not currently being proposed; however the analysis considers the potential for a future overlay and assumes 50 sites could receive the overlay with an average of 4 DU/site.</p>			



3.4.6 APPROACH TO THE ANALYSIS

Although the proposed Project does not involve site-specific development, the intent is to provide adequate sites for residential development to accommodate the City's RHNA and to allow for additional residential development opportunities should they arise. To allow for new residential development, it is assumed existing on-site uses will be removed and residential development, consistent with the development assumptions identified in Table 3-3, will occur. The assumptions used in this EIR are consistent with the assumptions that were used in the recently adopted 6th Cycle Housing Element and assumes every Inventory Site, as well as the Non-inventory sites, will actually be developed with residential uses only; non-residential development would not occur. However unlikely, the assumptions in this EIR present a possible development potential. Table 3-4, Proposed Project Net Development Potential, identifies the net change in development that could occur with implementation of the proposed Project.

Additionally, although no Religious Institution Overlay is being proposed at this time for either the Land Use Plan or zoning, the City committed in its Housing Element to explore the feasibility of establishing a Religious Site Housing Overlay. The anticipated development potential associated with the future implementation of the overlay is included within the development potential and accounted for within this EIR; refer to Section 3.4.5, Development Potential, above. It is anticipated that approximately 50 sites may have the potential for this overlay; therefore, for purposes of this EIR, it is assumed that an average of four housing units could be developed per site, resulting in a total of approximately 200 residential uses; refer to Section 3.4.5, Development Potential, above.

As indicated in Table 3-4, the proposed Project could result in the following when compared to existing conditions:

- 154 fewer single-family dwelling units;
- 12,167 additional multiple-family dwelling units; and
- 7,544,381 fewer square feet of non-residential development.



**Table 3-4
Proposed Project Net Development Potential**

Land Use	Development	
	Dwelling Units	Building Square Feet
Existing Land Uses to be Removed		
Single-Family Residential	-154	
Multiple-Family Residential	-961	
Non-Residential Development		-7,544,381
New Residential Development Potential		
Single-Family Residential	0	
Multiple-Family Residential	13,128	
Non-Residential Development		0
Net New Development Potential		
Single-Family Residential	-154	
Multiple-Family Residential	12,167	
Non-Residential Development		-7,544,381
Source: City of Gardena, November 22, 2022.		

As site-specific development proposals are not currently known, a programmatic analysis of the potential environmental impacts associated with new residential development consistent with implementation of the proposed project was prepared in this EIR.

As discussed previously, the development potential is solely based on the new residential development that could occur with implementation of the new land use designations and the higher densities that would be associated with the proposed land use designations to resolve split-zoned parcels. The minor clean-up changes to the Gardena Zoning Map that are proposed as part of the Project would not result in new development or new development potential; rather the Zoning Map would be amended to rezone properties to match the existing uses, densities, or intensities that already occur on the property.

Similarly, the Zoning Text Amendments would not have the potential to result in direct or indirect physical impacts on the environment. In addition to adding new zones and associated development standards that would implement the proposed Land Use designations, the Zoning Text Amendments would provide new objective development standards for multi-family and mixed-use housing development. Other revisions, as described above in Section 3.4.2, implement State law and are required as part of the adopted Housing Element.



Several of the Zoning Text Amendments establish requirements that provide for environmental protections and would reduce potential environmental impacts associated with future development within the City, including the potential residential development analyzed within this EIR. Since these amendments have been approved (as described above in Sections 3.2 and 3.4.2), this EIR analysis identifies compliance with these Zoning Code requirements as part of the City's established regulatory framework. More specifically, the Zoning Text Amendments include requirements to address water quality; screen parking facilities, utilities, and mechanical equipment; ensure security lighting is not directed beyond property lines; and increased use of water efficient plants. The amendments also provide for pre-permit requirements, including providing a geotechnical investigation; compliance with air quality objective standards; provision of demolition and construction waste recycling plans; compliance with the noise ordinance and noise reduction techniques; submittal of a sewer capacity study; and submittal of a Phase I Environmental Site Assessment under specific conditions. Post-permit requirements include compliance with all mitigation measures in the mitigation monitoring program for the City's General Plan and implementation of mitigation measures to specifically address paleontological resources, tribal cultural resources, and migratory birds.

3.5 STATEMENT OF PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124(b), the EIR project description must include “[a] statement of objectives sought by the proposed project”. The statement of objectives should include the underlying purpose of the project and may discuss the project benefits.

The City has identified the following Project objectives:

Implement Housing Element programs: Several of the programs described in the City's 6th Cycle Housing Element are intended to increase residential development potential to make Gardena's share of regional housing development goals attainable and to implement state law. The implementation of the Housing Element programs is achieved through a combination of Land Use Element, zoning text, and zoning map amendments, as well as the adoption of new policies and procedures. The implementation of these various amendments and changes is the objective of this project.

Create consistency between general plan and zoning: Recent court decisions and amendments to state law provide that where there is a conflict between density allowed in the general plan and zoning, the general plan will prevail. In order to insure that properties will not be developed at a higher density than originally anticipated by the City's zoning, new land use designations and zoning designations are being created to resolve inconsistencies.

Preservation of multi-family lots for higher density: To assist the City in reaching its RHNA numbers and providing as much housing as possible, minimum densities are imposed.



Provide opportunities for a mix of housing at varying densities: To meet the needs of current and future Gardena residents, maintain existing residential land use and zoning designations, while creating and applying new and modified land use and zoning designations throughout the City that allow for housing at varying densities.

Provide opportunities to align housing production with state and local sustainability goals: Contribute toward the reduction of vehicle miles traveled (VMT) and greenhouse gas emissions by allowing for infill residential and mixed-use development at higher densities in proximity to areas served by transit, jobs, and services.

3.6 REQUIRED AGENCY APPROVALS AND USE OF THE EIR

3.6.1 AGENCY APPROVALS

The City of Gardena is the lead agency for the proposed Project. To implement the Project, the following discretionary approvals are required:

General Plan Amendment (GPA #1-22). A General Plan Amendment to incorporate the Artesia Mixed-Use, Very High-Density Residential, and Housing Overlay designations into the Land Use Plan of the Gardena General Plan, and add related text; update the Land Use Policy Map to apply the Housing Overlays; the Artesia Corridor Specific Plan boundaries and apply the new Very High-Density Residential designation, apply the new Artesia Mixed-Use designation, and apply the existing General Commercial and Public/Institutional designations; change the land use designations of several parcels to eliminate split-zoned properties and re-designate other properties to address existing inconsistencies; and update the tables to reflect the new land use designations and changes to the Land Use Policy Map.

Zoning Text Amendment (ZTA #-1-22). A Zoning Text Amendment to the text of Title 18, Zoning, of the Gardena Municipal Code to add a new Artesia Mixed-Use (AMU) Zone, add a new Very High-Density Residential Zone of 51-70 DU/acre, add new Housing Overlay Zones, and provide developments standards for the new zones, and add pre-permit and post-permit requirements. Additionally, the following Zoning Code sections will be amended to provide clean-up and changes, as previously described:

- 18.28.030 – allowed uses in the Home Business Zone
- 18.42.030 – amendment to satellite antenna regulations
- 18.42.095 – street facing entries
- 18.42.150 – requirement for security plans
- 18.42.210 – post permit requirements

Zoning Map Amendment (ZC #-1-22). A Zoning Map Amendment to apply the Housing Overlays to specific parcels within the City; remove the Artesia Corridor Specific Plan Zone and apply the new Very High-Density Residential Zone (R-6) of 51-70 DU/acre, apply the new Artesia Mixed-Use (AMU) Zone, apply the new 1450 Artesia Specific Plan Zone, and apply the existing General



Commercial (C-3) and Official (O) Zones; and change the zone classifications of several parcels to eliminate split-zoned properties and re-zone other properties to address existing inconsistencies.

3.6.2 SUBSEQUENT USES OF THE EIR

This EIR provides a review of environmental effects associated with implementation of the proposed Land Use Plan, Zoning Code and Zoning Map amendments. When considering approval of subsequent activities under the proposed project, the City of Gardena would utilize this EIR as the basis in determining potential environmental effects and the appropriate level of environmental review, if any, of a subsequent discretionary activity.



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4.0 BASIS OF CUMULATIVE ANALYSIS

4.1 INTRODUCTION

This section analyzes potential impacts resulting from reasonably foreseeable growth associated with the Project.

CEQA Guidelines Section 15355 defines cumulative impacts as follows:

“Cumulative impacts” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

Pursuant to CEQA Guidelines Section 15130(a), an EIR shall discuss the cumulative impacts of a project when the project’s incremental effect is cumulatively considerable, as defined in CEQA Guidelines Section 15065(a)(3). The potential cumulative impacts associated with the Project are assessed in Section 5.0, Environmental Analysis, of this EIR for each applicable environmental issue area to a degree that reflects each impact’s severity and likelihood of occurrence.

As indicated above, a cumulative impact involves two or more individual effects. The following elements are necessary in an adequate discussion of cumulative impacts, as noted in Sections 15130(b) through 15130(e) of the CEQA Guidelines:

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary to an adequate discussion of significant cumulative impacts:

1. Either:

- A. 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*
- B. A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projects may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.*



2. *When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.*
 3. *Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.*
 4. *A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and*
 5. *A reasonable analysis of the cumulative impacts of the relevant projects, including examination of reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.*
- (c) *With some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.*
- (d) *Previously approved land use documents such as general plans, specific plans, and regional transportation plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impacts analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or areawide cumulative impacts of the proposed project have already been adequately addressed, as defined in section 15152(f), in a certified EIR for that plan.*
- (e) *If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact, as provided in Section 15183(j).*

4.2 CUMULATIVE IMPACT ANALYSIS METHODOLOGY

As demonstrated above, a cumulative impact is an impact created by the combination of the project evaluated in the EIR and other reasonably foreseeable projects or actions. CEQA Guidelines Section 15130 requires an EIR to discuss cumulative impacts of a project when the project's incremental effect is "cumulatively considerable." Used in this context, cumulatively considerable means that the incremental effects of an individual project are considerable when



viewed in connection with effects of past projects, other current projects, and probable future projects.

In the case of the proposed Project, cumulative effects occur when future development associated with implementation of the Project is combined with development in the surrounding areas, or in some instances, within the entire region. Where the incremental effect of a project is not “cumulatively considerable,” a lead agency need not consider that effect significant but must briefly describe its basis for concluding that the effect is not cumulatively considerable.

The cumulative impact discussions in Sections 5.1 through 5.16 explain the geographic scope of the area affected by each cumulative effect (e.g., immediate project vicinity, city, planning area, county, watershed, or air basin). The geographic area considered for each cumulative impact depends upon the impact that is being analyzed. For example, in assessing noise impacts, the geographic study area is more local and includes the immediate vicinity of the areas of new development under the Project. In assessing air quality impacts, all development within the air basin contributes to regional emissions of criteria pollutants and basin-wide projections of emissions is the best tool for determining cumulative effect.

As discussed above, Section 15130 of the CEQA Guidelines permits two different methodologies for completion of the cumulative impact analysis:

- The “list” approach permits the use of a list of past, present, and probable future projects producing related or cumulative impacts, including projects both within and outside the city; and
- The “projections” approach allows the use of a summary of projections contained in an adopted plan or related planning document, such as a regional transportation plan, or in an EIR prepared for such a plan. The projections may be supplemented with additional information such as regional modeling.

This Draft EIR uses the projections approach and takes into account growth from the proposed Project within the Gardena Planning Area, in combination with impacts from projected growth in Los Angeles County and the surrounding region, as forecast by the Southern California Association of Governments (SCAG). Additionally, this Draft EIR also uses the list approach for present and probable future projects within the City; refer to Table 4-1, Cumulative Projects and Figure 4-1, Cumulative Projects Location.



**Table 4-1
Cumulative Projects**

Key Map	Location (Project Name)	Status	Description ¹	Proposed Development	
				Non-Residential (SF)	Residential (DU)
1	15106 South Western Avenue	Approved	Commercial (Restaurant) & Drive-thru	3,720	
2	1333 West 168th Street	Approved	Condominiums		3
3	1348 West 168th Street (Normandie Courtyard Project)	Approved	Small Lot Subdivision, 3-Story		9
4	13919 Normandie Avenue	Approved – under construction	Single-Room Occupancy		20
5 ²	12850 Crenshaw Boulevard (GTOD SP Project)	Approved – under construction	Apartments		265
6	1938 West 146th Street	Approved	Townhomes		6
7	13126 South Western Avenue	Approved	Single-Room Occupancy, 7 DU Affordable		121
8	2545 Marine Avenue	Approved – under construction	Townhomes, 2 DU Affordable		22
9	1031 Magnolia Avenue	Under Review ³	Townhomes		6
10 ²	2800 Rosecrans Avenue	Under Review ³	Townhomes, 4 DU Live-Work		20
11 ²	16911 S Normandie Avenue	Under Review ³	Apartments, 20 DU Affordable		328
			Townhomes		75
12	1600 W 135th Street	Approved – under construction	Warehouse	190,860	
13 ²	1450 W Artesia Boulevard	Under Review ³	Self-Storage, Warehouse/ Office	186,000 72,000	
14 ²	14206 Van Ness Avenue	Under Review ³	Self-Storage	177,573	
			Office	8,000	



**Table 4-1 (continued)
Cumulative Projects**

Key Map	Location (Project Name)	Status	Description ¹	Proposed Development	
				Non-Residential (SF)	Residential (DU)
15 ²	14600 Western Avenue	Under Review ³	Apartments & Commercial (Retail)	3,000	196
16 ²	1515 West 178th Street (Melia 178th Street Project)	Approved – under construction	Townhomes		114
17	1341 West Gardena Boulevard	Approved – under construction	Apartments & Commercial (Retail/Office) 1 DU Affordable	3,385	14
18	1621 West 147th Street	Approved – under construction	Townhomes, 3-Story		6
19 ²	1335 West 141st Street	Approved – under construction	Townhomes, 3-Story		50
20	2129 West Rosecrans Avenue	Approved – construction completed	Townhomes, 3-Story, 15 DU Live-Work		113
21 ²	13615 South Vermont Avenue	Approved- under construction	Townhomes, 2 DU Affordable		84
22	2500-2508 Rosecrans Avenue	Approved – under construction	Townhomes, 3 DU Live-Work		53
23	15717 & 15725 Normandie Avenue	Approved – under construction	Townhomes, 3 DU Affordable		30
Total				654,538	1,535

Source: City of Gardena Community Development Department, March 2023.

Notes: SF = square feet; DU = dwelling unit

1. Slight discrepancies between the project description development listed in this table and those approved may occur through the development review process; however, the most conservative buildout is considered in this EIR.
2. Proposal would require/required a general plan amendment.
3. Applications have been received by the Planning Division of the Community Development Department and are pending review for potential approvals of entitlements.



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5.0 ENVIRONMENTAL ANALYSIS

The City of Gardena (City) determined that an Environmental Impact Report (EIR) would be required for the Project; as allowed by CEQA Guidelines Section 15063(a), no Initial Study was prepared. A Notice of Preparation (NOP) was prepared and circulated for the proposed Project on April 13, 2023; refer to Appendix A, Notice of Preparation. Input received during the NOP comment period and the EIR Scoping Meeting were used to inform the scope of the evaluation for the EIR.

This EIR focuses on the potentially significant and significant effects of the Project and documents the reasons for concluding that other effects will be less than significant. The following subsections of the EIR contain a detailed environmental analysis of the existing conditions, Project impacts (including direct and indirect, short-term, long-term, and cumulative impacts), recommended mitigation measures and unavoidable significant impacts, if applicable, for the following environmental issue areas:

5.1	Aesthetics	5.9	Hydrology and Water Quality
5.2	Air Quality	5.10	Land Use and Planning
5.3	Biological Resources	5.11	Noise
5.4	Cultural Resources	5.12	Population and Housing
5.5	Energy	5.13	Public Services
5.6	Geology and Soils	5.14	Transportation
5.7	Greenhouse Gas Emissions	5.15	Tribal Cultural Resources
5.8	Hazards and Hazardous Materials	5.16	Utilities and Service Systems

Each potentially significant environmental issue area is addressed in a separate section of the EIR and is organized into the following subsections:

- “Environmental Setting” provides a description of the existing environmental setting and condition (typically the time of the NOP) that provides a baseline against which potential impacts of the project can be compared.
- “Regulatory Setting” contains an overview of the federal, State, regional, and local programs and regulations relevant to each environmental issue.
- “Significance Criteria and Thresholds” refer to quantitative or qualitative standards, performance levels, or criteria used to compare the existing environmental setting with and without the project to determine whether the impact is significant. These thresholds are based primarily on CEQA Guidelines Appendix G, but also may reflect established health standards, ecological tolerance standards, public service capacity standards, or guidelines established by agencies or experts.



“... An ironclad definition of significant effect is not possible because the significance of any activity may vary with the setting” (CEQA Guidelines Section 15064[b]). Principally, “... a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the Project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance” constitutes a significant impact (CEQA Guidelines Section 15382). The standards used to evaluate the significance of impacts are sometimes qualitative rather than quantitative because appropriate quantitative standards are either not available for many types of impacts or are not applicable for some types of projects.

- “Analysis, Impacts, and Mitigation Measures” describes the methodology used in assessing potential impacts of the project and contains an analysis of direct and indirect impacts from construction, operation, and maintenance activities related to future development that could occur under the project. For each impact identified, a level of impact will be described using the following categories:
 - Significant impacts include a description of the circumstances where an established or defined threshold would be exceeded.
 - Less than significant impacts include effects that may be noticeable, but do not exceed established or defined thresholds. Potentially significant impacts that are mitigated to a less-than-significant level by mitigating programs, actions, or other factors are also included in this category.
 - No impact describes circumstances where there is no adverse effect on the environment.

Mitigation Measures are measures that would be required of the Project to avoid a significant adverse impact; to minimize a significant adverse impact; to rectify a significant adverse impact by restoration; to reduce or eliminate a significant adverse impact over time by preservation and maintenance operations; or to compensate for the impact by replacing or providing substitute resources or environment.

- “Cumulative Impacts” describes potential environmental changes to the existing physical conditions that may occur as a result of the proposed project together with all other reasonably foreseeable, planned, and approved future projects producing related or cumulative impacts.
- “Significant Unavoidable Impacts” describes impacts that would be significant and cannot be feasibly mitigated to less than significant, and thus would be unavoidable. To approve a project with unavoidable significant impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency is required to balance the benefits of a project against its unavoidable environmental impacts in determining whether to approve the project. If the benefits of a project are found to outweigh the unavoidable adverse environmental effects, the adverse effects may be considered “acceptable” (CEQA Guidelines Section 15093[a]).
- “References” identifies the sources used in and throughout the subsection.



CEQA provides that an EIR shall focus on the significant effects on the environment and discuss potential environmental effects with emphasis in proportion to their severity and probability of occurrence. During preparation of this EIR, the City conducted an analysis of the proposed Project's effect on specific environmental topic areas, included as part of the Environmental Checklist form presented in CEQA Guidelines Appendix G. Through evaluation, certain impacts of the Project were found to have no impact or have a less than significant impact due to the inability of a project of this scope to create such impacts or the absence of Project characteristics producing effects of this type. These effects are not required to be included in the EIR's primary environmental analysis sections (Section 5.1 through 5.16). In accordance with CEQA Guidelines Section 15128, Section 8.0, Effects Found Not To Be Significant, provides a brief description of potential impacts found to have no impact or a less than significant impact.



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5.1 AESTHETICS

5.1.1 PURPOSE

This section identifies the existing aesthetic and light/glare conditions within the Project Area and provides an analysis of potential impacts associated with Project implementation.

CONCEPTS AND TERMINOLOGY

When viewing the same landscape, people may have different responses to that landscape and any proposed visual changes, based upon their values, familiarity, concern, or expectations for that landscape and its scenic quality. Since each person's attachment to and value for a particular landscape is unique, visual changes to that landscape inherently affect viewers differently. However, generalizations can be made about viewer sensitivity to scenic quality and visual changes. The visual sensitivity of a landscape is affected by the viewing distances at which it is seen, such as close-up or far away. The visual sensitivity of a landscape is also affected by the travel speed at which a person is viewing the landscape (high speeds on a highway, low speeds on a hiking trail, or stationary at a residence).

The same feature of a project can be perceived differently by people depending on the distance between the observer and the viewed object. When a viewer is closer to a viewed object in the landscape, more detail can be seen, and there is greater potential influence of the object on visual quality because of its form or scale (relative size of the object in relation to the viewer). When the same object is viewed at background distances, details may be imperceptible but overall forms of terrain and vegetation are evident, and the horizon and skyline are dominant. In the middle-ground, some detail is evident (e.g., the foreground), and landscape elements are seen in context with landforms and vegetation patterns (e.g., the background).

The following terms and concepts are used in this EIR section:

- **Scenic vista.** An area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, State, or local agency.
- **Scenic highway.** Any stretch of public roadway that is designated as a scenic corridor by a federal, State, or local agency.
- **Visual character** typically consists of the landforms, vegetation, water features, and cultural modifications that impart an overall visual impression of an area's landscape. Scenic areas typically include open space, landscaped corridors, and viewsheds. Visual character is influenced by many different landscape attributes including color contrasts, landform prominence, repetition of geometric forms, and uniqueness of textures among other characteristics.
- **Light and Glare.** Lighting effects are associated with the use of artificial light during the evening and nighttime hours. There are two primary sources of light: light emanating from



building interiors passing through windows and light from exterior sources (i.e., street lighting, building illumination, security lighting, parking lot lighting, landscape lighting, and signage). Light introduction can be a nuisance. Uses such as residences and hotels are considered light sensitive, since occupants have expectations of privacy during evening hours and may be subject to disturbance by bright light sources. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated. With respect to lighting, the degree of illumination may vary widely depending on the amount of light generated, height of the light source, presence of barriers or obstructions, type of light source, and weather conditions.

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light on highly polished surfaces such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces. Perceived glare is the unwanted and potentially objectionable sensation as observed by a person as they look directly into the light source of a luminaire. Daytime glare generation is common in urban areas and is typically associated with buildings with exterior facades largely or entirely comprised of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources such as automobile headlights. Glare generation is typically related to either moving vehicles or sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. Glare-sensitive uses include residences, hotels, transportation corridors, and aircraft landing corridors.

5.1.2 ENVIRONMENTAL SETTING

The City of Gardena is located in a highly urbanized area within the South Bay region of southwestern Los Angeles County. The City's topography is relatively flat with an elevation averaging 49 feet above sea level. There are some high points in the northeastern corner of the City that can reach up to approximately 150 feet above sea level. Distant mountain ranges, including the Palos Verdes Hills located approximately six miles to the southwest, the Santa Monica Mountains approximately 20 miles to the north, and the San Gabriel Mountains approximately 25 miles to the northeast, contribute to the Project Area's regional identity, while the City itself is primarily developed with limited natural or scenic resources.

In general, the City of Gardena is built out and primarily comprised of established residential neighborhoods, commercial, and industrial uses. Commercial and light industrial development is generally located along the City's corridors, and in the north-central quadrant of the City. Adjacent jurisdictions, including the cities of Los Angeles, Hawthorne, Torrance, and other unincorporated areas of Los Angeles County are also highly urbanized.

The Land Use Plan and Zoning Amendment Project proposes changes to the land use designation and zoning for parcels located throughout the City of Gardena (City). The parcels proposed for changes to their existing land use designations are identified on Figure 3-2, *Parcels Proposed for Changes to General Plan Land Use*, and the parcels proposed for changes to their existing zone are identified on Figure 3-3, *Parcels Proposed for Changes to Zones*. Parcels proposed for changes



to the existing land use and zoning contain a mix of development uses, as shown in Section 3.0, Project Description, [Table 3-1](#). Many of the sites contain aging structures or vacancies. The parcels are currently developed with 7,544,381 square feet of non-residential uses, 154 single-family dwelling units, and 961 multi-family dwelling units.

SCENIC VISTAS

The Gardena General Plan does not identify any scenic vistas or scenic resources within the City. Scenic views within the Project Area include long-range views of the Palos Verdes Hills, Santa Monica Mountains, and San Gabriel Mountains. The County of Los Angeles General Plan Conservation and Natural Resources Element identifies scenic resources within the County to include hillsides, scenic viewsheds, and ridgelines, including the Santa Monica Mountains and the San Gabriel Mountains (Los Angeles County, 2015). As the Project Area is located a great distance away from these scenic resources, views are highly dependent on atmospheric conditions. Additionally, views of these scenic resources are intermittent from within the Project Area due to existing development within the Project Area and surrounding area. Long-range views are primarily provided along the north-south corridors and at elevated locations within the Project Area. Other features that contribute to the visual character within the Project Area include public parks, the density and distribution of existing development, and the architecture of the built environment.

SCENIC HIGHWAYS

There are no Eligible or Designated State Scenic Highways within the Project Area. The nearest officially designated State Scenic Highway is a portion of State Highway 2 that extends through the San Gabriel Mountains, beginning just north of Route 210 and the City of La Cañada Flintridge (Caltrans 2023). The portion of State Highway 2 that is officially designated as a State Scenic Highway is located approximately 23 miles northeast of the Project Area. Due to this distance, the Project Area is not within the viewshed of this State Scenic Highway. The nearest eligible State Scenic Highway is a portion of State Highway 1, just northwest of the intersection at Venice Boulevard, in the Venice Beach neighborhood of the city of Los Angeles. The portion of State Highway 1 that is eligible for designation as a State Scenic Highway is located approximately nine miles northwest of the Project Area.

LIGHT AND GLARE

Urban land uses in the Project Area are the main source of daytime and nighttime light and glare. These uses are primarily comprised of multi-family residences, commercial, industrial, and office structures, and roadways. Lighting associated with these uses include interior light emanating from structures, exterior decorative and landscape lighting, and security lighting within parking lots, park/open space areas, and around buildings and walkways. Street lights and traffic signals also contribute to lighting within the area. The majority of structures within the Project Area do not exhibit highly reflective materials (i.e., taller buildings with extensive glazing). Therefore, potential glare effects are minimal under existing conditions.



5.1.3 REGULATORY SETTING

STATE

California Scenic Highways and Historic Parkways Program

The California Scenic Highways and Historic Parkways Program was created in 1963 to preserve and protect highway corridors located in areas of outstanding natural beauty from changes that would diminish the aesthetic value of the adjacent lands. Caltrans maintains its State Scenic Highways and Historic Parkways Program, through which segments of the State highway system are designated as being of particular scenic value or interest. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Interstates, State highways, byways, and parkways are eligible for designation or for recognition as eligible for designation. The Program is governed by the regulations found in the California Streets and Highways Code, Section 260 et seq.

California Streets and Highway Code Section 261 requires local government agencies to take the following actions to protect the scenic appearance of the scenic corridor:

- Regulate land use and density of development;
- Provide detailed land and site planning;
- Prohibit offsite outdoor advertising and control of on-site outdoor advertising;
- Pay careful attention to and control of earthmoving and landscaping; and
- Scrutinize the design and appearance of structures and equipment.

California Streets and Highway Code Section 263 allows the California State Legislature the authority to identify highways as eligible for designation as a scenic highway. The government with jurisdiction over land abutting a highway considered to be scenic is required to adopt a "scenic corridor protection program" that restricts development, outdoor advertising, and earthmoving activities along the affected segment or corridor ("Corridor Protection Program"). Caltrans must also indicate that the highway segment meets established criteria for the roadway or segment to be designated as scenic.

California Building Standards Code

Title 24 of the California Building Standards Code serves as the basis for the design and construction of buildings in California. In addition to safety, sustainability, new technology and reliability, the California Building Standards Code addresses light pollution and glare hazards through the establishment of maximum allowable backlight, up light, and glare (BUG) ratings.

California Vehicle Code, Division 11. Rules of the Road

California Vehicle Code Chapter 2, Article 3 stipulates limits to the location of light sources that may cause glare and impair driver's vision.



ARTICLE 3. Offenses Relating to Traffic Devices [21450 - 21468] (Article 3 enacted by Stats. 1959, Ch. 3.), §21466.5. No person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway. A light source shall be considered vision impairing when its brilliance exceeds the values established in the Code.

LOCAL

[City of Gardena General Plan](#)

The Gardena General Plan Community Development Element, Community Design Plan focuses on the aesthetic qualities of existing and future developments in the City and its relationship to the surrounding environment.

The Gardena General Plan Community Development Element, Community Design Plan contains the following goals and policies potentially relevant to the proposed Project:

[Community Development Element, Community Design Plan](#)

DS Goal 1: Enhance the visual environment and create a positive image of the City.

Policy DS 1.1: Foster proactive code enforcement on maintenance of properties and compliance with adopted development standards.

Policy DS 1.3: Promote a stronger design review process to ensure that public and private projects comply with best design practices and standards.

Policy DS 1.8: Encourage neighborhood district identity.

DS Goal 2: Enhance the aesthetic quality of the residential neighborhoods in the City.

Policy DS 2.1: Provide stronger design guidelines for residential development, including both new construction and additions to existing single-family units or multi-family dwellings.

Policy DS 2.2: Ensure that new and remodeled dwelling units are designed with architectural styles, which are varied and are compatible in scale and character with existing buildings and the natural surroundings.

Policy DS 2.3: Encourage a variety of architectural styles, massing, floor plans, color schemes, building materials, façade treatments, elevation and wall articulations.

Policy DS 2.4: Strengthen the important elements of residential streets that unify and enhance the character of the neighborhood, including pedestrian amenities, parkways, mature street trees, compatible setbacks, and unified architectural detailing and building.

Policy DS 2.5: Encourage homeowner associations and neighborhoods to maintain existing housing tract entrance signs in an attractive manner and encourage the placement of such signs at the entrance of major developments.



Policy DS 2.6: Encourage rehabilitation or upgrade of aging residential neighborhoods.

Policy DS 2.7: Require appropriate setbacks, massing, articulation and height limits to provide privacy and compatibility where multiple-family housing is developed adjacent to single-family housing.

Policy DS 2.8: Ensure that new single-family residential buildings or additions are designed and constructed with sensitivity for the privacy of adjacent residential properties and the value and quality of existing homes.

Policy DS 2.9: Integrate new residential developments with the surrounding built environment. In addition, encourage a strong relationship between the dwelling and the street.

Policy DS 2.10: Provide landscape treatments (trees, shrubs, groundcover, and grass areas) within multi-family development projects in order to create a “greener” environment for residents and those viewing from public areas.

Policy DS 2.11: Incorporate quality residential amenities such as private and communal open spaces into multi-unit development projects in order to improve the quality of the project and to create more attractive and livable spaces for residents to enjoy.

Policy DS 2.12: Provide well-designed and safe parking areas that maximize security, surveillance, and efficient access to building entrances.

Policy DS 2.13: Encourage lot consolidation for multi-family development projects in order to produce larger sites with greater project amenities.

Policy DS 2.14: Require design standards be established to provide for attractive building design features, safe egress and ingress, sufficient parking, adequate pedestrian amenities, landscaping, and proper signage.

Policy DS 2.15: Promote innovative development and design techniques, new material and construction methods to stimulate residential development that protects the environment.

[City of Gardena Municipal Code](#)

Chapter 18 of the City of Gardena Municipal Code, also known as the Zoning Code, provides specific development standards that influence the City’s scenic views, visual character, and lighting. The Zoning Code implements the Gardena General Plan goals and policies by classifying and regulating the specific uses of land and structures within the City. Generally, property development standards are established within each zone and include, but are not limited to:

- Minimum lot size;
- Maximum building height;



- Building setbacks;
- Parking and garage/carport design and placement;
- Landscaping and screening requirements;
- Design and architectural regulations; and
- Lighting requirements.

Section 18.42.095, *Residential Design Criteria*, establishes various design criteria for all new and expanded single-family residential developments. This includes standards for scale and massing; street-facing entries; architectural detailing; rooflines; garages, driveways, and parking; walls and fences; and materials, color, and texture.

Section 18.42.120, *Residential Criteria*, establishes residential criteria for all multi-family and overlay zones, including massing and articulation; exterior surfaces; roofs; main entries; windows, trellises; lighting; and balconies, porches, and other projections.

Section 18.42.150, *Security and Lighting Plan*, requires that complete security and lighting plans shall accompany all site development plans for multiple-family development of four or more units and commercial and industrial developments to ensure that safety and security issues are addressed in the design of the development. Specifically, lighting plans for multifamily developments shall demonstrate an average of one footcandle for all public and common areas; all entries, parking areas, trash enclosures, active outdoor areas, and pedestrian pathways shall include dusk to dawn lighting for safety and security; and security lighting shall not be directed beyond the property lines.

Chapter 18.44, *Site Plan Review*, outlines the site plan process. The reviewing body reviews the physical location, size, massing, setbacks, pedestrian orientation, and placement of proposed structures on the site and the location of proposed uses within the project; compatibility with surrounding sites and neighborhoods; and other factors, including but not limited to, location, amount, and nature of landscaping; placement, height, and direction of illumination of light standards; the location, number, size and height of signs; location, height and materials of walls, fences, or hedges; and the location and method of screening of refuse and storage areas and building equipment.

Chapter 18.45, *Design Review*, is a ministerial process that ensures that a project meets the applicable objective standards while also encouraging affordable housing. Design review applies to all two-family dwellings and any new housing project of two or more units, including a residential mixed use housing project as defined in Chapter 18.04, or transitional or supportive housing where either twenty percent of the total units are sold or rented to lower income households or one hundred percent are sold or rented to persons and families of moderate income or middle income as those terms are further defined in Government Code Section 65915. A project's design is reviewed pursuant to the provisions of Chapter 18.45, all applicable and



objective standards contained in Chapter 18.42, and all applicable and objective development standards in the zone in which the development occurs.

5.1.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to aesthetics and light/glare. A project would result in a significant impact related to aesthetics and light/glare if it would:

- Have a substantial adverse effect on a scenic vista (refer to Impact Statement 5.1-1);
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (refer to Section 8.0, Effects Found Not To Be Significant);
- In an urbanized area, conflict with applicable zoning and other regulations governing scenic quality (refer to Impact Statement 5.1-2);
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (refer to Impact Statement 5.1-3).

Based on these standards and significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a "significant unavoidable impact."

5.1.5 IMPACTS AND MITIGATION MEASURES

Impact 5.1-1: Would the project have a substantial adverse effect on a scenic vista?

Impact Analysis: The Gardena General Plan does not identify any scenic vistas or scenic resources within the City. Scenic views within the Project Area include long-range views of the Palos Verdes Hills, Santa Monica Mountains, and San Gabriel Mountains. Due to the Project Area's relatively flat topography and distance from these scenic resources, views are highly dependent on atmospheric conditions. Additionally, views of these scenic resources are intermittent from within the Project Area due to existing development within and surrounding the area. Long-range views are primarily provided along the north-south corridors and at elevated locations within the Project Area.

The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development, height, and densities when compared to existing conditions. While the Project does not include any specific development proposals, the Project could facilitate future development projects at higher densities, heights, and intensities than currently exist. The City's



Zoning Code would regulate development within the City, including building heights, setbacks, massing, and design and architectural regulations. Each future development project would be subject to the City’s development standards, site plan and/or design review process to ensure conformance with the Gardena General Plan and the City’s established development standards. Although the potential for new residential development at higher densities and heights could occur within the Project Area, scenic vistas and resources do not readily occur within the City and long-range views are limited due to the existing topography and urbanized nature of the area. Thus, the Project would not have a substantial adverse effect on a scenic vista and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.1-2: In an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact Analysis: Public Resources Code Section 21071 defines an “Urbanized area” as:

(a) An incorporated city that meets either of the following criteria:

- (1) Has a population of at least 100,000 persons.
- (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.

According to the California Department of Finance, the City of Gardena has a current (2022) population of 59,947. The adjacent City of Los Angeles has a population of 3,819,538. Combined, the cities have 3,879,485, which exceeds 100,000 persons; thus, the City qualifies as being within an “Urbanized Area”. Therefore, a significant impact would occur if a future development project associated with implementation of the Project conflicts with applicable zoning and other regulations governing scenic quality.

The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. Project implementation would support and guide future infill development and redevelopment within the Project Area by providing opportunities for new residential development at varying densities. Although site-specific development is not currently proposed, the Gardena Zoning Code provides for project-specific design review of future development proposals within the City, including the Project Area, which would ensure that development is consistent with the General Plan goals, policies, and actions, and the Zoning Code.

Gardena Municipal Code Chapter 18, *Zoning Code*, establishes the official land use zoning regulations and design guidelines for development within the City. The zoning districts and regulations are consistent with the goals and policies of the General Plan. As discussed above,



Section 18.42.095, *Residential Design Criteria*, establishes various design criteria for all new and expanded single-family residential developments. This includes standards for scale and massing; street-facing entries; architectural detailing; rooflines; garages, driveways, and parking; walls and fences; and materials, color, and texture. Section 18.42.120, *Residential Criteria*, establishes residential criteria including multifamily site design in residential and commercial zones; massing and articulation; exterior surfaces; roofs; main entries; windows, trellises; lighting; and balconies, porches, and other projections. Chapter 18.44, *Site Plan Review*, outlines the development projects requirement site plan review. Development projects requiring site plan review are subject to specific findings that the project is consistent with applicable standards, including the physical location, size, massing, setbacks, pedestrian orientation, and placement of proposed structures on the site and the location of proposed uses within the project; compatibility with surrounding sites and neighborhoods; and other factors, including but not limited to, location, amount, and nature of landscaping; placement, height, and direction of illumination of light standards; the location, number, size and height of signs; location, height and materials of walls, fences, or hedges; and the location and method of screening of refuse and storage areas and building equipment. Chapter 18.45, *Design Review*, ensures that a project meets the applicable objective standards while also encouraging affordable housing. A project's design is reviewed pursuant to the provisions of Chapter 18.45, all applicable and objective standards contained in Chapter 18.42, and all applicable and objective development standards in the zone in which the development occurs. Individual projects would be reviewed to ensure the development being proposed at the time is consistent with the applicable development standards. The proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.1-3: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact Analysis: Future development accommodated through implementation of the Project could introduce new sources of light or glare with the potential to adversely affect day or nighttime views. Light and glare impacts could result from new light sources such as street lighting, interior and exterior building lighting (including for safety purposes), vehicle headlights, illuminated signage, and new glare sources such as reflective building materials, roofing materials, and windows. These new sources of light and glare would be most visible from development along adjacent roadways, and to receptors such as residents and traveling motorists.

All lighting installed in future development projects as a result of Project implementation would be subject to conformance with the Gardena General Plan and applicable Zoning Code requirements. Gardena Municipal Code Section 18.42.150, *Security and Lighting Plan*, requires



that complete security and lighting plans accompany all site development plans for multiple-family development of four or more units and commercial and industrial developments to ensure that safety and security issues are addressed in the design of the development. Specifically, lighting plans for multifamily developments are required to demonstrate an average of one footcandle for all public and common areas; all entries, parking areas, trash enclosures, active outdoor areas, and pedestrian pathways are required to include dusk to dawn lighting for safety and security; and security lighting is required to not be directed beyond the property lines. Future development projects would be reviewed to ensure compliance with Municipal Code Section 18.42.150. Additionally, all new residential developments would be required to demonstrate compliance with design criteria established in either Section 18.42.095 or 18.42.120, which addresses materials, color, and texture to ensure new development would not involve the use of materials that would create a new source of substantial glare that would adversely affect day or nighttime views in the area. Thus, through compliance with the City's established regulatory requirements, future development associated with the proposed Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area; impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.1.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the related projects in the City determined as having the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to aesthetics may occur. The cumulative projects' setting for aesthetics is the City of Gardena; the setting would be similar due to the urbanized nature of the City.

Would the project, combined with other related cumulative projects, have a substantial adverse effect on a scenic vista?

Impact Analysis: The Project Area, along with the cumulative project sites, do not contain any scenic vistas or scenic resources; long-range views of the Palos Verdes Hills, Santa Monica Mountains, and San Gabriel Mountains are limited and primarily provided along major north-south corridors due to the existing development within the City and surrounding area. The Project Area, including the cumulative project sites, are developed and within an urbanized area. Development and/or redevelopment of the Project Area and cumulative development sites would be subject to the regulations and requirements of the City's Zoning Code, including building heights, setbacks, massing, and design and architectural regulations. Future development projects would be subject to the City's development standards, site plan and/or design review process to ensure conformance with the Gardena General Plan and the City's established development standards. Although the potential for new development at higher densities could occur with implementation of the Project and the cumulative development projects, scenic vistas and resources do not readily occur within the City and long-range views



are limited due to the existing topography and urbanized nature of the area. Thus, the Project's incremental effects involving the potential for substantial adverse effects on a scenic vista would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, conflict with applicable zoning and other regulations governing scenic quality?

Impact Analysis: The Project Area and cumulative development sites are located within the City limits and are therefore within an "Urbanized Area". As discussed above, the Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. Project implementation would support and guide future infill development and redevelopment within the Project Area by providing opportunities for new residential development at varying densities. Similarly, some of the cumulative development projects would require a Land Use Policy Map amendment to allow for the development being proposed. All future development would be reviewed to ensure consistency with the goals and policies of the General Plan. Additionally, development within the City is subject to the Gardena Zoning Code, which provides for project-specific design review of future development proposals, which would ensure that development is consistent with the General Plan goals, policies, and actions, and the Zoning Code. Individual development projects are reviewed subject to the specific zoning district and development being proposed. The proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. Thus, the Project's incremental effects involving potential conflicts with applicable zoning and other regulations governing scenic quality would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact Analysis: Future development associated with the Project and cumulative development projects could introduce new sources of light or glare with the potential to adversely affect day or nighttime views. All lighting installed in future development projects would be subject to conformance with the Gardena General Plan and applicable Zoning Code requirements. Gardena Municipal Code Section 18.42.150, *Security and Lighting Plan*, requires that complete security and lighting plans accompany all site development plans for multiple-family development of four or more units and commercial and industrial developments to ensure that safety and security issues are addressed in the design of the development. Specifically, lighting plans for multifamily developments are required to demonstrate an average of one footcandle for all public and



common areas; all entries, parking areas, trash enclosures, active outdoor areas, and pedestrian pathways are required to include dusk to dawn lighting for safety and security; and security lighting is required to not be directed beyond the property lines. Future developments associated with the Project as well as the cumulative development projects would be reviewed to ensure compliance with Municipal Code Section 18.42.150. Additionally, all new and expanded residential developments would be required to demonstrate compliance with design criteria established in Sections 18.42.095 or 18.42.120, which addresses materials, color, and texture to ensure new development would not involve the use of materials that would create a new source of substantial glare that would adversely affect day or nighttime views in the area. Thus, through compliance with the City's established regulatory requirements, the Project's incremental effects involving the potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area would not be cumulative considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.1.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with aesthetics would occur with the proposed Project.

5.1.8 REFERENCES

Los Angeles County, *Los Angeles County 2035 General Plan*, October 2015.

State of California Department of Transportation (Caltrans), *California State Scenic Highway System Map*,

<https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>, accessed April 26, 2023.



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5.2 AIR QUALITY

5.2.1 PURPOSE

The purpose of this section is to describe the existing air quality characteristics and to identify the emissions generated by the construction and operation of the proposed Project and address their potential impacts to air quality, including toxic air contaminants. The analysis also addresses the potential for the Project to conflict with or obstruct implementation of the applicable Air Quality Management Plan. This section is primarily based upon the air quality emissions analysis and modeling prepared by De Novo Planning Group, and included as Appendix E, Air Quality, Energy and Greenhouse Gas Emissions Modeling Data.

One comment was received during the NOP comment period regarding air quality. The comment was received from Vera Povetina, who expressed concern about air pollution resulting from additional dwelling units within the City.

5.2.2 ENVIRONMENTAL SETTING

REGIONAL TOPOGRAPHY

The California Air Resources Board (CARB) divides the State of California (State) into 15 air basins that share similar meteorological and topographical features. The City is located within the South Coast Air Basin (Basin), a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes the non-desert portions of San Bernardino, Los Angeles, and Riverside Counties, as well as all of Orange County, in addition to the San Gorgonio Pass area of Riverside County.

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 dispersion of air pollutants throughout the Basin.

LOCAL CLIMATE AND METEOROLOGY

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the region form natural horizontal barriers to the dispersion of air contaminants. Air pollution created in the coastal areas and around the Los Angeles area is transported inland until it reaches the mountains where the combination of mountains and inversion layers generally prevent further dispersion. This poor ventilation results in a gradual degradation of air quality from the coastal areas to inland areas. Air stagnation may occur during the early evening and early morning periods of transition between day and nighttime flows. The region also experiences periods of hot, dry winds from the desert, known as Santa Ana winds. If the Santa Ana winds are strong, they can surpass the sea breeze, which blows from the ocean to



the land, and carry the suspended dust and pollutants out to the ocean. If the winds are weak, they are opposed by the sea breeze and cause stagnation, resulting in high pollution events.

The temperature and precipitation levels for the Los Angeles International Airport, the closest station with data, are in Table 5.2-1, *Metrological Summary*. Table 5.2-1 shows that August is typically the warmest month and January is typically the coolest month. Rainfall in the Project Area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

**Table 5.2-1
Meteorological Summary**

Month	Temperature (°F)		Average Precipitation (inches)
	Average High	Average Low	
January	65.2	47.5	2.65
February	65.3	48.9	2.67
March	65.3	50.5	1.85
April	67.4	53.0	0.77
May	69.1	56.4	0.17
June	71.9	59.7	0.05
July	75.1	62.9	0.02
August	76.3	63.8	0.07
September	76.0	62.6	0.16
October	73.6	58.5	0.39
November	70.2	52.3	1.40
December	65.9	47.9	1.82
<i>Annual Average</i>	<i>70.1</i>	<i>55.3</i>	<i>12.02</i>

Source: Western Regional Climate Center, *Period of Record Monthly Climate Summary*, <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5114>, accessed on March 3, 2023.

CRITERIA AIR POLLUTANTS

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by State and federal laws. These regulated air pollutants are known as “criteria air pollutants” and are categorized into primary and secondary pollutants.

Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO_x), sulfur dioxide (SO₂), coarse particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and lead are primary air pollutants. Of these, CO, NO_x, SO₂, PM₁₀, and



PM_{2.5} are criteria pollutants. In addition, ROG and NO_x act as criteria pollutant precursors and form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant O₃ is formed by a chemical reaction between ROG and NO_x in the presence of sunlight. O₃ and nitrogen dioxide (NO₂) are the principal secondary pollutants.

Carbon Monoxide (CO). CO is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. 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 (unborn babies), 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 carbon monoxide.

Ozone (O₃). O₃ occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric layer (the "good" O₃ layer) extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays. "Bad" O₃ is a photochemical pollutant, and needs volatile organic compounds (VOCs), NO_x, and sunlight to form; therefore, VOCs 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 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 elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and 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.

Nitrogen Dioxide (NO₂). NO_x are a family of highly reactive gases that are a primary precursor to the formation of ground-level O₃ and react in the atmosphere to form acid rain. NO₂ (often used interchangeably with NO_x) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO₂ occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). 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 NO_2 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 NO_2 may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter (PM_{10}). PM_{10} refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM_{10} arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM_{10} scatters light and significantly reduces visibility. In addition, these particulates penetrate into 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).

Fine Particulate Matter ($\text{PM}_{2.5}$). Due to increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and federal $\text{PM}_{2.5}$ standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the U.S. Environmental Protection Agency (EPA) announced new $\text{PM}_{2.5}$ standards. Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon appeal by the EPA, the United States Supreme Court reversed this decision and upheld the EPA's new standards.

On January 5, 2005, the EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal $\text{PM}_{2.5}$ standards. 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. On July 8, 2016, EPA made a finding that the South Coast has attained the 1997 24-hour and annual $\text{PM}_{2.5}$ standards based on 2011-2013 data. However, the Basin remains in nonattainment as the EPA has not determined that California has met the Federal Clean Air Act requirements for redesignating the Basin nonattainment area to attainment.

Sulfur Dioxide (SO_2). SO_2 is a colorless, irritating gas with a rotten egg smell; it is formed primarily by the combustion of sulfur-containing fossil fuels. Sulfur dioxide is often used interchangeably with SO_x . Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air.



VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O₃ to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. VOCs are a criteria pollutant since they are a precursor to O₃, which is a criteria pollutant. The terms VOC and reactive organic gases (ROG), discussed below, are often used interchangeably.

Reactive Organic Gases (ROG). Similar to VOCs, ROGs are also precursors in forming O₃ and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O₃, which is a criteria pollutant.

TOXIC AIR CONTAMINANTS

Toxic air contaminants (TACs) are airborne substances capable of causing short-term (acute) and/or long-term (chronic) or carcinogenic (i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

Hazardous air pollutant (HAP) is a term used in the Federal Clean Air Act (FCAA) and includes a variety of pollutants generated or emitted by industrial production activities. Identified as TACs under the California Clean Air Act (CCAA), ten pollutants have been singled out through ambient air quality data as being the most substantial health risks in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, brain and nervous system damage, and respiratory disorders.

TACs do not have ambient air quality standards because no safe levels of TACs can be determined. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic “Hot Spots” Information and Assessment Act (Assembly Bill [AB] 2588) apply to facilities that use, produce, or emit toxic chemicals. Facilities subject to the toxic emission inventory requirements of AB 2588 must prepare, submit, and periodically update their toxic emission inventory plans and reports.

Toxic contaminants often result from fugitive emissions during fuel storage and transfer activities, and from leaking valves and pipes. For example, the electronics industry, including semiconductor manufacturing, uses highly toxic chlorinated solvents in semiconductor production processes. Automobile exhaust also contains toxic air pollutants such as benzene and 1,3-butadiene.



Diesel Particulate Matter

Diesel Particulate Matter (DPM) is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the Statewide total, with an additional 71 percent attributed to other mobile sources, such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute approximately five percent of total DPM in the State. It should be noted that CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan, the Statewide Portable Equipment Registration Program (PERP), and the Diesel Off-Road Online Reporting System (DOORS). PERP and DOORS allow owners or operators of portable engines and certain other types of equipment to register their equipment in order to operate them in the State without having to obtain individual permits from local air districts.

Diesel exhaust and many individual substances contained in it (e.g., arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by the Office of Environmental Health Hazard Assessment (OEHHA). CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. Using information from OEHHA's assessment, CARB estimates that diesel particle levels measured in California's air in 2000 could cause 540 "excess" cancers in a population of one million people over a 70-year lifetime. Other researchers and scientific organizations, including the National Institute for Occupational Safety and Health, have calculated cancer risks from diesel exhaust similar to those developed by OEHHA and CARB.

Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and can cause coughing, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine



particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, diesel exhaust particles have been identified as a carcinogen.

AMBIENT AIR QUALITY

Attainment Status

The EPA and CARB designate air basins where ambient air quality standards are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified.” National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or ‘form’ of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual PM_{2.5} standard is met if the three-year average of the annual average PM_{2.5} concentration is less than or equal to the standard. Table 5.2-2, South Coast Air Basin Attainment Status, lists the attainment status for the criteria pollutants in the basin.

**Table 5.2-2
South Coast Air Basin Attainment Status**

Pollutant	Standard ¹	Averaging Time	Designation ²	Attainment Deadline Date ³
1-Hour Ozone	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 (not attained) ⁴
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone ⁵	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	7/20/2032
	NAAQS	2015 8-Hour (0.070 ppm)	Nonattainment (Extreme)	8/3/2038
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032
CO	NAAQS	1-Hour (35 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	CAAQS	8-Hour (9 ppm)	Attainment	6/11/2007 (attained)



Table 5.2-3 (continued)
South Coast Air Basin Attainment Status

Pollutant	Standard ¹	Averaging Time	Designation ²	Attainment Deadline Date ³
NO ₂ ⁶	NAAQS	1-Hour (0.1 ppm)	Unclassifiable/Attainment	N/A (attained)
	NAAQS	Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-hour (0.18 ppm) Annual (0.030 ppm)	Attainment	--
SO ₂ ⁷	NAAQS	1-Hour (75 ppb)	Designations Pending (expect Uncl./Attainment)	N/A (attained)
	NAAQS	24-Hour (0.14 ppm) Annual (0.03 ppm)	Unclassifiable/Attainment	3/19/1979 (attained)
PM ₁₀	NAAQS	1987 24-Hour (150 µg/m ³)	Attainment (Maintenance) ⁸	7/26/2013 (attained)
	CAAQS	24-Hour (50 µg/m ³) Annual (20 µg/m ³)	Nonattainment	N/A
PM _{2.5} ⁹	NAAQS	2006 24-Hour (35 µg/m ³)	Nonattainment (Serious)	12/31/2019
	NAAQS	1997 Annual (15.0 µg/m ³)	Attainment	8/24/2016
	NAAQS	2021 Annual (12.0 µg/m ³)	Nonattainment (Serious)	12/31/2025
	CAAQS	Annual (12.0 µg/m ³)	Nonattainment	N/A
Lead	NAAQS	3-Months Rolling (0.15 µg/m ³)	Nonattainment (Partial) ¹⁰	12/31/2015
Hydrogen Sulfide (H ₂ S)	CAAQS	1-Hour (0.03 ppm/42 µg/m ³)	Attainment	--
Sulfates	CAAQS	24-Hour (25 µg/m ³)	Attainment	--



Table 5.2-4 (continued)
South Coast Air Basin Attainment Status

Pollutant	Standard ¹	Averaging Time	Designation ²	Attainment Deadline Date ³
Vinyl Chloride	CAAQS	24-Hour (0.01 ppm/26 µg/m ³)	Attainment	--

Source: South Coast Air Quality Management District, *National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin*, September 2018.

Notes:

¹ NAAQS = National Ambient Air Quality Standards, CAAQS = California Ambient Air Quality Standards

² U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable.

³ A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration.

⁴ 1-hour O₃ standard (0.12 ppm) was revoked, effective June 15, 2005 ; however, the Basin has not attained this standard based on 2008-2010 data and is still subject to anti-backsliding requirements.

⁵ 1997 8-hour O₃ standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the revoked 1997 O₃ standard is still subject to anti-backsliding requirements.

⁶ New NO₂ 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO₂ standard retained.

⁷ The 1971 annual and 24-hour SO₂ standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO₂ 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.

⁸ Annual PM₁₀ standard was revoked, effective December 18, 2006; 24-hour PM₁₀ NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM₁₀ maintenance plan was approved by U.S. EPA on June 26, 2013, effective July 26, 2013.

⁹ Attainment deadline for the 2006 24-Hour PM_{2.5} NAAQS (designation effective December 14, 2009) is December 31, 2019 (end of the 10th calendar year after effective date of designations for Serious nonattainment areas). Annual PM_{2.5} standard was revised on January 15, 2013, effective March 18, 2013, from 15 to 12 µg/m³. Designations effective April 15, 2015, so Serious area attainment deadline is December 31, 2025.

¹⁰ Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect redesignation to attainment based on current monitoring data.



Los Angeles County Monitoring

The SCAQMD is divided into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The City of Gardena is in the Southwest Los Angeles County (Area 3). The nearest air monitoring station is the LAX Hastings Station, located at 7201 W. Westchester Parkway, approximately six miles northwest of the Project Area. Table 5.2-3, Local Area Air Quality Levels, presents the monitored pollutant levels within the vicinity.

The monitoring data presented in Table 5.2-3 shows that ozone and particulate matter (PM₁₀) are the air pollutants of primary concern in the Project Area, which are detailed below.

Ozone

During the 2019 to 2021 monitoring period, the State 1-hour concentration standard for ozone was exceeded for one day in 2020 at the LAX Hastings Station. The federal and State 8-hour ozone standard was exceeded for two days in 2020 over the past three years at the LAX Hastings Station.

Ozone is a secondary pollutant as it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO₂, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of the SCAQMD contribute to the ozone levels experienced at the monitoring station, with the more significant areas being those directly upwind.

Carbon Monoxide

CO is another important pollutant that is due mainly to motor vehicles. The Southwest Los Angeles County LAX Hastings Station did not record an exceedance of the State or federal 1-hour or 8-hour CO standards for the last three years.

Nitrogen Dioxide

The LAX Hastings Station did not record an exceedance of the State or federal NO₂ standards for the last three years.

Sulfur Dioxide

The LAX Hastings Station did not record an exceedance of the State SO₂ standards for the last three years.



**Table 5.2-3
 Local Area Air Quality Levels**

Pollutant (Standard)	Year		
	2019	2020	2021 ¹
Ozone:			
Maximum 1-Hour Concentration (ppm)	0.082	0.117	0.059
Days > CAAQS (0.09 ppm)	0	1	0
Maximum 8-Hour Concentration (ppm)	0.067	0.074	0.049
Days > NAAQS (0.07 ppm)	0	2	0
Days > CAAQS (0.07 ppm)	0	2	0
Carbon Monoxide:			
Maximum 1-Hour Concentration (ppm)	1.8	1.6	1.7
Days > NAAQS (20 ppm)	0	0	0
Maximum 8-Hour Concentration (ppm)	1.3	1.3	1.3
Days > NAAQS (9 ppm)	0	0	0
Nitrogen Dioxide:			
Maximum 1-Hour Concentration (ppm)	0.057	0.060	0.063
Days > NAAQS (0.25 ppm)	0	0	0
Sulfur Dioxide:			
Maximum 1-Hour Concentration (ppm)	0.008	0.006	0.008
Days > CAAQS (0.25 ppm)	0	0	0
Inhalable Particulates (PM₁₀):			
Maximum 24-Hour Concentration (ug/m ³)	62	43	33
Days > NAAQS (150 ug/m ³)	0	0	0
Days > CAAQS (50 ug/m ³)	2 (3%)	0	0
Annual Average (ug/m ³)	19.2	22.5	17.7
Annual > NAAQS (50 ug/m ³)	No	No	No
Annual > CAAQS (20 ug/m ³)	No	Yes	No
Ultra-Fine Particulates (PM_{2.5}):²			
Maximum 24-Hour Concentration (ug/m ³)	--	--	--
Days > NAAQS (35 ug/m ³)	--	--	--
Annual Average (ug/m ³)	--	--	--
Annual > NAAQS (15 ug/m ³)	--	--	--
Annual > CAAQS (12 ug/m ³)	--	--	--
Source: South Coast Air Quality Management District, <i>Historical Air Quality Data by Year</i> , https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year , accessed March 3, 2023. Notes: CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million Bold = number of days or a condition in which an exceedance occurred. 1. Incomplete data due to site closure in September 2021. 2. Pollutant not monitored.			



Particulate Matter

During the 2019 to 2021 monitoring period, the State 24-hour concentration standard for PM₁₀ was exceeded for two days (3 percent of sampled days) in 2019 at the LAX Hastings Station. Over the same time period, the federal 24-hour and annual standards for PM₁₀ have not been exceeded at the LAX Hastings.

PM_{2.5} was not monitored at the LAX Hastings Station during the 2019 to 2021 monitoring period.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM₁₀ and PM_{2.5}). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM₁₀ and PM_{2.5}. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive, because many breathe through their mouths during exercise.

5.2.3 REGULATORY SETTING

FEDERAL

Federal Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health (with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases), and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

NAAQS standards define clean air and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Existing violations of the ozone and PM_{2.5} ambient air quality standards indicate that certain individuals exposed to these pollutants may experience certain health effects, including increased incidence of cardiovascular and respiratory ailments.

NAAQS standards have been designed to accurately reflect the latest scientific knowledge and are reviewed every five years by a Clean Air Scientific Advisory Committee (CASAC), consisting of



seven members appointed by the EPA administrator. Reviewing NAAQS is a lengthy undertaking and includes the following major phases: Planning, Integrated Science Assessment (ISA), Risk/Exposure Assessment (REA), Policy Assessment (PA), and Rulemaking. The process starts with a comprehensive review of the relevant scientific literature. The literature is summarized and conclusions are presented in the ISA. Based on the ISA, EPA staff perform a risk and exposure assessment, which is summarized in the REA document. The third document, the PA, integrates the findings and conclusions of the ISA and REA into a policy context, and provides lines of reasoning that could be used to support retention or revision of the existing NAAQS, as well as several alternative standards that could be supported by the review findings. Each of these three documents is released for public comment and public peer review by the CASAC. Members of CASAC are appointed by the EPA Administrator for their expertise in one or more of the subject areas covered in the ISA. The committee's role is to peer review the NAAQS documents, ensure that they reflect the thinking of the scientific community, and advise the Administrator on the technical and scientific aspects of standard setting. Each document goes through two to three drafts before CASAC deems it to be final.

Although there is some variability among the health effects of the NAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. NAAQS standards were last revised for each of the six criteria pollutants as listed below, with detail on what aspects of NAAQS changed during the most recent update:

- Ozone: On October 1, 2015, the EPA lowered the national eight-hour standard from 0.075 ppm to 0.070 ppm, providing for a more stringent standard consistent with the current California state standard.
- CO: In 2011, the primary standards were retained from the original 1971 level, without revision. The secondary standards were revoked in 1985.
- NO₂: The national NO₂ standard was most recently revised in 2010 following an exhaustive review of new literature pointed to evidence for adverse effects in asthmatics at lower NO₂ concentrations than the existing national standard.
- SO₂: On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb.
- PM: the national annual average PM_{2.5} standard was most recently revised in 2012 following an exhaustive review of new literature pointed to evidence for increased risk of premature mortality at lower PM_{2.5} concentrations than the existing standard.
- Lead: The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. In 2016, the primary and secondary standards were retained.



The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. The CARB is the state agency that is responsible for preparing and implementing the California SIP.

Transportation Conformity

Transportation conformity requirements were added to the FCAA in the 1990 amendments, and the EPA adopted implementing regulations in 1997. See Section 176 of the FCAA (42 U.S.C. Section 7506) and 40 CFR Part 93, Subpart A. Transportation conformity serves much the same purpose as general conformity: it ensures that transportation plans, transportation improvement programs, and projects that are developed, funded, or approved by the United States Department of Transportation or that are recipients of funds under the Federal Transit Act or from the Federal Highway Administration (FHWA), conform to the SIP as approved or promulgated by EPA.

Currently, transportation conformity applies in nonattainment areas and maintenance areas (maintenance areas are those areas that were in nonattainment that have been redesignated to attainment, under the FCCA). Under transportation conformity, a determination of conformity with the applicable SIP must be made by the agency responsible for the project, such as the Metropolitan Planning Organization, the Council of Governments, or a federal agency. The agency making the determination is also responsible for all the requirements relating to public participation. Generally, a project will be considered in conformance if it is in the transportation improvement plan and the transportation improvement plan is incorporated in the SIP. If an action is covered under transportation conformity, it does not need to be separately evaluated under general conformity.

Transportation Control Measures

One particular aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.



STATE

California Clean Air Act

The CCAA was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. CARB is the agency responsible for administering the CCAA. The CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [§39606(b)], which are similar to the federal standards.

California Air Quality Standards

Although NAAQS are determined by the EPA, states have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards. Federal and State ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM₁₀), and lead. In addition, California has created standards for pollutants that are not covered by federal standards. Although there is some variability among the health effects of the CAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations, and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. The existing State and federal primary standards for major pollutants are shown in Table 5.2-2.

Air quality standard setting in California commences with a critical review of all relevant peer reviewed scientific literature. OEHHA uses the review of health literature to develop a recommendation for the standard. The recommendation can be for no change, or can recommend a new standard. The review, including the OEHHA recommendation, is summarized in a document called the draft Initial Statement of Reasons (ISOR), which is released for comment by the public, and also for public peer review by the Air Quality Advisory Committee (AQAC). AQAC members are appointed by the President of the University of California for their expertise in the range of subjects covered in the ISOR, including health, exposure, air quality monitoring, atmospheric chemistry and physics, and effects on plants, trees, materials, and ecosystems. The Committee provides written comments on the draft ISOR. CARB staff next revises the ISOR based on comments from AQAC and the public. The revised ISOR is then released for a 45-day public comment period prior to consideration by the Board at a regularly scheduled Board hearing.

In June of 2002, CARB adopted revisions to the PM₁₀ standard and established a new PM_{2.5} annual standard. The new standards became effective in June 2003. Subsequently, staff reviewed the published scientific literature on ground-level ozone and nitrogen dioxide and CARB adopted revisions to the standards for these two pollutants. Revised standards for ozone and nitrogen dioxide went into effect on May 17, 2006 and March 20, 2008, respectively. These revisions reflect the most recent changes to the CAAQS.



CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the state. Rather than mandating the use of specific technology or the reliance on a specific fuel, CARB's motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB has adopted regulations which required auto manufacturers to phase in less polluting vehicles.

CARB Air Quality and Land Use Handbook

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities. The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (Interstate [I] 405 and I-710), the San Francisco Bay, and San Diego areas. The recommendations identified by CARB, including siting residential uses a minimum distance of 500 feet from freeways or other high-traffic roadways, are consistent with those adopted by the State of California for location of new schools. Specifically, the CARB Handbook recommends, "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day." It is noted that the City does not have any roads with 100,000 vehicles/day.

Tanner Air Toxics Act

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and has adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology (BACT) to minimize emissions.

AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. CARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, CARB adopted a new public-transit bus-fleet rule and emission standards for new urban buses. These rules and standards provide for (1) more stringent



emission standards for some new urban bus engines, beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule. Other recent milestones include the low-sulfur diesel-fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide.

[Climate Change Scoping Plan](#)

On December 11, 2008, CARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of CARB's plans to achieve GHG reductions in California required by Assembly Bill (AB) 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce carbon dioxide-equivalent (CO₂e) emissions by 169 million metric tons (MMT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT of CO₂e under a business-as-usual scenario. This is a reduction of 42 MMT CO₂e, or almost 10 percent, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020. The Scoping Plan also breaks down the amount of GHG emissions reductions CARB recommends for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO₂e);
- The Low-Carbon Fuel Standard (15.0 MMT CO₂e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO₂e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO₂e).

CARB updated the Scoping Plan in 2013 (*First Update to the Scoping Plan*) and again in 2017. The 2013 Update built upon the initial Scoping Plan with new strategies and recommendations, and also set the groundwork to reach the long-term goals set forth by the State. Successful implementation of existing programs (as identified in previous iterations of the Scoping Plan) has allowed California to meet the 2020 target. The 2017 Update expanded the scope of the plan further by focusing on the strategy for achieving the State's 2030 GHG target of 40 percent emissions reductions below 1990 levels (to achieve the target codified into law by SB 32), and substantially advances toward the State's 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

The 2017 Update relied on the preexisting programs paired with an extended, more stringent Cap-and-Trade Program, to deliver climate, air quality, and other benefits. The 2017 Update identified new technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction goals.



CARB adopted the 2022 Scoping Plan Update (2022 Scoping Plan) on December 15, 2022. The 2022 Scoping Plan Update assesses progress towards the SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030, while laying out a path to achieving carbon neutrality no later than 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.

REGIONAL & LOCAL

South Coast Air Quality Management District (SCAQMD)

The SCAQMD shares responsibility with CARB for ensuring that all state and federal ambient air quality standards are achieved and maintained over an area of approximately 10,743 square miles. This area includes all of Orange County and Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County.

The SCAQMD reviews projects to ensure that they do not (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay the timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan.

The SCAQMD is responsible for controlling emissions primarily from stationary sources. The SCAQMD maintains air quality monitoring stations throughout the South Coast Air Basin (SCAB). In coordination with the Southern California Association of Governments (SCAG), SCAQMD is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for SCAB. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the national and/or California ambient air quality standards.

In 2003, an AQMP was prepared by SCAQMD to bring SCAB, as well as portions of the Salton Sea Air Basin under the SCAQMD jurisdiction, into compliance with the 1-hour ozone and PM₁₀ national standards. The 2003 AQMP also replaced the 1997 attainment demonstration for the federal CO standard and provided a basis for a maintenance plan for CO for the future. It also updated the maintenance plan for the federal NO₂ standard, which SCAB has met since 1992.

A subsequent AQMP for the Basin was adopted by SCAQMD on June 1, 2007. The goal of the 2007 AQMP was to lead SCAB into compliance with the national 8-hour ozone and PM_{2.5} standards. The 2007 AQMP outlined a detailed strategy for meeting the national health-based standards for PM_{2.5} by 2015 and 8-hour ozone by 2024 while accounting for and accommodating future expected growth. The 2007 AQMP incorporated significant new emissions inventories, ambient measurements, scientific data, control strategies, and air quality modeling. Most of the reductions were to be from mobile sources, which are currently responsible for about 75 percent of all smog and particulate-forming emissions.

SCAQMD approved the 2012 AQMP on December 7, 2012. The 2012 AQMP incorporated the latest scientific and technological information and planning assumptions, including the 2012–



2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and updated emission inventory methodologies for various source categories. The 2012 AQMP outlines a comprehensive control strategy that meets the requirement for expeditious progress toward attainment with the 24-hour PM_{2.5} federal ambient air quality standard with all feasible control measures and demonstrates attainment of the standard by 2014. The 2012 AQMP also updates the 8-hour ozone control plan with new emission reduction commitments from a set of new control measures that implement the 2007 AQMP's Section 182 (e)(5) commitments. The goal of the Final 2012 AQMP is to lead the Basin into compliance with the national 8-hour ozone and PM_{2.5} standards.

SCAQMD approved the Final 2016 AQMP on March 3, 2017. The 2016 AQMP includes transportation control measures developed by SCAG from the 2016-2040 RTP/SCS, as well as the integrated strategies and measures needed to meet the NAAQS. The 2016 AQMP demonstrates attainment of the 1-hour and 8-hour ozone NAAQS as well as the latest 24-hour and annual PM_{2.5} standards.

SCAQMD approved the Final 2022 AQMP on December 2, 2022. The Final 2022 AQMP builds upon measures already in place from previous AQMPs to reduce air pollution and meet the federal ozone standard established by the EPA in 2015. It includes a variety of additional actions and strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission emissions technologies, when cost-effective and feasible, and low NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other Clean Air Act measures to achieve the 2015 8-hour ozone standard. The 2022 AQMP is based on the most recent assumptions provided by both CARB and SCAG (SCAG's 2020-2045 RTP/SCS) for motor vehicle emissions and demographic updates and includes updated transportation conformity budgets.

SCAQMD has also prepared the 2010 Clean Communities Plan (Formerly the Air Toxics Control Plan), the Air Quality Monitoring Network Plan, the Vision for Air: A Framework for Air Quality and Climate Plan.

SCAQMD is responsible for limiting the amount of emissions that can be generated throughout the basin by various stationary, area, and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board that (1) limit the emissions that can be generated by various uses and activities; and (2) identify specific pollution reduction measures, which must be implemented in association with various uses and activities. These rules regulate the emissions of not only the federal and state criteria pollutants, but also TACs and acutely hazardous materials. The rules are also subject to ongoing refinement by the SCAQMD.

Among SCAQMD rules that may be applicable to future development projects within the City are Rule 401 (Visible Emissions), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 1113 (Architectural Coatings), Rule 1138 (Control of Emissions from Restaurant Operations), Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process



Heaters), and Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). Rule 401 restricts the emissions of air contaminants that significantly reduce air opacity. Rule 402 restricts discharges that cause nuisance to the public. Rule 403 requires the use of stringent best available control measures (BACMs) to minimize PM₁₀ emissions during grading and construction activities. Rule 1113 requires reductions in the VOC content of coatings. Rule 1138 specifies PM and VOC emissions and odor control requirements for some kinds of commercial cooking operations. Rule 1146.2 restricts the NO_x emissions from natural gas-fired water heaters, boilers, and process heaters as defined by this rule. Compliance with SCAQMD Rule 1403 requires the owner or operator of any demolition or renovation activity to have an asbestos survey performed prior to demolition and to provide notification to SCAQMD prior to commencing demolition activities.

SCAQMD's CEQA guidelines are voluntary initiatives recommended for consideration by local planning agencies. The CEQA *Air Quality Handbook* (Handbook) published by SCAQMD provides local governments with guidance for analyzing and mitigating project-specific air quality impacts. SCAQMD is currently updating some of the information and methods in the Handbook, such as the screening tables for determining the air quality significance of a project and the on-road mobile source emission factors. While this process is underway, SCAQMD recommends using other approved models to calculate emissions from land use projects, such as CalEEMod.

SCAQMD's *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* considers impacts on air quality sensitive receptors from TAC-emitting facilities. SCAQMD's siting distance recommendations are the same as those provided by the CARB (e.g., a 500-foot siting distance for air quality sensitive receptors proposed in proximity to freeways and high-traffic roads, and the same siting criteria for distribution centers and dry-cleaning facilities).

[SCAG's Connect SoCal: Regional Transportation Plan/Sustainable Communities Strategy \(RTP/SCS\)](#)

SCAG is the metropolitan planning organization (MPO) for the region in which the City is located. In 2020, SCAG adopted Connect SoCal, the 2020-2045 RTP/SCS, which is an update to the previous 2016 RTP/SCS.

The 2020 RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2020 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving a 19 percent reduction by 2035 compared to the 2005 level. Although the focus of the 2020 RTP/SCS is on GHG emission-reduction, compliance with and implementation of 2020 RTP/SCS policies and strategies would also have co-benefits of reducing per capita criteria air pollutant and TAC emissions associated with reduced per capita vehicle miles traveled (VMT). Improved air quality with implementation of the 2020 RTP/SCS policies would decrease reactive organic gases (ROG) (similar to VOCs), CO, NO_x, and PM_{2.5}.

SCAG's 2020 RTP/SCS builds on the land use policies that were incorporated into the 2016 RTP/SCS, and provides specific strategies for successful implementation. These strategies include



implementing the Sustainable Communities Program (SCP) – Housing and Sustainable Development (HSD) which will both accelerate housing production as well as enable implementation of the Sustainable Communities Strategy of Connect SoCal; encouraging use of active transportation, or human powered transportation such as bicycles, tricycles, wheelchairs, electric wheelchairs/scooters, skates, and skateboards; and supporting alternative fueled vehicles. The 2020 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in infill areas well served by transit.

In addition, the 2020 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). The 2020 RTP/SCS strategies support local planning and projects that serve short trips, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. The 2020 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and state funding, and to expand the potential for all people to use active transportation.

[City of Gardena General Plan](#)

The City of Gardena Community Development Element, Land Use Plan and Circulation Plan contain the following goals and policies potentially relevant to the proposed Project for this topic:

[Community Development Element, Land Use Plan](#)

Policy LU 3.6: New commercial and industrial developments shall meet or exceed local and state requirements pertaining to noise, air, water, seismic safety and any other applicable environmental regulations.

[Community Development Element, Circulation Plan](#)

CI Goal 1: Promote a safe and efficient circulation system that benefits residents and businesses, and integrates with the greater Los Angeles/South Bay transportation system.

Policy CI 1.1: Prioritize long-term sustainability for the City of Gardena, in alignment with regional and state goals, by promoting infill development, reduced reliance on single-occupancy vehicle trips, and improved multi-modal transportation networks, with the goal of reducing air pollution and greenhouse gas emissions, thereby improving the health and quality of life for residents.

CI Goal 3: Develop Complete Streets to promote alternative modes of transportation that are safe and efficient for commuters, and available to persons of all income levels and disabilities.

Policy CI 3.1: Work with Gardena Municipal Bus Lines and MTA to increase the use of public transit, establish or modify routes, and improve connectivity to regional services.



Policy CI 3.2: Maintain, to the extent fiscally feasible, and regularly evaluate the efficiency and effectiveness of the Gardena Municipal Bus Lines and Dial-a-Ride services for City residents.

Policy CI 3.3: Maintain and expand sidewalk installation and repair programs, particularly in areas where sidewalks link residential neighborhoods to local schools, parks, and shopping areas.

Policy CI 3.4: Maintain a citywide bicycle route and maintenance plan that promotes efficient and safe bikeways integrated with the MTA’s regional bicycle system.

[City of Gardena Climate Action Plan 2017](#)

The City of Gardena, in cooperation with the South Bay Cities Council of Governments, has developed a Climate Action Plan (CAP) to reduce Greenhouse Gas (GHG) emissions within the City. The CAP 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. Chapters 6 and 7 focus on land use and transportation strategies to improve air quality by reducing transportation-related emissions.

5.2.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to air quality. A project would result in a significant impact related to air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan (refer to Impact Statement 5.2-1);
- 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 (refer to Impact Statement 5.2-2);
- Expose sensitive receptors to substantial pollutant concentrations (refer to Impact Statement 5.2-3); and/or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people (refer to Impact Statement 5.2-4).

Based on these standards and significance thresholds and criteria, the Project’s effects have been categorized as either “no impact,” a “less than significant impact,” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a “significant unavoidable impact.”

MASS EMISSIONS THRESHOLDS

SCAQMD significance criteria may be relied upon to make the above determinations. According to SCAQMD, an air quality impact is considered significant if a proposed project would violate



any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. SCAQMD has established thresholds of significance for air quality during project construction and operations, as shown in Table 5.2-4, South Coast Air Quality Management District Emissions Thresholds.

Table 5.2-4
South Coast Air Quality Management District Emissions Thresholds

Criteria Air Pollutants and Precursors (Regional)	Construction-Related	Operational-Related
	Average Daily Emissions (pounds/day)	
Reactive Organic Gases (ROG)	75	55
Carbon Monoxide (CO)	550	550
Nitrogen Oxides (NO _x)	100	55
Sulfur Oxides (SO _x)	150	150
Coarse Particulates (PM ₁₀)	150	150
Fine Particulates (PM _{2.5})	55	55

Source: South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1993 (PM_{2.5} threshold adopted June 1, 2007).

LOCALIZED CARBON MONOXIDE

In addition to the daily thresholds listed above, the proposed Project would be subject to the ambient air quality standards. These are addressed through an analysis of localized carbon monoxide (CO) impacts. The California 1-hour and 8-hour CO standards are:

- 1-hour = 20 parts per million (ppm)
- 8-hour = 9 ppm

The significance of localized impacts depends on whether ambient CO levels near a project site exceed State and federal CO standards. SCAB has been designated as attainment under the 1-hour and 8-hour standards.

LOCALIZED SIGNIFICANCE THRESHOLDS

In addition to the CO hotspot analysis, SCAQMD developed Local Significance Thresholds (“LSTs”) for emissions of Nitrogen Oxide (NO_x), CO, Coarse Particulate Matter (PM₁₀), and Fine Particulate Matter (PM_{2.5}) generated at new development sites (off-site mobile source emissions are not included in the LST analysis). LSTs represent the maximum emissions that can be generated at a project site without expecting to cause or substantially contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA), as demarcated by SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb 5.0 acres or less on a single day. The appropriate SRA for the LSTs is the Central San Bernardino Valley area (SRA 34), since SRA 34 includes the Project



Area. LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. SCAQMD produced look-up tables for projects that disturb areas less than or equal to 5.0 acres. Table 5.2-5, Local Significance Thresholds (Construction/Operations), shows the LSTs for a 1.0-acre, 2.0-acre, and 5.0-acre project site in SRA 34 with sensitive receptors located within 25 meters of the Project Area.

**Table 5.2-5
Local Significance Thresholds (Construction/Operations)**

Project Size	Nitrogen Oxide (NOx) lbs/day	Carbon Monoxide (CO) lbs/day	Coarse Particulates (PM ₁₀) lbs/day	Fine Particulates (PM _{2.5}) lbs/day
1.0 acres	118/118	667/667	4/1	3/1
2.0 acres	148/148	972/972	7/2	4/1
5.0 acres	270/270	1,746/1,746	14/4	8/2

Source: South Coast Air Quality Management District, *Localized Significance Threshold Methodology – Appendix C*, revised October 21, 2009.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles and introduction of cleaner fuels as well as implementation of control technology on industrial facilities, CO concentrations in the South Coast Air Basin and the state have steadily declined. The analysis of CO hotspots compares the volume of traffic that has the potential to generate a CO hotspot and the volume of traffic with implementation of the proposed Project.

5.2.5 METHODOLOGY AND ASSUMPTIONS

The City is proposing to amend the Land Use Plan, which is part of the General Plan, and the Zoning Code, amend both the Land Use Policy Map and the Zoning Map, as well as rescind the Artesia Corridor Specific Plan. Overall, the intent of the proposed Project is to provide adequate sites for all types of housing consistent with the 2021-2029 Housing Element and provide a more cohesive land use/zoning pattern. As part of the Housing Element the City identified candidate sites (also referred to as Inventory Sites) to be designated with one of several Housing Overlays. In addition to implementation of the housing overlays to the parcels identified in the 2021-2029 Housing Element, the City identified opportunities for the exploration of additional residential development by proposing to apply the housing overlays to additional parcels (also referred to



as Non-inventory Sites) and introducing and applying Very High-Density Residential land use designations and zones. The Project also involves rezoning several sites to eliminate split-zoned properties and re-zone other properties to match the existing uses, densities, or intensities that already occur on the property, as described in Section 3.0, Project Description.

Although the proposed Project does not involve site-specific development, the intent is to provide adequate sites for residential development to accommodate the City's RHNA and to allow for additional residential development opportunities should they arise. For purposes of this analysis, it is assumed existing on-site uses will be removed and new residential development, consistent with the development assumptions and development potential identified in [Table 3-3](#) and [Table 3-4](#), respectively, will occur. This analysis focuses on the nature and magnitude of the change in the air quality environment due to potential development associated with implementation of the proposed Project.

Air pollutant emissions associated with the proposed Project would result from construction equipment usage and from construction-related traffic. Additionally, emissions would be generated from operations of the future residential land uses that would be developed, and from traffic volumes generated by these new uses. The net increase in emissions generated by these activities and other secondary sources have been quantitatively estimated and compared to the applicable thresholds of significance recommended by SCAQMD.

[AQMP Consistency](#)

SCAQMD's CEQA Handbook suggests an evaluation of the following two criteria to determine whether a project involving a legislative land use action (such as the proposed General Plan land use and zoning designation changes) would be consistent or in conflict with the AQMP:

- **Consistency Criterion No. 1:** A proposed project would not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of the AQMP's air quality standards or the interim emissions reductions.
- **Consistency Criterion No. 2:** A proposed project would not exceed the AQMP's assumptions or increments based on the years of the project build-out phase.

Consistency Criterion No. 1 refers to the California Ambient Air Quality Standards. An impact would occur if the long-term emissions associated with the proposed Project would exceed SCAQMD's regional significance thresholds for operation-phase emissions.

Consistency Criterion No. 2 refers to SCAG's growth forecast and associated assumptions included in the AQMP. The future air quality levels projected in the AQMP are based on SCAG's growth projections, which are based, in part, on the general plans of cities and counties located within the SCAG region, and, in part, on SCAG's three Land Development Categories. Therefore, if the level of housing or employment related to the proposed Project are consistent with the



applicable assumptions used in the development of the AQMP, the Project would not jeopardize attainment of the air quality levels identified in the AQMP.

Construction

Short-term construction-generated emissions of criteria air pollutants and ozone precursors from implementation of the Project were assessed in accordance with methods recommended by SCAQMD. The Project's regional emissions were modeled using the California Emissions Estimator Model (CalEEMod), as recommended by SCAQMD. CalEEMod was used to determine whether short-term construction-related emissions of criteria air pollutants associated with the proposed Project would exceed applicable regional thresholds and where mitigation would be required. Modeling was based on Project-specific data and predicted short-term construction-generated emissions associated with the proposed Project were compared with applicable SCAQMD regional thresholds for determination of significance.

In addition, to determine whether construction activities associated with implementation of the Project would create significant adverse localized air quality impacts on nearby sensitive receptors, the worst-case daily emissions contribution from the proposed Project was compared to SCAQMD's LSTs that are based on the pounds of emissions per day that can be generated by a project without causing or contributing to adverse localized air quality impacts. The daily total on-site combustion, mobile, and fugitive dust emissions associated with construction was combined and evaluated against SCAQMD's LSTs for a 5-acre site. The use of the 5-acre threshold provides a conservative evaluation because it estimates the area undergoing construction activities that could impact a nearby sensitive receptor, which is not anticipated to be greater than 5-acres, in a given day, for an individual sensitive receptor.

Operations

Long-term (i.e., operational) regional emissions of criteria air pollutants and precursors, including mobile- and area-source emissions from future development associated with implementation of the proposed Project, were also quantified using the CalEEMod (v. 2022.1) computer model. Area-source emissions were modeled according to the size and type of the land uses proposed. Mass mobile-source emissions were modeled based on the increase in daily vehicle trips that would result from the proposed Project. Predicted long-term operational emissions were compared with applicable SCAQMD thresholds for determination of significance.

Trips and Trip Length

To determine emissions from passenger car vehicles, CalEEMod default trip rates and trip lengths were utilized, based on the CalEEMod Condo/Townhouse land use, which reflects the best proxy for the land uses proposed by the Project within the CalEEMod model.



5.2.6 IMPACTS AND MITIGATION MEASURES

Impact 5.2-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis: As part of its enforcement responsibilities, the United States Environmental Protection Agency (EPA) requires that each state with nonattainment areas prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under State law, the California Clean Air Act (CCAA) requires an air quality attainment plan to be prepared for areas designated as nonattainment regarding the federal and State ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The Project is located within SCAB, which is under SCAQMD's jurisdiction. SCAQMD is required, pursuant to the Federal Clean Air Act (FCAA), to reduce emissions of criteria pollutants for which SCAB is in non-attainment. To reduce such emissions, SCAQMD drafted the 2022 Air Quality Management Plan (AQMP). The 2022 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving State (California) and national air quality standards. The 2022 AQMP is a regional and multi-agency effort including SCAQMD, the CARB, the Southern California Association of Governments (SCAG), and the EPA. The AQMP's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, updated emission inventory methodologies for various source categories, and SCAG's growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed Project is subject to SCAQMD's AQMP.

As stated above, criteria for determining consistency with the AQMP are defined by the following indicators:

- **Consistency Criterion No. 1:** A proposed project would not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of the AQMP's air quality standards or the interim emissions reductions.
- **Consistency Criterion No. 2:** A proposed project would not exceed the AQMP's assumptions or increments based on the years of the project build-out phase.

Consistency Criterion No. 1 refers to the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). Although the Project's operational impacts would be below the applicable SCAQMD's regional thresholds for operational emissions (as shown in [Table 5.2-5](#)), the Project's construction impacts as a whole would exceed SCAQMD's thresholds for construction emissions (as shown in [Table 5.2-4](#)). Therefore, the Project would



violate air quality standards during Project construction. Thus, the Project would not be consistent with the first criterion, and therefore would generate a significant and unavoidable impact relative to this topic.

Consistency Criterion No. 2 refers to whether the Project would exceed the AQMP's assumptions or increments based on the years of the project build-out phase. Future emissions forecasts in the 2022 AQMP are primarily based on demographic and economic growth projections provided by SCAG's 2020 RTP/SCS, which are compiled using a number of sources including the general plans of cities and counties in the SCAG region, including Gardena.

The General Plan Land Use Plan (as revised April 2021) anticipates a total of 23,617 dwelling units and a population of 64,492. Although the General Plan does not indicate a specific number of jobs, it does anticipate a non-residential development capacity of 16,879,240 square feet. Implementation of the proposed Project would allow for the development of up to 12,167 net new housing units with a population increase of approximately 33,338 people. It is noted that residential development associated with implementation of the proposed land use designations would result in an associated reduction of the non-residential development capacity anticipated by the General Plan, as sites currently anticipated for non-residential development would be developed with residential uses.

Although the proposed Project would provide for increased population growth within the Project Area when compared to the current General Plan, the proposed Project is intended to identify and plan for future population growth and housing development within the City. The Project would implement the goals and policies of the General Plan and accommodate the City's fair share of statewide housing needs, which are allocated by SCAG, based on regional numbers provided by the HCD on a regular basis (every five to eight years). The City of Gardena 2021-2029 Housing Element was adopted in February 2023 and accommodates the City's share of the regional housing need for the 2021-2029 RHNA period of 5,735 units. The City's 2021-2029 Housing Element identifies the implementation of Housing Overlays as the primary opportunity to accommodate the City's RHNA allocation. In addition to implementation of the housing overlays to the parcels (Inventory Sites) identified in the 2021-2029 Housing Element, the City identified opportunities for the exploration of additional residential development by proposing to apply the housing overlays to additional parcels (Non-inventory Sites) and introducing and applying Very High-Density Residential land use designations and zones. The inclusion of additional sites, beyond the Inventory Sites, would create more cohesive and compatible development patterns, providing improved opportunities for residential development within these areas of the City (compared to other sites and areas within the City not zoned for residential development). Ultimately, market conditions will determine the number of Inventory and Non-inventory Sites that are developed. However, considering development trends in the City, it is unlikely that housing development of this magnitude would occur within the City.

Overall, the Project would allow for the development of up to 12,167 net new housing units with a population increase of approximately 33,338 residents based on a DOF persons per household



of 2.74. This would be an approximate 56 percent increase over existing conditions and an approximate 42 percent increase over SCAG's projected future conditions (2045). Thus, Project implementation would exceed the population projections anticipated by SCAG's growth forecasts and therefore would likely exceed the AQMP's growth assumptions since they are based on SCAG's forecast data. Thus, the Project would not be consistent with the second criterion, and therefore would generate a significant and unavoidable impact relative to this topic.

As discussed in Section 5.12, SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts for local Los Angeles County governments, among other counties. SCAG provides household, population, and employment projection estimates in five-year increments through 2045. While Project growth projections are anticipated to exceed SCAG's 2045 population, SCAG's projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. Discrepancies between Project and regional forecasts can also be attributed to the RHNA process. The proposed Project is intended to accommodate the City's 2021-2029 RHNA; SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs and revised General Plan growth projections associated with implementation of the Project will be included as part of SCAG's future growth forecasts.

The proposed Project does not include site-specific development and would provide for the planning of the potential growth associated with the RHNA and additional residential development, which would also be considered as part of future updates to plans and programs, including the next update to SCAG's RTP/SCS. The General Plan includes policies that reduce environmental impacts associated with growth, such as air quality. However, since Project implementation would violate air quality standards during Project construction and would accommodate residential development opportunities that exceed the City's 2021-2029 RHNA and SCAG's growth projections, the Project would not be consistent with the first or second AQMP consistency criteria, and therefore would conflict with or obstruct implementation of the AQMP, resulting in a significant and unavoidable impact relative to this topic.

Mitigation measures to address the impacts associated with Project construction emissions are provided under Impact 5.2-2.

Mitigation Measures: Refer to Mitigation Measures AQ-1 through AQ-7, below.

Level of Significance: Significant and Unavoidable Impact.



Impact 5.2-2: Would the project result in a cumulative 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:

Construction Emissions

Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within a Project site include ozone-precursor pollutants (i.e., ROG and NOx) and PM₁₀ and PM_{2.5}. Construction-generated emissions are short term and temporary, lasting only while construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds SCAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from demolition, site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities, as well as weather conditions and the appropriate application of water.

Construction-related emissions were calculated using the latest version of the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. For analysis purposes, it is assumed that demolition, site preparation, grading, building construction, paving, and architectural coating phases would begin in 2024 and end in 2040.

The timing of development and operation of the development of the Project would be dependent upon market conditions and development applications for new projects within the Project Area. Thus, construction activities associated with buildout of the Project would likely occur sporadically over 16 years or longer. Due to the uncertainty of the specific timing and methods of construction activities related to individual development projects within the Project Area, the maximum daily emissions are based on a very conservative scenario that construction could occur throughout Project buildout, based on maximum equipment use, and multiple future individual development projects overlapping. Although site-specific development is not currently proposed and the exact construction timeline is unknown, the 2024 construction start date used in the modeling results in a conservative analysis because CalEEMod uses cleaner emissions factors in future years due to improved emissions controls and fleet turnover. This approach is conservative given that emissions factors are anticipated to decrease in future years due to regulatory and technological improvements and fleet turnover; refer to Appendix E for additional information regarding the construction assumptions used in this analysis.

The Project's predicted maximum daily construction-related emissions are summarized in Table 5.2-6, Construction-Related Emissions (Unmitigated Maximum Pounds Per Day). As shown in



Table 5.2-6, in the unmitigated scenario, all criteria pollutant emissions would exceed their respective thresholds, except for SO_x and PM_{2.5}. Therefore, short-term construction emissions would be significant.

**Table 5.2-6
Construction-Related Emissions (Unmitigated Maximum Pounds Per Day)**

Construction Year	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Sulfur Oxides (SO _x)	Coarse Particulates (PM ₁₀)	Fine Particulates (PM _{2.5})
2024	84.2	235.7	996.2	0.5	196.3	57.4
2025	80.8	210.4	921.4	0.5	195.6	56.4
2026	73.4	195.5	859.9	0.5	195.2	56.1
2027	71.5	188.3	805.7	0.5	194.6	55.8
2028	69.5	178.4	763.2	0.5	194.4	55.7
2029	67.7	166.5	719.6	0.5	194.2	55.5
2030	66.0	157.2	682.7	0.5	194.1	55.4
2031	59.3	152.2	644.5	0.5	194.0	55.3
2032	57.7	140.5	607.8	0.5	193.7	55.0
2033	56.4	131.1	578.0	0.5	193.5	54.8
2034	55.0	127.5	550.3	0.5	193.3	54.7
2035	53.9	122.8	526.2	0.5	193.1	54.5
2036	53.1	113.6	502.4	0.5	192.9	54.3
2037	52.0	111.8	486.5	0.5	192.9	54.3
2038	50.9	107.0	471.2	0.5	192.7	54.1
2039	50.3	104.7	459.0	0.5	192.7	54.0
2040	49.2	103.5	447.9	0.5	192.6	54.0
SCAQMD Threshold	75	100	550	150	55	150
Exceed Threshold?	Yes	Yes	Yes	No	Yes	No
Source: CalEEMod version 2022.1						



In order to reduce impacts associated with construction activities, future development would be required to comply with Mitigation Measures AQ-1 through AQ-7, which would require construction activities to utilize “Super-Compliant” low VOC paints that have no more than 10 g/L of VOC, which exceeds the regulatory VOC limits put forth by SCAQMD’s Rule 1113; require all construction equipment greater than 150 horsepower (>150 HP) to be CARB certified tier 4 or higher; and require construction activities to use electrical and alternative fueled equipment, and other similar measures.. Additionally, future development would be subject to compliance with SCAQMD Rules 402, 403, and 1113, which would reduce specific construction-related emissions beyond what is shown in [Table 5.2-6](#). With implementation of Mitigation Measures AQ-1 through AQ-7, emissions of ROG, NOx, CO, and PM from construction activities would be reduced and emissions from most individual developments projects within the Project Area would be reduced to below SCAQMD significance thresholds for construction.¹ However, due to the unknown detail about future development projects and the potential overlap of construction activities, it cannot be assured that the mitigation measures would reduce emissions below SCAQMD significance thresholds. Therefore, based on the conservative scenario of construction timing and construction equipment use, impacts related to construction emissions would remain significant and unavoidable.

Operational Emissions

Operational emissions would be associated with motor vehicle use and area sources associated with the new residential uses. Area sources include natural gas for space and water heating, gasoline-powered landscaping and maintenance equipment, consumer products (such as household-type cleaners)². Mobile sources emissions are generated from vehicle operations associated with Project operations. Typically, area sources are small sources that contribute very minor emissions individually, but when combined may generate substantial amounts of pollutants. Area specific defaults in CalEEMod were used to calculate area source emissions.

CalEEMod was also used to calculate pollutants emissions from vehicular trips generated from the Project. CalEEMod default inputs for vehicle mix and trip distances were unaltered for this analysis. CalEEMod estimated net emissions (from Project operations minus Existing Conditions) are summarized in [Table 5.2-7, *Operational-Related Emissions \(Maximum Pounds Per Day\)*](#). Note that emissions rates differ from summer to winter because weather factors are dependent on the season and these factors affect pollutant mixing, dispersion, ozone formation, and other factors.

¹ It should be noted that CalEEMod does not allow Plan-level projects to be modeled with construction-related mitigation measures associated with Mitigation Measures AQ-1 through AQ-7, or with SCAQMD Rules 402, 403, and 1113.

² For conservative analysis, modeling assumed gas appliances would exist; however, it is noted that beginning in 2026 all residential development would be required to install electric appliances, which would result in reduced emissions associated with Project implementation.



As shown in [Table 5.2-7](#), emission calculations generated from CalEEMod demonstrate that Project operations would not exceed SCAQMD’s thresholds for any criteria air pollutants, when compared to the existing conditions. Rather, the results of [Table 5.2-7](#) demonstrate that the Project would generate a net benefit in operational criteria pollutant emissions, since the existing scenario generates greater emissions than the proposed Project. Therefore, as shown in [Table 5.2-7](#), Project operational impacts would be less than significant.

**Table 5.2-7
Operational-Related Emissions (Maximum Pounds Per Day)**

Source	Reactive Organic Gases (ROG)	Nitrogen Oxides (NOx)	Carbon Monoxide (CO)	Sulfur Oxides (SOx)	Coarse Particulates (PM ₁₀)	Fine Particulates (PM _{2.5})
Existing Conditions						
Summer Emissions						
Total	1,332.5	522.2	7,590.3	20.0	882.3	228.7
Winter Emissions						
Total	1,271.7	562.7	6,675.1	19.2	881.8	228.1
Proposed Project						
Summer Emissions						
Total	559.4	224.7	2,660.0	5.7	228.9	48.0
Winter Emissions						
Total	624.3	230.4	1,773.8	5.4	228.6	47.7
Net Emissions						
Summer Emissions						
Total	-773.1	-297.5	-4,930.3	-14.3	-653.4	-180.7
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No
Winter Emissions						
Total	-647.4	-332.3	-4,901.3	-13.8	-653.2	-180.4
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No
Source: CalEEMod Version 2022.1; refer to Appendix E for model outputs.						



Area Source Emissions

Area source emissions would be generated due to consumer products, architectural coating, and landscaping associated with the sites. As shown in Table 5.2-7, the Project's area source emissions would not exceed SCAQMD thresholds for either the winter or summer seasons. Rather, the Project's area source emissions net of existing conditions would provide a net benefit during both the winter and summer seasons. Therefore, impacts would be less than significant and mitigation measures would not be required.

Energy Source Emissions

Energy source emissions would be generated due to the Project's electricity and natural gas usage. The Project's primary uses of electricity and natural gas would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. As shown in Table 5.2-7, the Project's energy source emissions would not exceed SCAQMD thresholds for criteria pollutants. As such, the Project would not violate any air quality standards or contribute substantially to an existing or projected air quality violation. Rather, the Project's energy source emissions net of existing conditions would provide a net benefit during both the winter and summer seasons. Therefore, the Project's operational air quality impacts would be less than significant.

Mobile Source Emissions

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NOX, PM₁₀, and PM_{2.5} are all pollutants of regional concern. NOx and ROG react with sunlight to form O₃, known as photochemical smog. Additionally, wind currents readily transport PM₁₀ and PM_{2.5}. However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions have been estimated using CalEEMod, as recommended by SCAQMD. As shown in Table 5.2-7, mobile source emissions would not exceed SCAQMD thresholds for criteria pollutants. Rather, the Project's mobile source emissions net of existing conditions would provide a net benefit during both the winter and summer seasons. Therefore, the Project's air quality impacts associated with mobile source emissions would be less than significant.

Mitigation Measures:

AQ-1: Dust Control. The construction plans and specifications and construction permitting for future development projects shall ensure to the satisfaction of the City of Gardena Community Development Department that the following dust suppression measures in the SCAQMD CEQA Air Quality Handbook will be implemented by the construction contractor to reduce the project's emissions:

- Revegetate disturbed areas.



- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.
- Sweep all streets once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
- Install “shaker plates” prior to construction activity where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment prior to leaving the site.
- Pave, water, or chemically stabilize all onsite roads.
- Minimize at all times the area disturbed by clearing, grading, earthmoving, or excavation operations.

AQ-2: Tier 4 Construction Equipment. Construction plans and specifications and construction permitting shall include to the satisfaction of the City of Gardena Community Development Department the requirement that for construction equipment greater than 150 horsepower (>150 HP), the construction contractor shall use off-road diesel construction equipment that complies with Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 4 emissions standards during all construction phases and will ensure that all construction equipment be tuned and maintained in accordance with the manufacturer’s specifications.

AQ-3: Low VOC Paints. Construction plans and specifications and construction permitting shall include to the satisfaction of the City of Gardena Community Development Department the requirement that “Super-Compliant” low VOC paints which have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD’s Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC.

AQ-4: Electric Construction Equipment. Construction plans and specifications and construction permitting shall state to the satisfaction of the City of Gardena Community Development Department that the construction contractor shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site, if available rather than electrical generators powered by internal combustion engines.

AQ-5: Alternative Fueled Construction Equipment. Construction plans and specifications and construction permitting shall require to the satisfaction of the City of Gardena Community Development Department that the construction contractor use alternative fueled, engine retrofit technology, after-treatment products (e.g., diesel oxidation catalysts, diesel particulate filters), and/or other options as they become available, including all off-road and portable diesel-powered equipment.

AQ-6: Construction Equipment Maintenance. Construction plans and specifications and construction permitting shall require to the satisfaction of the City of Gardena



Community Development Department that construction equipment be maintained in good operation condition to reduce emissions. The construction contractor shall ensure that all construction equipment is being properly serviced and maintained as per the manufacturer's specification. Maintenance records shall be available at the construction site for City verification.

- AQ-7: Construction Vehicle Maintenance Plan. Prior to the issuance of any grading permits, the applicant and/or building operators shall submit construction plans and a construction vehicle management plan to the City of Gardena Community Development Department denoting the proposed schedule and projected equipment use. The construction vehicle management plan shall include such things as: idling time requirements; requiring hour meters on equipment; documenting the serial number, horsepower, age, and fuel of all onsite equipment. The plan shall include that California state law requires equipment fleets to limit idling to no more than 5 minutes. Construction contractors shall provide evidence that low emission mobile construction equipment will be utilized, or that their use was investigated and found to be infeasible for the project as determined by the City. Contractors shall also conform to any construction measures imposed by SCAQMD and the City of Gardena Community Development Department.

Level of Significance: Significant and Unavoidable Impact.

Impact 5.2-3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis:

Localized Construction Significance Analysis

As the parcels identified for potential future residential development are distributed throughout the City, the nearest sensitive receptors are typically existing residential uses adjacent to or in proximity to the parcels. To identify impacts to sensitive receptors, SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific emissions.

The daily construction emissions generated by future development associated with implementation of the proposed Project are evaluated against SCAQMD's LSTs or a 5-acre site as a conservative screening analysis to determine whether the emissions would cause or contribute to adverse localized air quality impacts. Additionally, for purposes of the analysis, the worst-case assumption for the location of the nearest sensitive receptor (i.e., within 25 meters of a project site) was utilized. The appropriate SRA for the LSTs is the Southwest Coastal LA County area (SRA



3), since SRA 3 includes the City of Gardena. LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. SCAQMD produced look-up tables for projects that disturb areas less than or equal to 5.0 acres.

SCAQMD's methodology states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, as recommended by SCAQMD, LSTs for receptors located at 25 meters were utilized in this analysis for receptors closer than 25 meters. Table 5.2-8, Localized Significance of Construction Emissions (Maximum Pounds per Day), presents the results of localized emissions during construction.

As shown in Table 5.2-8, the emissions of these pollutants on the peak day of construction for each pollutant³ would not result in significant concentrations of pollutants at nearby sensitive receptors. In addition, specific development projects would be subject to compliance with SCAQMD Rules 402, 403, and 1113, which would further reduce specific construction-related emissions. Therefore, the proposed Project would result in a less than significant impact concerning LSTs during construction activities.

³ Peak day of emissions for each pollutant is calculated by CalEEMod, for each year of Project construction, during both 'summer' and 'winter' months. The maximum value provided by CalEEMod for each pollutant (during all years, and both 'summer' and 'winter' months) represents the peak day of emissions for each pollutant.



**Table 5.2-8
Localized Significance of Construction Emissions (Maximum Pounds Per Day)¹**

Construction Activity (Maximum Year)	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Coarse Particulates (PM ₁₀)	Fine Particulates (PM _{2.5})
Demolition (2024)	24.9	21.7	1.1	1.0
Site Preparation (2024)	36.0	32.9	1.6	1.5
Grading (2024)	34.3	30.2	1.4	1.3
Building Construction (Maximum year)	11.2	13.1	0.5	0.5
Paving (Maximum year)	7.8	10.0	0.39	0.4
Architectural Coating (Maximum year)	0.9	1.1	<0.1	<0.1
SCAQMD Localized Screening Thresholds (5 acres at 25 meters)	197	1,796	15	8
Exceed SCAQMD Threshold?	No	No	No	No
Source: CalEEMod Version 2022.1; refer to Appendix E for model outputs.				
Note:				
1. Emissions reflect on-site construction emissions only, per SCAQMD guidance.				

Localized Operational Significance Analysis

The on-site operational emissions are compared to the LST thresholds in Table 5.2-9, Localized Significance of Operational Emissions (Maximum Pounds per Day). Table 5.2-9 shows that the maximum daily emissions of these pollutants during operations of future residential developments associated with implementation of the proposed Project would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, the proposed Project would result in a less than significant impact concerning LSTs during operational activities.



Table 5.2-9
Localized Significance of Operational Emissions (Maximum Pounds Per Day)

Emission Sources	Nitrogen Oxides (NO_x)	Carbon Monoxide (CO)	Coarse Particulates (PM₁₀)	Fine Particulates (PM_{2.5})
On-Site Emissions (Area Sources)	6.9	748.6	0.3	0.3
SCAQMD Localized Screening Threshold (5 acres at 25 meters)	197	1,796	4	2
Exceed SCAQMD Threshold?	No	No	No	No
Source: CalEEMod version 2022.1; refer to Appendix E for model outputs.				

The Project would not involve the use, storage, or processing of carcinogenic or non-carcinogenic toxic air contaminants, and no significant toxic airborne emissions would result from operation of the proposed Project. Construction activities are subject to the regulations and laws relating to toxic air pollutants at the regional, State, and federal level that would protect sensitive receptors from substantial concentrations of these emissions. Therefore, impacts associated with the release of toxic air contaminants would be less than significant.

Criteria Pollutant Health Impacts

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, the California Supreme Court held that an EIR's air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided. As noted in the Brief of Amicus Curiae by SCAQMD in the Friant Ranch case (April 6, 2015, Appendix 10.1), SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes.

SCAQMD discusses that it may be infeasible to quantify health risks caused by projects similar to the proposed Project, due to many factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). The Brief states that it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s)). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk--it does not necessarily mean anyone will contract cancer as a result of the Project. The Brief also cites the author of the CARB methodology, which reported that a PM_{2.5} methodology is not suited for small projects and may



yield unreliable results. Similarly, SCAQMD staff does not currently know of a way to accurately quantify O₃-related health impacts caused by NO_x or VOC emissions from relatively small projects, due to photochemistry and regional model limitations. The Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful.

It should also be noted that NO_x and VOCs are “precursor” pollutants, which makes analysis of potential health impacts even more difficult. NO_x and VOCs are precursors to ozone, which is formed in the atmosphere from the chemical reaction of NO_x and VOCs in the presence of sunlight. As explained by SCAQMD in its amicus curiae brief for the Friant Ranch case, it takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources.” Given this, “...it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels over an entire region.” Therefore, SCAQMD opined that while it “may be feasible” for large, regional projects with very high emissions of NO_x and VOCs to conduct an accurate health impact analysis, “SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_x or VOC (similar to ROG) emissions from relatively small projects.”

On the other hand, for extremely large regional projects (unlike the proposed Project), SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 lbs./day of NO_x and 89,180 lbs./day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to O₃.

The proposed Project does not generate anywhere near 6,620 lbs/day of NO_x or 89,190 lbs/day of VOC emissions. Rather, as previously discussed, Project emissions would be less than significant and would not exceed SCAQMD thresholds; refer to [Table 5.2-6](#), and [Table 5.2-7](#). Localized effects of on-site Project emissions on nearby receptors were also found to be less than significant; refer to [Table 5.2-8](#) and [Table 5.2-9](#). The LSTs represent the maximum emissions from a Project that are not expected to cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS. The LSTs were developed by SCAQMD based on the ambient concentrations of that pollutant for each SRA and distance to the nearest sensitive receptor. The ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect public health, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. As shown above, Project-related emissions would not exceed the regional thresholds or the LSTs, and therefore would not exceed the ambient air quality standards or cause an increase in the frequency or severity of existing violations of air quality standards. Therefore, sensitive receptors would not be exposed to criteria pollutant levels more than the health-based ambient air quality standards.

[Carbon Monoxide Hotspots](#)

An analysis of CO “hot spots” is needed to determine whether the change in the level of service of an intersection resulting from the proposed Project would have the potential to result in



exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined.

Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. The 2022 AQMP is the most recent version that addresses CO concentrations. As part of SCAQMD's CO Hotspot Analysis, the Wilshire Boulevard/Veteran Avenue intersection, one of the most congested intersections in Southern California with approximately 100,000 average daily traffic trips (ADT), was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35-ppm Federal standard. The potential development of up Project would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD's CO Hotspot Analysis. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection even as it accommodates 100,000 ADT, it can be reasonably inferred that CO hotspots would not be experienced at any Project Area intersections from the net new ADT attributable to the proposed Project. Therefore, impacts would be less than significant.

Construction-Related Diesel Particulate Matter

Project construction would generate diesel particulate matter (DPM) emissions from the use of off-road diesel equipment required. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to toxic air contaminants (TAC) emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment would dissipate rapidly. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities.

OEHHA has not identified short-term health effects from diesel particulate matter (DPM). Construction is temporary and would be transient throughout the site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time. Construction activities would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than five minutes to further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Moreover, Mitigation Measures AQ-6 and AQ-7 would require construction equipment be maintained to reduce emissions and a construction vehicle maintenance plan to include idling time



requirements pursuant to Title 13 of the California Code of Regulations, Section 2485. For these reasons, DPM generated by Project construction activities, in and of itself, would not expose sensitive receptors to substantial amounts of air toxins and the proposed Project would result in a less than significant impact.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less than Significant Impact.

Impact 5.2-4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis:

Construction

Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents. SCAQMD Rule 1113 (Architectural Coatings) limits the amount of VOCs from architectural coatings and solvents. According to SCAQMD's *CEQA Air Quality Handbook*, construction equipment is not a typical source of odors. Odors from the combustion of diesel fuel would be minimized by complying with the CARB ATCM that limits diesel-fueled commercial vehicle idling to five minutes at any given location, which was adopted in 2004. Future development accommodated through implementation of the Project would also comply with SCAQMD Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds. Through adherence with mandatory compliance with SCAQMD Rules and State measures, construction activities and materials would not create objectionable odors. Construction of future development would not be expected to generate nuisance odors at nearby sensitive receptors. Therefore, impacts with respect to odors would be less than significant.

Operational

SCAQMD CEQA Air Quality Handbook identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Project would provide for development of residential uses and does not propose or allow for land uses with the potential to generate significant sources of odors beyond existing conditions. Therefore, the proposed Project would not create objectionable odors and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.



5.2.7 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the methodology used to determine the potential for cumulative growth and development to interact with the proposed Project to the extent that a significant cumulative effect relative to air quality may occur. The geographic setting for air quality considers development within the City as well as the SCAB.

Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis: As stated under Impact 5.2-1, the proposed Project does not include site-specific development and would provide for the planning of the potential growth associated with the RHNA and additional residential development, which would also be considered as part of future updates to plans and programs, including the next update to SCAG's RTP/SCS. The General Plan includes policies that reduce environmental impacts associated with growth, such as air quality. However, since Project implementation would violate air quality standards during Project construction and would accommodate residential development opportunities that exceed the City's 2021-2029 RHNA and SCAG's growth projections, the Project would not be consistent with the first or second AQMP consistency criteria, and therefore would conflict with or obstruct implementation of the AQMP, resulting in a significant and unavoidable impact relative to this topic. The Project's cumulative contribution relative to conflicts with or obstruction of the implementation of the applicable air quality plan would be significant and unavoidable.

Mitigation Measures: Refer to Mitigation Measures AQ-1 through AQ-7.

Level of Significance: Significant and Unavoidable Impact.

Would the project, combined with other related cumulative projects, 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:

Cumulative Short-Term Emissions

SCAB is designated nonattainment for O₃, PM₁₀, and PM_{2.5} for State standards and nonattainment for O₃ and PM_{2.5} for Federal standards. As discussed above, the Project's construction-related emissions could exceed SCAQMD significance thresholds for criteria pollutants.

Since these thresholds indicate whether individual project emissions have the potential to affect cumulative regional air quality, it can be expected that the Project-related construction emissions could be cumulatively considerable. SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to the Federal Clean Air Act mandates. The analysis assumed fugitive dust controls would be utilized during construction, including frequent water applications. SCAQMD rules, mandates, and compliance with adopted AQMP emissions control measures would also be imposed on construction projects throughout the SCAB, which would include related cumulative projects. As concluded above, the Project's construction-



related impacts would be required to implement Mitigation Measures AQ-1 through AQ-7, and would be significant and unavoidable. Therefore, Project-related construction emissions, in combination with those from other projects in the area, could substantially deteriorate the local air quality. Therefore, the Project's construction-related emissions could result in a cumulatively considerable contribution to significant cumulative air quality impacts.

Cumulative Long-Term Impacts

SCAQMD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, individual project emissions contribute to existing cumulatively significant adverse air quality impacts. SCAQMD developed the operational thresholds of significance based on the level above which individual project emissions would result in a cumulatively considerable contribution to SCAB's existing air quality conditions. Therefore, a project that exceeds SCAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.

As shown in Table 5.2-7, the Project's operational emissions would not exceed SCAQMD thresholds. As a result, the Project's operational emissions would not result in a cumulatively considerable contribution to cumulative air quality impacts. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Project operations would not contribute to a cumulatively considerable net increase of any nonattainment criteria pollutant; impacts would be less than significant in this regard.

Mitigation Measures: Refer to Mitigation Measures AQ-1 through AQ-7.

Level of Significance: Significant and Unavoidable Impact for Cumulative Construction Emissions.

Would the project, combined with other related cumulative projects, expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis: As stated under Impact 5.2-3, with respect to local air quality emissions, criteria pollutants, carbon monoxide hotspots, and construction-related diesel particulate matter, future development associated with Project implementation would not exceed established thresholds and would be required to comply with all regulations and laws relating to toxic air pollutants at the regional, State, and federal level. The Project would not contribute to a cumulatively considerable impact associated with exposure of sensitive receptors to substantial pollutant concentrations and impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.



Would the project, combined with other related cumulative projects, result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis: As stated under Impact 5.2-4, with respect to potential sources that may emit odors during construction, future development accommodated through implementation of the Project and related cumulative projects would be required to comply with SCAQMD Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. The Project would provide for development of residential uses and does not propose or allow for land uses with the potential to generate significant sources of odors beyond existing conditions. Therefore, Project implementation would not contribute to cumulative considerable objectionable odors affecting a substantial number of people within the City; impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.2.8 SIGNIFICANT UNAVOIDABLE IMPACTS

The Project would result in a significant unavoidable impact for the following areas:

- The Project would not be consistent with AQMP Consistency Criteria No. 1 and No. 2 and would therefore conflict with or obstruct implementation of the applicable air quality plan resulting in a significant project and cumulative project impact.
- Project implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts during construction activities.

All other air quality impacts associated with implementation of the Project would be less than significant.

If the City of Gardena approves the General Plan, Zoning Code & Zoning Map Amendment Project, the City will be required to make findings in accordance with CEQA Guidelines Section 15091 and prepare a Statement of Overriding Considerations for consideration by the City's decision makers in accordance with CEQA Guidelines Section 15093.

5.2.9 REFERENCES

Ahrens, Donald C., *Meteorology Today: An Introduction to Weather, Climate, & the Environment*, 2006.

California Air Resources Board, *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, October 2000,
<https://www.arb.ca.gov/diesel/documents/rrpFinal.pdf>



South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993,
<https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook#>

South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, June 2003, Revised July 2008. <https://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-1st-methodology-document.pdf?sfvrsn=2>

South Coast Air Quality Management District, *Localized Significance Thresholds Methodology – Appendix C*, Revised October 21, 2009.

South Coast Air Quality Management District, *2022 Air Quality Management Plan (AQMP)*, <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16>

Southern California Association of Governments, *Connect SoCal (2020-2045 Regional transportation Plan/Sustainable Communities Strategy*, Adopted Final Connect SoCal, <https://scag.ca.gov/read-plan-adopted-final-plan>, accessed January 10, 2021.



5.3 BIOLOGICAL RESOURCES

5.3.1 PURPOSE

This section describes biological resources within the Project Area and provides an analysis of potential impacts that could result from implementation of the Project.

KEY TERMS

The following key terms are used throughout this section to describe biological resources and the framework that regulates them:

Hydric Soils: One of the three wetland identification parameters, according to the Federal definition of a wetland, hydric soils have characteristics that indicate they were developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season. There are approximately 2,000 named soils in the United States that may occur in wetlands.

Hydrophytic Vegetation: Plant types that typically occur in wetland areas. Nearly 5,000 plant types in the United States may occur in wetlands. Plants are listed in regional publications of the U.S. Fish and Wildlife Service (USFWS) and include such species as cattails, bulrushes, cordgrass, sphagnum moss, bald cypress, willows, mangroves, sedges, rushes, arrowheads, and water plantains.

Sensitive Natural Community: A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, is structurally complex, or is in other ways of special concern to local, State, or Federal agencies. The California Environmental Quality Act (CEQA) identifies the elimination or substantial degradation of such communities as a significant impact. The California Department of Fish and Wildlife (CDFW) tracks sensitive natural communities in the California Natural Diversity Database (CNDDDB).

Special-Status Species: Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, State, or other agencies. Some of these species receive specific protection that is defined by federal or State endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special status species" in this report, following a convention that has developed in practice but has no official sanction. For the purposes of this assessment, the term "special status" includes those species that are:

- Federally listed or proposed for listing under the Federal Endangered Species Act (50 CFR 17.11-17.12);



- Candidates for listing under the Federal Endangered Species Act (61 FR 7596-7613);
- State listed or proposed for listing under the California Endangered Species Act (14 CCR 670.5);
- Species listed by the USFWS or the CDFW as a species of concern (USFWS), rare (CDFW), or of special concern (CDFW);
- Fully protected animals, as defined by the State of California (California Fish and Game Code Section 3511, 4700, and 5050);
- Species that meet the definition of threatened, endangered, or rare under CEQA (CEQA Guidelines Section 15380);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.); and
- Plants listed by the California Native Plant Society (CNPS) as rare, threatened, or endangered (List 1A and List 2 status plants in Skinner and Pavlik 1994).

Waters of the U.S.: The Federal government defines waters of the U.S. as "lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows" [33 C.F.R. §328.3(a)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high-water mark (OHWM). The OHWM is defined by the U.S. Army Corps of Engineers (USACE) as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

Wetlands: Wetlands are ecologically complex habitats that support a variety of both plant and animal life. The Federal government defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Wetlands require wetland hydrology, hydric soils, and hydrophytic vegetation. Examples of wetlands include freshwater marsh, seasonal wetlands, and vernal pool complexes that have a hydrologic link to waters of the U.S.

5.3.2 ENVIRONMENTAL SETTING

The City of Gardena is located in the South Bay area of Los Angeles County. According to the Gardena General Plan EIR, the City of Gardena is highly urbanized and is not known to support any significant wildlife or native planning communities or species (City of Gardena, 2006). There is an approximately nine-acre site located at the northwest corner of Artesia Boulevard and Vermont Avenue, known as the Gardena Willows Wetland Preserve. The area is designated as Open Space by the Gardena General Plan Land Use Map. According to a biological assessment conducted to prepare the Willows Wetland Plan, the vegetation of the Willows consists of herbaceous annual and perennial herbs and grasses, annual aquatic herbs, long-lived perennial herbs and shrubs, and trees. The wildlife of the Willows consists of resident, migratory and visitor



birds, mammals, reptiles, amphibians, and terrestrial and aquatic invertebrates. Outside of the Willows Wetland Preserve, the City consists primarily of developed and/or disturbed land that has been developed, paved, or landscaped, and existing vegetation consists primarily of ornamental and/or nonnative plant species.

The USFWS identifies the Willows Wetland as a 9.07-acre Freshwater Forested/Shrub Wetland habitat (USFWS, 2023). The Dominguez Channel is identified by the USFWS as Riverine habitat (USFWS, 2023). However, according to the LA County Flood Control District Enhanced Watershed Management Program DEIR (LACPW, 2015), the Dominguez Channel is a man-made rip-rap or concrete-lined channel. Although some vegetation occurs in localized drainages and some tributary drainages are being restored for wetland values, outside of the restoration areas and recreation features, habitat values in the urban and industrial areas are low. Within the western and southern portions of the City, the Dominguez Channel is a channelized watercourse; therefore, its habitat value is considered low.

SPECIAL-STATUS SPECIES

As previously described, special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, State, or other agencies. As part of this EIR, a background search was conducted to determine documented occurrences of special-status species within a one-mile radius of the City of Gardena. The background search included documented occurrences in the California Natural Diversity Database (CNDDDB), the California Native Plant Survey (CNPS) Inventory of Rare and Endangered Plants, and the USFWS endangered and threatened species lists. The search revealed documented occurrences of 11 special-status plants and animals within a one-mile radius of the Project Area, as shown in Table 5.3-1, *Special-Status Plants and Animals – One-Mile Search*.

For seven of the 11 special-status plants and animals within a one-mile radius of the Project Area, the CNDDDB provides a value of “Extirpated,” meaning the element has not been seen for many years or the habitat is destroyed at the site; or “Possibly Extirpated,” meaning evidence of habitat destruction or population extirpation has been received by the CNDDDB for the site, but questions remain as to whether the element still exists. Four of the 11 special-status plants and animals within a one-mile radius of the Project Area are “Presumed Extant,” meaning the occurrence is presumed to still be in existence until evidence to the contrary is received by the CNDDDB. The special-status plants and animals presumed extant are the Palos Verdes blue butterfly, western mastiff bat, southern tarplant, and Southern California legless lizard.



**Table 5.3-1
Special-Status Plants and Animals – One-Mile Search**

Scientific Name	Common Name	Federal Status	State Status	CDFW Status*	CRPR†
Dicots					
<i>Atriplex coulteri</i>	Coulter's saltbush	None	None	--	1B.2
<i>Symphotrichum defoliatum</i>	San Bernardino aster	None	None	--	1B.2
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	None	None	--	1B.1
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	None	None	--	1B.2
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	None	None		1B.1
Monocots					
<i>Orcuttia californica</i>	California Orcutt grass	Endangered	Endangered	--	1B.1
Amphibians					
<i>Spea hammondii</i>	western spadefoot	None	None	SSC	--
Birds					
<i>Agelaius tricolor</i>	tricolored blackbird	None	Threatened	SSC	--
Insects					
<i>Glaucopsyche lygdamus palosverdesensis</i>	Palos Verdes blue butterfly	Endangered	None	--	--
Mammals					
<i>Eumops perotis californicus</i>	western mastiff bat	None	None	SSC	--
Reptiles					
<i>Anniella stebbinsi</i>	Southern California legless lizard	None	None	SSC	--
<p>Source: CDFW, <i>California Natural Diversity Database</i>, March 3, 2023. Notes: One-mile radius of City of Gardena city limits (Project Area). * CDFW Status Key: SSC – CDFW Species of Special Concern † California Rare Plant Rank (CRPR) Key: 1B.1 Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California. 1B.2 Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California.</p>					



5.3.3 REGULATORY SETTING

FEDERAL

Federal Endangered Species Act

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (FESA) of 1973. The presence of any Federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. Under the regulations of the FESA, the USFWS may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act. Activities that may result in “take” of individuals are regulated by the USFWS.

Under the FESA, “Critical Habitat” is also designated at the time of listing or within one year of listing. “Critical Habitat” refers to habitat or a specific geographic area that contains the elements and features that are essential for the survival and recovery of the species. In the event a project may result in take or in adverse effects to a species’ designated Critical Habitat, the project proponent may be required to provide mitigation. If the project has a federal nexus (i.e., occurs on federal land, is issued federal permits, or receives any other federal oversight or funding), the proponent would be required to enter into Section 7 informal and/or formal consultations with the USFWS to obtain, if possible, a biological opinion allowing for incidental take of the species in question. If the project is on private land or would not require any federal permits, the proponent would be required to prepare a habitat management plan to address the impacts.

The FESA defines as “endangered” any plant or animal species that is in danger of extinction throughout all or a significant portion of its range. A “threatened” species is a species that is likely to become endangered in the foreseeable future. A “proposed” species is one that has been officially proposed by USFWS for addition to the federal threatened and endangered species list.

USFWS produced an updated list of candidate species for listing in June 2002 (Federal Register: Volume 67, Number 114, 50 CFR Part 17 2002). Candidate species are regarded by USFWS as candidates for addition to the “List of Endangered and Threatened Wildlife and Plants.” Although candidate species are not afforded legal protection under the FESA, they typically receive special attention from Federal and State agencies during the environmental review process.

USFWS also uses the label “species of concern,” an informal term that refers to species which might be in need of concentrated conservation actions. As the species of concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species would be proposed for listing as a threatened or endangered species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 United States Government Code [USC] 703) makes it unlawful to pursue, capture, kill, or possess or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States,



Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

Bald and Golden Eagle Preservation Act

The Bald and Golden Eagle Protection Act provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds (16 U.S. Government Code Section 668(a)). “Take” under the Act includes actions which significantly disturb eagles (50 CFR Section 22.3). 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorized the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations, and recent amendments authorize USFWS to issue permits for incidental and practically unavoidable take of eagles.

Section 404 of the Clean Water Act

Clean Water Act (CWA) Section 404 requires that a permit be obtained from the United States Army Corps of Engineers (Corps) prior to the discharge of dredged or fill materials into any “waters of the United States or wetlands.” Waters of the United States are broadly defined in the Corps regulations (33 CFR 328) to include navigable waterways, their tributaries, lakes, ponds, and wetlands. Wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that normally do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas” (United States Environmental Protection Agency [EPA] 2021). Wetlands that are not specifically exempt from Section 404 regulations (such as drainage channels excavated on dry land) are considered to be “jurisdictional wetlands.” In *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, the Court acted to limit the regulatory jurisdiction of the Corps under CWA Section 404 as it applies to adjacent waters (2001). Specifically, the Court ruled that waters that are non-navigable, isolated, and intrastate are not subject to the Corps jurisdiction (Guzy and Anderson, 2001). The Corps is required to consult with the USFWS, EPA, and State Regional Water Quality Control Board (RWQCB), among other agencies, in carrying out its discretionary authority under Section 404.

The Corps grants two types of permits, individual and nationwide. Project-specific individual permits are required for certain activities that may have a potential for more than a minimal impact and necessitate a detailed application. The most common type of permit is a nationwide permit. Nationwide permits authorize activities on a nationwide basis unless specifically limited and are designed to regulate with little delay or paperwork certain activities having minimal impacts. Nationwide permits typically take two to three months to obtain whereas individual permits can take a year or more. To qualify for a nationwide permit, specific criteria must be met.



If the criteria restrictions are met, permittees may proceed with certain activities without notifying the Corps. Some nationwide permits require a pre-construction notification before activities can begin.

[Section 401 of the Clean Water Act](#)

Applicants for a federal license or permit for activities which may discharge to waters of the U.S. must seek Water Quality Certification from the State or Indian tribe with jurisdiction. Such Certification is based on a finding that the discharge would meet water quality standards and other applicable requirements. In California, RWQCBs issue or deny Certification for discharges within their geographical jurisdiction. Water Quality Certification must be based on a finding that the proposed discharge would comply with water quality standards, which are defined as numeric and narrative objectives in each RWQCB's Basin Plan. Where applicable, the State Water Resources Control Board (SWRCB) has this responsibility for projects affecting waters within the jurisdiction of multiple RWQCBs. The RWQCB's jurisdiction extends to all waters of the State and to all waters of the U.S., including wetlands.

CWA Section 401 requires that "any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge would comply with the applicable provisions under the federal Clean Water Act." Therefore, before the Corps would issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the RWQCB.

STATE

[California Endangered Species Act \(California Fish and Game Code Section 2050 et seq.\)](#)

State-listed threatened and endangered species are protected under provisions of the California Endangered Species Act (CESA). Activities that may result in "take" of individuals (defined in CESA as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by the CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a Species of Special Concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced



substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection.

[California Environmental Quality Act](#)

CEQA Guidelines Section 15380 independently defines “endangered” and “rare” species separately from the definitions in the CESA. Under CEQA, “endangered” species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while “rare” species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

[Lake and Streambed Alteration Program \(California Fish and Game Code Sections 1600 through 1616\)](#)

California Fish and Game Code Sections 1600 through 1616 establish a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, State, or local governmental agency or public utility to notify the CDFW before beginning any activity that would do one or more of the following:

- Substantially obstruct or divert the natural flow of a river, stream, or lake;
- Substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW’s regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that would take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation.

[Native Plant Protection Act \(Fish and Game Code Sections 1900 through 1913\)](#)

Fish and Game Code Sections 1900 through 1913 were developed to preserve, protect, and enhance Rare and Endangered plants in the State of California. The act requires all State agencies to use their authority to carry out programs to conserve Endangered and Rare native plants.



Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

[California Fish and Game Code Sections 3503, 3503.5, 3511, 3513, 4700, 5050, and 5515](#)

The CDFW administers the Fish and Game Code. There are particular sections of the Fish and Game Code that are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy the nests or eggs of any birds that are protected under the MBTA. Furthermore, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Fish and Game Code Section 3503.5, which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW would be required prior to the removal of any bird of prey nest that may occur on a project site. Fish and Game Code Sections 3511, 4700, 5050, and 5515 list fully protected bird, mammal, reptile and amphibian, and fish species, respectively. The CDFW is unable to authorize the issuance of permits or licenses to take these species. Examples of species that are State fully protected include golden eagle and white-tailed kite (*Elanus leucurus*). Fish and Game Code Section 3513 makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

[California Native Plant Society Rare or Endangered Plant Species](#)

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under State and federal endangered species legislation are defined as follows:

- California Rare Plant Rank
 - 1A. Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere
 - 1B. Plants Rare, Threatened, or Endangered in California and Elsewhere
 - 2A. Plants Presumed Extirpated in California, But More Common Elsewhere
 - 2B. Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
 3. Plants about Which More Information is Needed - A Review List
 4. Plants of Limited Distribution - A Watch List
- Threat Ranks
 1. Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
 2. Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)



3. Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

LOCAL

City of Gardena General Plan

The City of Gardena General Plan Community Development Element, Land Use Plan; Community Resources Element, Open Space Plan; and Community Resources Element, Conservation Plan contain the following goals and policies potentially relevant to the proposed Project:

Community Development Element, Land Use Plan

Policy LU 4.6: Preserve and maintain as open space those areas in the City that serve as significant natural habitats.

Community Resources Element, Open Space Plan

OS Goal 2: Increase the City's supply and quality of parkland, open space, and recreational programs.

Policy OS 2.4: Preserve the Willows Wetland as a trail-oriented City park and passive natural open space with limited access to guided tours, volunteer activities, and educational programs.

Community Resources Element, Conservation Plan

CN Goal 1: Preserve and enhance the Willows Wetland and protect its natural resources.

Policy CN 1.1: Foster the implementation of the recommendations identified in A Plan for the Gardena Willows Wetland, which was adopted by the City in April 1999.

Policy CN 1.4: Promote collaboration with regional or State agencies in protecting the biological resources of the Willows Wetland.

A Plan for the Gardena Willows Wetland

In April 1999, the City of Gardena adopted *A Plan for the Gardena Willows Wetland* (Willows Wetland Plan). According to a biological assessment conducted to prepare the Willows Wetland Plan, the vegetation of the Willows consists of herbaceous annual and perennial herbs and grasses, annual aquatic herbs, long-lived perennial herbs and shrubs, and trees. The wildlife of the Willows consists of resident, migratory and visitor birds, mammals, reptiles, amphibians, and terrestrial and aquatic invertebrates. The Willows Wetland Plan identifies four principal vegetative communities and wildlife habitats of the Willows and indicates special-status wildlife species were observed in the area. The Willows Wetland Plan provides a comprehensive guide for preserving and enhancing the Willows Wetland's environmental integrity and quality.



City of Gardena Municipal Code

Gardena Municipal Code Chapter 13.60, *Trees, Shrubs, and Plants*, regulates the placement and provides for the proper selection of new trees to minimize problems in public facilities, and establishes requirements for the preservation and proper maintenance of existing trees located on public property, as well as certain trees located on private property, that are deemed important to the general welfare and the benefit of the community. The City has jurisdiction over maintenance and removal of trees on public property and trees located on private property to the extent such trees adversely impact adjoining Public Places. Section 13.60.080, *Permit*, requires a Trimming Permit, Tree Removal Permit, and/or a Tree Planting Permit for cutting, trimming, pruning, planting, removing, injuring or interfering with any tree, shrub or plant upon any Street or Public Place of the City. Section 13.60.110, *Tree Removal Criteria*, provides criteria to justify removal of a street tree.

Title 18, *Zoning*, Chapter 18.42, *General Provisions*, establishes general provisions and development standards for residential, mixed use and overlay zones. Section 18.42.210 (A) requires the applicant be required to comply with all applicable mitigation measures set forth in a mitigation monitoring program for the City's General Plan or any element thereof as posted on the City's website. Section 18.42.210 (E), *Migratory Bird Protection*, requires that construction, grubbing, brushing, or tree removal be conducted outside of the state identified nesting season for migratory birds (typically March 15th through September 1st) if possible. If construction is conducted during nesting season, a pre-construction nesting bird survey shall be conducted within and immediately adjacent to the project site by a qualified professional biologist no more than seven days prior to the beginning of any project-related physical activity that is likely to impact migratory birds. If active nests are found during the pre-construction nesting bird survey, a nesting bird plan (NBP) shall be prepared by a qualified biologist and implemented during construction. At a minimum, the NBP shall include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The size, location and duration of all buffer zones, if required, shall be based on the nesting species, nesting stage, nest location, its sensitivity to disturbance, and intensity and duration of the disturbance activity. The buffers shall be maintained until the breeding season has ended or until a qualified professional biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

5.3.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to biological resources. A project would result in a significant impact related to biological resources if it would:

- 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 (refer to Impact Statement 5.3-1);



- 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 (refer to Impact Statement 5.3-1);
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (refer to Impact Statement 5.3-1);
- 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 (refer to Impact Statement 5.3-2);
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (refer to Impact Statement 5.3-3); or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (refer to Section 8.0, Effects Found Not To Be Significant);

Based on these standards and significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a "significant unavoidable impact."

5.3.5 IMPACTS AND MITIGATION MEASURES

Impact 5.3-1: 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?

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?

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

Impact Analysis: According to the Gardena General Plan EIR, the City of Gardena is highly urbanized and is not known to support any significant wildlife or native plant communities or species. There have been documented occurrences of 11 special-status species within the general vicinity of the Project Area. Of these, four special-status species are presumed extant (the occurrence is presumed to still be in existence until evidence to the contrary is received by the CNDDDB), including the Palos Verdes blue butterfly, western mastiff bat, southern tarplant,



and Southern California legless lizard. The Gardena Willows Wetland Preserve, located at the northwest corner of Artesia Boulevard and Vermont Avenue, has been identified by the USFWS as a 9.07-acre Freshwater Forested/Shrub Wetland habitat (USFWS, 2023). The vegetation of the Willows consists of herbaceous annual and perennial herbs and grasses, annual aquatic herbs, long-lived perennial herbs and shrubs, and trees. The wildlife of the Willows consists of resident, migratory and visitor birds, mammals, reptiles, amphibians, and terrestrial and aquatic invertebrates. Outside of the Willows Wetland Preserve, the City consists primarily of developed and/or disturbed land that has been developed, paved, or landscaped, and existing vegetation consists primarily of ornamental and/or nonnative plant species. Within the western and southern portions of the City, the Dominguez Channel is a channelized watercourse; however its habitat value is considered low.

The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. The Project would not result in any changes to land designated as Open Space, including the Willows Wetland Preserve, or to the Willows Wetland Plan adopted for preservation of the Willows Wetland.

The Project does not include any specific development proposals and would not result in significant direct impacts to existing biological resources. The parcels identified for land use and zone changes are located within urbanized areas and are primarily developed or paved and any landscaping consists primarily of ornamental and/or nonnative plant species. Future development of the sites with residential uses would not occur within Open-Space-designated land or within the Willows Wetland Preserve.

It is possible that specific properties proposed for future development could include trees with the potential to support nesting migratory birds that are protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC). Future construction activities or removal of the trees could potentially impact nesting migratory birds. To address potential impacts to migratory birds, future development that would result in construction activities or removal of trees with the potential to support nesting migratory birds would be required to comply with Municipal Code Section 18.42.210, which requires construction activities to occur outside of the of the state identified nesting season for migratory birds (typically March 15 through September 1, if possible). If construction is conducted during nesting season, a Pre-construction Nesting Bird Survey would be conducted by a qualified professional biologist no more than seven days prior to the beginning of any project-related physical activity that is likely to impact migratory birds. If active nests are found during the Pre-Construction Nesting Bird Survey, a Nesting Bird Plan (NBP) would be prepared by a qualified biologist and implemented during construction. At a minimum, the NBP would be required to include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. Compliance with the Municipal Code requirements for migratory bird protection would reduce potential impacts to nesting migratory birds to a less than significant level. Thus, the Project would not have a substantial adverse effect, either directly or through



habitat modifications, on any special status plant or wildlife species, any riparian habitat or other sensitive natural community, or on any state or federally protected wetlands.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.3-2: 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: Corridors are linear linkages between two or more habitat patches, which provide for wildlife movement and dispersal. The parcels identified for land use and zone changes are located within urbanized areas and are primarily developed or paved; any landscaping consists primarily of ornamental and/or nonnative plant species. Thus, the Project Area does not provide for habitat linkages. The Dominguez Channel is concrete-lined and considered to have low habitat value. Although the channel could be used for wildlife movement, the Project does not propose site-specific development activities; nor does it involve any changes or modifications to the channel. Thus, the Project would not 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. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.3-3: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact Analysis: Future development accommodated under the Project would be subject to all applicable federal, State, regional, and local policies and regulations related to the protection of biological resources, as outlined above. The Gardena Municipal Code Chapter 13.60, *Trees, Shrubs, and Plants*, establishes requirements for the preservation and proper maintenance of existing trees located on public property, as well as certain trees located on private property, that are deemed important to the general welfare and the benefit of the community. The City has jurisdictions over maintenance and removal of trees on public property and trees located on private property to the extent such trees adversely impact adjoining Public Places. Section 13.60.080, *Permit*, requires a Trimming Permit, Tree Removal Permit, and/or a Tree Planting Permit for cutting, trimming, pruning, planting, removing, injuring or interfering with any tree, shrub or plant upon any Street or Public Place of the City. Section 13.60.110, *Tree Removal Criteria*, provides criteria to justify removal of a street tree. In addition, the Gardena General Plan includes goals and policies to protect and conserve biological resources.



The Plan for Gardena Willows Wetland, adopted in April 1999, documents the biological resources in the Willows Wetland and preservation and enhancement strategies for the wetland. Implementation of the Plan requires compliance with the Clean Water Act (CWA), the Federal Endangered Species Act (FESA), the National Historic Preservation Act (NHPA), the California Department of Fish and Game Code (CFGC) and CEQA. As stated, the Project would not alter the current Open Space land use designation of the Gardena Willows Wetland, nor would the Project alter or conflict with the Plan for the Gardena Willows Wetland. No parcels within the Project Area are located adjacent to the Willows Wetland Preserve. Any future development near the Willows Wetland Preserve would be required to comply with the General Plan goal and policies to preserve and enhance the Willows Wetlands and to protect its natural resources, including implementation of the Plan for the Gardena Willows Wetland.

The Project would not modify the City's Municipal Code or General Plan goals or policies specific to the protection of biological resources. Site-specific development is not currently proposed; however, future development projects associated with implementation of the Project would be assessed for consistency with local policies and ordinances, including the Municipal Code and General Plan goals and policies, as appropriate. Proposed removal of any trees within the Project Area would be reviewed in accordance with Municipal Code Chapter 13.60 and would be required to comply with the requirements for removal. Thus, the Project would not conflict with any local policies or ordinances protecting biological resources and impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.3.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the related projects in the City determined as having the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to biological resources may occur. The cumulative projects' setting for biological resources is the City of Gardena.

Would the project, combined with other related cumulative projects, 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?

Would the project, combined with other related cumulative projects, 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?

Would the project, combined with other related cumulative projects, have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh,



vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact Analysis: The City of Gardena is highly urbanized and is not known to support any significant wildlife or native plant communities or species. The Project Area, along with the cumulative project sites, are primarily developed or paved and any landscaping consists primarily of ornamental and/or nonnative plant species. Neither the Project nor the cumulative projects would involve modifications to land designated as Open Space, including the Willows Wetland Preserve, or to the Willows Wetland Plan adopted for preservation of the Willows Wetland. Any future development within the City would be assessed for consistency with local policies and ordinances, including the Municipal Code and General Plan goals and policies, as appropriate. Compliance with the City's Municipal Code would reduce potential impacts associated with nesting migratory birds and tree removal. Thus, the proposed Project's incremental effects involving special status plant or wildlife species, riparian habitat or other sensitive natural community, or any state or federally protected wetlands would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, 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: The Project Area, along with the cumulative project sites, are primarily developed or paved and any landscaping consists primarily of ornamental and/or non-native plant species and do not provide for habitat linkages. The Dominguez Channel is concrete-lined and considered to have low habitat value. Although the channel could be used for wildlife movement, the Project as well as the cumulative projects do not involve any direct or indirect physical changes or modifications to the channel. Thus, the proposed Project's incremental effects involving the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impeding the use of native wildlife nursery sites would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.



Would the project, combined with other related cumulative projects, conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact Analysis: The Project and the cumulative development projects would not modify the City's Municipal Code or General Plan goals or policies specific to the protection of biological resources, including the Plan for Gardena Willows Wetland.

Site-specific development is not currently proposed as part of the Project; however, future development associated with implementation of the Project would be assessed for consistency with local policies and ordinances, including the Municipal Code and General Plan goals and policies, as appropriate. Proposed removal of any trees within the Project Area would be reviewed in accordance with Municipal Code Chapter 13.60 and would be required to comply with the requirements for removal. Similarly, cumulative development would be required to comply with the Municipal Code in the event of proposed tree removal. Thus, the Project's incremental effects involving conflict with any local policies or ordinances protecting biological resources would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.3.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with biological resources would occur with the proposed Project.

5.3.8 REFERENCES

California Department of Fish and Wildlife (CDFW), *California Natural Diversity Database*, search conducted March 3, 2023.

City of Gardena, *Final Environmental Impact Report: City of Gardena General Plan 2006*, April 2006.

Guzy, G. & Anderson, R., *Memorandum: Supreme Court Ruling Concerning CWA Jurisdiction of Isolated Waters*, January 2001.

Los Angeles County Public Works (LACPW), *Enhanced Watershed Management Programs Final Program Environmental Impact Report*, April 2015.

U.S. Fish & Wildlife Service (USFWS), *National Wetlands Inventory*, <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>, accessed March 3, 2023.



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5.4 CULTURAL RESOURCES

5.4.1 PURPOSE

The purpose of this section is to identify existing cultural (including historic and archaeological resources) resources within the Project Area. This section is primarily based upon the *Cultural and Paleontological Resource Assessment for the City of Gardena Land Use Plan & Zoning Amendment Project* prepared by Cogstone, dated July 2023 and included as Appendix F, Cultural and Paleontological Resources Assessment.

5.4.2 ENVIRONMENTAL SETTING

PREHISTORIC SETTING

Approaches to prehistoric frameworks have changed over the past half century from being based on material attributes to radiocarbon chronologies to association with cultural traditions. Archaeologists defined a material complex consisting of an abundance of milling stones (for grinding food items) with few projectile points or vertebrate faunal remains dating from about seven to three thousand years before the present as the “Millingstone Horizon.” Later, the “Millingstone Horizon” was redefined as a cultural tradition named the Encinitas Tradition with various regional expressions including Topanga and La Jolla. Use by archaeologists varied as some adopted a generalized Encinitas Tradition without regional variations, some continued to use “Millingstone Horizon” and some used Middle Holocene (the time period) to indicate this observed pattern.

Recently, it was recognized that generalized terminology is suppressing the identification of cultural, spatial, and temporal variation and the movement of peoples throughout space and time. These factors are critical to understanding adaptation and change. The Encinitas Tradition characteristics are abundant metates and manos, crudely made core and flake tools, bone tools, shell ornaments, very few projectile points with subsistence focusing on collecting (plants, shellfish, etc.). Faunal remains vary by location but include shellfish, land animals, marine mammals, and fish.

The Encinitas Tradition is currently redefined as comprising four geographical patterns. These are: (1) Topanga in coastal Los Angeles and Orange counties, (2) La Jolla in coastal San Diego County, (3) Greven Knoll in inland San Bernardino, Riverside, Orange, and Los Angeles counties, and (4) Pauma in inland San Diego County.

About 3,500 years before present, the Encinitas Tradition was replaced in the greater Los Angeles Basin by the Del Rey Tradition. This tradition has been generally assigned to the Intermediate and Late Prehistoric periods. The changes that initiated the beginning of the Intermediate Period include new settlement patterns, economic foci, and artifact types that coincided with the arrival of a biologically distinctive population. The Intermediate and Late Prehistoric periods have not been well-defined. Many archaeologists have proposed, however, that the beginning of the



Intermediate marked the arrival of Takic-speaking groups (from the Mojave Desert, southern Sierra Nevada, and San Joaquin Valley) and that the Late Prehistoric Period reflected Shoshonean groups (from the Great Basin). Related cultural and biological changes occurred on the southern Channel Islands about 300 years later.

As defined by Sutton, the Del Rey Tradition replaces usage of the Intermediate and Late Prehistoric designations for both the southern California mainland and the southern Channel Islands. Within the Del Rey Tradition are two regional patterns named Angeles and Island. The Del Rey Tradition represents the arrival, divergence, and development of the Gabrielino in southern California.

Prehistoric Chronology

The latest cultural revisions for the Project Area define traits for time phases of the Topanga pattern of the Encinitas Tradition applicable to coastal Los Angeles and Orange counties. This pattern is replaced in the Project Area by the Angeles pattern of the Del Rey Tradition later in time.

Topanga Pattern groups were relatively small and highly mobile. Sites known are temporary campsites, not villages and tend to be along the coast in wetlands, bays, coastal plains, near-coastal valleys, marine terraces, and mountains. The Topanga toolkit is dominated by manos and metates with projectile points scarce.

In Topanga Phase I other typical characteristics were a few mortars and pestles, abundant core tools (scraper planes, choppers, and hammerstones), relatively few large, leaf-shaped projectile points, coggled stones, and early discoidals. Secondary inhumation under cairns was the common mortuary practice. In Orange County as many as 600 flexed burials were present at one site and dated 6,435 radiocarbon years before present.

In Topanga Phase II, flexed burials and secondary burial under cairns continued. Adoption of the mortar and pestle is a marker of this phase. Other typical artifacts include manos, metates, scrapers, core tools, discoidals, charmstones, coggled stones and an increase in the number of projectile points. In Orange County stabilization of sea level during this time period resulted in increased use of estuary, near shore, and local terrestrial food sources.

In Topanga Phase III, there was continuing abundance of metates, manos, and core tools plus increasing amounts of mortars and pestles. More numerous and varied types of projectile points are observed along with the introduction of stone-line earthen ovens. Cooking features such as these were possibly used to bake yucca or agave. Both flexed and extended burials are known.

The Angeles pattern generally is restricted to the mainland and appears to have been less technologically conservative and more ecologically diverse, with a largely terrestrial focus and greater emphases on hunting and nearshore fishing.

The Angeles IV phase is marked by new material items including Cottonwood points for arrows, Olivella cupped beads, Mytilus shell disks, birdstones (zoomorphic effigies with magico- religious



properties), and trade items from the Southwest including pottery. Presence and utility of steatite vessels may have impeded the diffusion of pottery into the Los Angeles Basin. The settlement pattern altered to one of fewer and larger permanent villages. Smaller special-purpose sites continued to be used.

Angeles V components contain more and larger steatite artifacts, including larger vessels, more elaborate effigies, and comals. Settlement locations shifted from woodland to open grasslands. The exploitation of marine resources seems to have declined and use of small seeds increased. Many Gabrielino inhumations contained grave goods while cremations did not.

The Angeles VI phase reflects the ethnographic mainland Gabrielino of the post-contact period (i.e., after A.D. 1542). One of the first changes in Gabrielino culture after contact was undoubtedly population loss due to disease, coupled with resulting social and political disruption. Angeles VI material culture is essentially Angeles V augmented by a number of Euro-American tools and materials, including glass beads and metal tools such as knives and needles (used in bead manufacture). The frequency of Euro-American material culture increased through time until it constituted the vast majority of materials used. Locally produced brownware pottery appears along with metal needle-drilled Olivella disk beads.

The ethnographic mainland Gabrielino subsistence system was based primarily on terrestrial hunting and gathering, although nearshore fish and shellfish played important roles. Sea mammals, especially whales (likely from beached carcasses), were prized. In addition, a number of European plant and animal domesticates were obtained and exploited. Ethnographically, the mainland Gabrielino practiced interment and some cremation.

[Ethnography](#)

Early Native American peoples of the Project Area are poorly understood. They were replaced about 1,000 years ago by the Gabrielino (Tongva) who were semi-sedentary hunters and gatherers. The Gabrielino speak a language that is part of the Takic language family. Their territory encompassed a vast area stretching from Topanga Canyon in the northwest, to the base of Mount Wilson in the north, to San Bernardino in the east, Aliso Creek in the southeast and the Southern Channel Islands, in all an area of more than 2,500 square miles. At European contact, the tribe consisted of more than 5,000 people living in various settlements throughout the area. Some of the villages could be quite large, housing up to 150 people.

The Gabrielino are considered to have been one of the wealthiest tribes and to have greatly influenced tribes they traded with. Houses were domed, circular structures thatched with tule or similar materials. The best known artifacts were made of steatite and were highly prized. Many common everyday items were decorated with inlaid shell or carvings reflecting an elaborately developed artisanship.

The main food zones utilized were marine, woodland, and grassland. Plant foods were, by far, the greatest part of the traditional diet at contact. Acorns were the most important single food source. Villages were located near water sources necessary for the leaching of acorns, which was



a daily occurrence. Grass seeds were the next most abundant plant food used along with chia. Seeds were parched, ground, and cooked as mush in various combinations according to taste and availability. Greens and fruits were eaten raw or cooked or sometimes dried for storage. Bulbs, roots, and tubers were dug in the spring and summer and usually eaten fresh. Mushrooms and tree fungus were prized as delicacies. Various teas were made from flowers, fruits, stems, and roots for medicinal cures as well as beverages.

The principal game animals were deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, dove, ducks, and other birds. Most predators were avoided as food, as were tree squirrels and most reptiles. Trout and other fish were caught in the streams, while salmon were available when they ran in the larger creeks. Marine foods were extensively utilized. Sea mammals, fish, and crustaceans were hunted and gathered from both the shoreline and the open ocean, using reed and dugout canoes. Shellfish were the most common resource, including abalone, turban, mussels, clams, scallops, bubble shells, and others.

The Project Area was not home to any known major villages. The closest known named villages are Tevaaxa'anga, 5.9 miles east-southeast of the Project Area, and Saa'anga, 6.65 miles northwest of the Project Area. However, smaller villages and seasonal camps may have been present closer to the Project Area.

HISTORICAL SETTING

Early California History

Juan Cabrillo was the first European to sail along the coast of California in 1542 and was followed in 1602 by Sebastian Vizcaino. Between 1769 and 1822 the Spanish had colonized California and established missions, presidios, and pueblos.

In 1821 Mexico won its independence from Spain and worked to lessen the wealth and power held by the missions. The Secularization Act was passed in 1833, giving the vast mission lands to the Mexican governor and downgrading the missions' status to that of parish churches. The governor then redistributed the former mission lands in the form of grants, to private owners.

Ranchos in California numbered over 500 by 1846, all but approximately 30 of which resulted from land grants. A portion of the southern part of the Project Area overlaps with the San Pedro (Dominguez) land grant.

Following the signing of the Treaty of Guadalupe Hidalgo on February 2, 1848, which ceased American/Mexican hostilities, the region transitioned to the American Period of California. In 1850, California was granted statehood and although the United States promised to honor the land grants, the process of defining rancho boundaries and proving legal ownership became time consuming and expensive. Legal debts led to bankruptcies followed by the rise in prices of beef, hide, and tallow. This combined with flooding and drought was detrimental to the cattle industry. Ranchos were divided up and sold inexpensively.



City of Gardena History

In 1784, in recognition of his years of military service, Spanish soldier Juan Jose Dominquez received thousands of acres of land upon which he established Rancho San Pedro. Part of this land grant became Gardena Valley. In 1869, General William Starke Rosecrans purchased 16,000 acres in the Gardena Valley, which he promptly subdivided and sold off. Spencer Roane Thorpe was among the first to purchase property from Rosecrans near 161st and Figueroa streets in the Gardena Valley. Various ranchers and farmers also purchased land in the valley and by 1887 the settlement of Gardena was born. It is speculated the name “Gardena” is credited to Thorpe or his daughter after the land’s reputation as a “garden spot.” The valley remained one of the few areas between Los Angeles and the west coast with a reliable source of water (fed by the Dominquez Slough) during the dry seasons.

From 1886 to 1887, Gardena underwent a significant population and real-estate boom as a result of the construction of the first railroad in the Gardena Valley, which ran from Agricultural Park in Los Angeles to the town site of Rosecrans. Known as the Rosecrans Rapid Transit Railway, the railway was purchased in 1889 by the Redondo Railway Company. The Redondo Railway Company constructed approximately 20 miles of rail between Los Angeles and Redondo, which resulted in a downtown area moving from Figueroa Street to Vermont Avenue.

Key to the settlement’s early farming economy, many Japanese immigrants moved to Gardena to work as farmers, nurserymen, and gardeners; prominent crops included strawberries, blackberries, raspberries, tomatoes, alfalfa, and barley. Gardena’s vast berry fields earned the area the title of “Berryland” and the reputation as Southern California’s berry capital.

In the early 1900s, Gardena was known as a rural “Japantown” with a large Japanese community second only to Los Angeles’ Little Tokyo. First-generation Japanese (Issei) responsible for the development and growth of berry agriculture in the region arrived between 1902 and 1906 and referred to their settlement within Gardena as “Moneta.” With the growing Issei population came the formation of the Japanese Association of Moneta.

Following the onset of World War I, Gardena’s berry industry fell into decline as they were replaced with the cultivation of what was considered more vital crops for the war effort. After the war, residential development gradually replaced Gardena’s farmland. Despite the decline of local agriculture, by 1940 Gardena’s wholesale flower industry was on the rise with 22 nurseries within its City limits. In September 1930, Gardena incorporated with the neighboring settlements of Strawberry Park and Moneta to become the City of Gardena.

From 1936 to 1980, Gardena operated as the only legalized gambling city in the county.

CULTURAL RESOURCES

A search of the California Historic Resources Inventory System (CHRIS) at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton was conducted on February 10, 2022. The records search covered the entire City of Gardena. In



addition, a variety of other sources were consulted in May 2022, including the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Built Environment Resource Directory (BERD), California Historical Landmarks (CHL), California Points of Historical Interest (CPHI), and a 1981 Gardena Historical Resources Survey.

Results of the SCCIC records search indicate that 15 previous studies have been completed within the Project Area parcels and an additional 31 previous studies have been completed within the City. Eight cultural resources have been recorded within the City; previously recorded cultural resources within the City include one prehistoric archaeological site, one historic archaeological site, and six historic built environment resources. Table 5.4-1, Cultural Resources Recorded within the City of Gardena, lists the previously recorded cultural resources within the City. Following Table 5.4-1 is a description of the previously recorded cultural resources within the City. One resource, P-19-190051, is located within a parcel that is proposed for land use and zone changes under Project implementation.

**Table 5.4-1
Cultural Resources Recorded within the City of Gardena**

Primary No. (P-19-)	Resource Type	Resource Description	Year Recorded	NRHP/ CRHR Status
000101	Prehistoric Archaeological Site	Artifact deposit and human burials	1939	Unevaluated
177369	Historic Archaeological Site	South Gardena Parksite/ Dominguez Slough. Around 60 acres of ponds and marshland.	1981	Unevaluated
177464	Historic Built Environment	Commercial building. Gardena Department Store, 1106 Gardena Boulevard. Flat stepped roof, concrete masonry, 1938.	2007	NR – Not Eligible
188449	Historic Built Environment	Commercial building. Gardena Community Outpatient Clinic, 1251 W. Redondo Beach Boulevard. 3-story rectangular shaped Modern style, 1963.	2008	NR – Not Eligible CR – Not Evaluated



Table 5.4-1 (continued)
Cultural Resources Recorded within the City of Gardena

Primary No. (P-19-)	Resource Type	Resource Description	Year Recorded	NRHP/CRHR Status
190051	Historic Built Environment	Church building. Calvary Baptist Church, 15916 Crenshaw Boulevard. 2-story, irregular shaped Modern style, 1956.	2010	NR – Not Eligible CR – Not Evaluated
190623	Historic Built Environment	Commercial building. Gardena Western Business Park, 13200 South Western Avenue. Modern/Contemporary, 1961.	2012	NR – Not Eligible
190646	Historic Built Environment	Tower structure. Steel-lattice transmission tower with concrete foundation. 17795 Normandie Avenue. Modern style, 1929.	2012	NR – Not Eligible CR – Not Evaluated
192741	Historic Built Environment	Single family residence. 1348 West 168th Street. 1-story, Craftsman style rectangular plan with gabled wood roof, 1922. Resource was demolished in 2019	2013	NR/CR – Not Eligible

Description of Cultural Resources Within the City

P-19-000101 (CA-LAN-101)

Site P-19-000101 was originally recorded by F.H. Racer in 1939 as a small prehistoric site located on the south side of Gardena at the western end of a blind street from Vermont Avenue and east of Normandie Avenue. “A number of skeletons was uncovered” and “a number of artifacts was uncovered.”



[P-19-177369](#)

Site P-19-177369 was originally recorded as the South Gardena Parksite, also known as the Dominguez Slough, located near the corner of Vermont Avenue and Artesia Boulevard. The slough is described as being shallow ponds and low shrubbery with various associated wildlife. The site was acquired by the State of California in the 1970s with the intent to become recreational land use. The site is now within the Gardena Willows Wetland Preserve.

[P-19-177464](#)

Site P-19-177464 was originally recorded by Dana E. Supernowicz in 2007 as a one-story, flat stepped roof design, concrete masonry commercial building constructed in 1938. The Gardena Department Store building is located in the central business district of Gardena at 1106 Gardena Boulevard. While the subject property reflects commerce and trade in the central business district of Gardena from the late 1930s through the 1950s, the building's key architectural design characteristics appear to have been severely damaged by extensive renovation and remodeling in the past three decades. Because of these extensive changes the property has lost integrity of design, materials, workmanship, and feeling. Therefore, the property was recommended but not individually eligible for the NRHP under Criterion A, B, or C.

[P-19-188449](#)

Site P-19-188449 was originally recorded by K.A. Crawford in 2008 as a three-story, rectangular shaped, asymmetrical, commercial building of Modern design, constructed in 1963. The Gardena Community Outpatient Clinic building is located at 1251 West Redondo Beach Boulevard. The building was originally built and used as medical office space and retains its overall integrity with little to no alterations, while still maintaining the original workmanship and design. The property was evaluated for listing in the NRHP but was recommended 6Y: "Determined ineligible for NR by consensus through Section 106 process-Not evaluated for CR or Local Listing."

[P-19-190051](#)

Site P-19-190051 was originally recorded by K.A. Crawford in 2010 as the Calvary Baptist Church constructed in 1956. Located at 15916 Crenshaw Boulevard, the property is described as a two-story, irregular shaped, asymmetrical building in the Modern style. The building was originally built and used as a men's clothing store from 1956 to 1979 when it was sold and converted to a church. In 1991, the second story was added and the building was significantly altered. The property was evaluated for listing in the NRHP but was recommended as not eligible for listing.

[P-19-190623](#)

Site P-19-190623 was originally recorded by Brent D. Johnson in 2012 as the Gardena Western Business Park constructed in 1961. Located at 13200 South Western Avenue, the property is described as a one-story manufacturing building surrounded by Modern style industrial buildings. The building was originally built for light industrial/manufacturing and has retained that association since it was constructed. The original workmanship and materials used have



remained intact. The property was evaluated for listing in the NRHP but was recommended not eligible.

[P-19-190646](#)

Site P-19-190646 was originally recorded by K.A. Crawford in 2013 as Southern California Edison M7-T4 Mesa-Redondo electrical transmission tower constructed in 1929. Located at 17795 Normandie Avenue, the structure is described as a steel lattice type transmission tower with rectangular shaped concrete footings. An equipment storage area is located at the base of the tower. The structure is in good condition and has retained its original workmanship and design with little to no alterations. The property was evaluated for listing in the NRHP but was recommended not eligible. The property was not evaluated for eligibility for the CRHP.

[P-19-192741](#)

Site P-19-192741 was originally recorded by Kara Brunzell in 2018 as a Craftsman style single-family residence constructed in 1922. Located at 1348 West 168th Street, the structure was described as a one-story rectangular plan with a gabled wood shingle roof and a secondary living quarters building located directly adjacent. The secondary building was described as a Ranch style house with L-shaped plan with cross-gabled roof. The property was evaluated for listing in the NRHP and CRHP but was recommended not eligible. The resource was demolished in 2019.

[City of Gardena 1981 Historical Resources Survey](#)

The City conducted a historical resources survey, which was published in April 1981. The survey identified 112 historic resources within the City, 25 of which the report recommends as a local historic site and six of which were recommended for nomination to the NRHP. Of the 112 historic resources identified by the survey, 14 are located within or adjacent to parcels proposed for land use and zone changes under Project, as shown in [Table 5.4-2, 1981 Gardena Historical Resources Survey](#). Nine of the 10 extant structures identified in the 1981 Gardena Historical Resource Survey are located within a parcel that is proposed to receive a Housing Overlay under Project implementation, including: 2007 Marine Avenue, 17826 S Hobart Boulevard, 17904 S Hobart Boulevard, 15032 S Western Avenue, 16501 Western Avenue, 16522 S Western Avenue, 16535 S Western Avenue (16531 S Western Avenue), 1433 W 139th Street, and 1745 W 165th Place. 1820 W 162nd Street is located adjacent to a parcel proposed to receive a Housing Overlay under Project implementation. The remaining structures identified in the 1981 Gardena Historical Resource Survey are either no longer extant or are not located within or adjacent to parcels proposed for land use and zone changes under Project.



Table 5.4-2
1981 Gardena Historical Resources Survey

Address	Year	Architectural style	Condition	NRHP/CRHR Status
2007 W Compton Blvd (Marine Ave)	1936	Spanish Colonial Revival	Extant	Not known
17826 S Hobart Blvd		Colonial Revival	Extant	Not known
17904 S Hobart Blvd	1900	Colonial Revival/ Queen Anne	Extant	Not known
14512 S Western Ave	1910	Commercial/ Utilitarian	No Longer Extant	Not known
15032 S Western Ave	1950	Pop Fantasy	Extant	Not known
16411 S Western Ave	1918	Commercial/ Utilitarian	No Longer Extant	Not known
16417 S Western Ave	1920	Commercial/ Utilitarian	No Longer Extant	Not known
16501 Western Ave	1915	Commercial/ Utilitarian	Extant	Not known
16522 S Western Ave	1918	Commercial/ Utilitarian	Extant	Not known
16535 S Western Ave (16531 S Western Ave)	1931	Commercial/ Utilitarian	Extant	Not known
1727 W 130th St	1926	Craftsman	No Longer Extant	Not known
1433 W 139th St	1928	Vernacular/ Spanish Colonial	Extant	Not known
1820 W 162nd St	1935	Spanish Colonial	Extant	Not known
1745 W 165th Pl	1929	Mediterranean	Extant	Not known



5.4.3 REGULATORY SETTING

FEDERAL

National Historic Preservation Act 1966

Enacted in 1966 and amended in 2000, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at federal, State, and local levels. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP), established the position of State Historic Preservation Officer (SHPO) and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

Section 106 Process

Through regulations associated with the NHPA, an impact to a cultural resource would be considered significant if government action would affect a resource listed in or eligible for listing in the NRHP. The NHPA codifies a list of cultural resources found to be significant within the context of national history, as determined by a technical process of evaluation. Resources that have not yet been placed on the NRHP, and are yet to be evaluated, are afforded protection under the Act until shown not to be significant.

Section 106 of the NHPA and its implementing regulations (36 Code of Federal Regulations Part 800) state that for a cultural resource to be determined eligible for listing in the NRHP, the resource must meet specific criteria associated with historic significance and possess certain levels of integrity of form, location, and setting. The criteria for listing on the NRHP are applied within an analysis when there is some question as to the significance of a cultural resource. The criteria for evaluation are defined as the quality of significance in American history, architecture, archeology, engineering, and culture. This quality must be present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

- Criterion A: It is associated with events that have made a significant contribution to the broad patterns of our history; or
- Criterion B: It is associated with the lives of persons significant in our past; or
- Criterion C: It embodies 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



- Criterion D: It has yielded, or may be likely to yield, information important in prehistory or history.

Criterion (D) is usually reserved for archaeological resources. Eligible cultural resources must meet at least one of the above criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character.

The Section 106 evaluation process does not apply to projects undertaken under City environmental compliance jurisdiction. However, should the undertaking require funding, permits, or other administrative actions issued or overseen by a Federal agency, analysis of potential impacts to cultural resources following the Section 106 process would likely be necessary. The Section 106 process typically excludes cultural resources created less than 50 years ago unless the resource is considered highly significant from the local perspective. Finally, the Section 106 process allows local concerns to be voiced and the Section 106 process must consider aspects of local significance before a judgment is rendered.

[Secretary of the Interior’s Standards for the Treatment of Historic Properties](#)

Evolving from the Secretary of the Interior’s Standards for Historic Preservation Projects with Guidelines for Applying the Standards that were developed in 1976, the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings were published in 1995 and codified as 36 CFR 67.

Neither technical nor prescriptive, these standards are “intended to promote responsible preservation practices that help protect our Nation’s irreplaceable cultural resources.” “Preservation” acknowledges a resource as a document of its history over time, and emphasizes stabilization, maintenance, and repair of existing historic fabric. “Rehabilitation” not only incorporates the retention of features that convey historic character, but also accommodates alterations and additions to facilitate continuing or new uses. “Restoration” involves the retention and replacement of features from a specific period of significance. “Reconstruction,” the least used treatment, provides a basis for recreating a missing resource. These standards have been adopted, or are used informally, by many agencies at all levels of government to review projects that affect historic resources.

STATE

[California Environmental Quality Act](#)

CEQA requires a lead agency, in this case the City of Gardena, to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]). A resource shall be considered historically significant if it:



- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated with the lives of persons important in our past;
- 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
- Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required. PRC Section 21083.2[a], [b], and PRC Section 21083.2(g) define a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, the probability is high that it:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

[California Register of Historical Resources \(CRHR\)](#)

Created in 1992 and implemented in 1998, the CRHR is “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.” Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the criteria modeled on the NRHP criteria.

[California Historical Landmarks](#)

CHLs are buildings, structures, sites, or places that have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value and that have been determined to have statewide historical significance by meeting at least one of the criteria listed below. The resource also must have written consent of the property owner;



be recommended by the SHRC; and be officially designated by the Director of California State Parks. The specific standards now in use were first applied in the designation of CHL #770. CHLs #770 and above are automatically listed in the CRHR. To be eligible for designation as a CHL, a resource must meet at least one of the following criteria:

- It is the first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California);
- It is associated with an individual or group having a profound influence on the history of California; or
- It is a prototype of, or an outstanding example of, a period, style, architectural movement, or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer, or master builder.

[California Historic Building Code](#)

The California Historic Building Code (CHBC) provides guidelines for the preservation, restoration, rehabilitation, relocation, and reconstruction of buildings or structures designated as qualified historical buildings or properties by a local, State, or Federal jurisdiction, as defined by CHBC §8-218. The CHBC provides guidelines for long-term preservation efforts of qualified historical buildings or properties in order to allow owners to make improvements for access for persons with disabilities; to provide a cost-effective approach to preservation; and, to ensure overall safety of affected occupants or users.

As defined by the CHBC, a “qualified historical building” is “any building, site, structure, object, district, or collection of structures, and their associated sites, deemed of importance to the history, architecture, or culture of an area by an appropriate local, State, or Federal governmental jurisdiction. This includes designated buildings or properties on, or determined eligible for, official national, State, or local historical registers or official inventories, such as the NRHP, CRHR, State Historical Landmark, State Points of Historical Interest, and officially adopted city or county registers, inventories, or surveys of historical or architecturally significant sites, places, or landmarks.”

[Public Resources Code Section 5097 \(Related to Cultural Resources\)](#)

California Public Resources Code (PRC) Section 5097 addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the California Native American Heritage Commission (NAHC) to resolve disputes regarding the disposition of such remains. It has been incorporated into Section 15064.5(e) of the CEQA Guidelines.

The NAHC, created in statute in 1976 (Chapter 1332, Statutes of 1976), is a nine-member body whose members are appointed by the Governor. The NAHC identifies, catalogs, and protects Native American cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and



public lands in California. The NAHC is also charged with ensuring California Native American tribes' accessibility to ancient Native American cultural resources on public lands, overseeing the treatment and disposition of inadvertently discovered Native American human remains and burial items, and administering the California Native American Graves Protection and Repatriation Act (CalNAGPRA), among many other powers and duties.

PRC Sections 5097.9 through 5097.991 establish that no public agency or private party using or occupying public property, or operating on public property under a public license, permit, grant, lease or contract made after July 1, 1977, shall in any manner interfere with the free expression or exercise of Native American religion as provided in the U.S. Constitution and the California Constitution. It also prohibits such agencies and parties from causing severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require it.

These sections also establish the state's NAHC. The NAHC is tasked with working to ensure the preservation and protection of Native American human remains, associated grave goods and cultural resources. Towards this end, the NAHC has a strategic plan for assisting the public, development communities, local and federal agencies, educational institutions and California Native Americans to better understand problems relating to the protection and preservation of cultural resources and to serve as a tool to resolve these problems. In 2006, PRC Sections 5097.91 and 5097.98 were amended by Assembly Bill 2641 to authorize the NAHC to bring legal action when necessary to prevent damage to Native American burial grounds or places of worship. It also established more specific procedures to be implemented in the event that Native American remains are discovered.

[California Health and Safety Code \(Sections 7050.5, 7051, and 7054\)](#)

Sections 7050.5, 7051, and 7054 of the California Health and Safety Code collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the PRC), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

LOCAL

[City of Gardena General Plan](#)

The City of Gardena General Plan Community Resources Element, Conservation Plan, contains the following goals and policies potentially relevant to the proposed Project:

CN Goal 5: Protect the City's cultural resources.



Policy CN 5.1: Maintain an inventory of the City’s historical resources, including a survey of buildings of architectural, cultural or historical significance.

Policy CN 5.2: Provide provisions in the Municipal Code to protect historical and cultural resources.

Policy CN 5.3: Protect and preserve cultural resources of the Gabrielino Native American Tribe found or uncovered during construction.

City of Gardena Municipal Code

Gardena Municipal Code Section 18.42.210, *Post-permit Requirements*, contains protections pertaining to cultural resources. Specifically, with regards to human remains, Section 18.42.210(D)(2) requires, in compliance with State law, that if human remains are unearthed, the project developer, pursuant to State Health and Safety Code Section 7050.5, will contact the County coroner and ensure no further disturbance occurs until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the Native American Heritage Commission (NAHC) must be notified within twenty-four hours.

City of Gardena Historical Resource Survey Report

The City of Gardena conducted a historical resources survey between 1980 and 1981, culminating in the Historical Resources Survey Report in April 1981. The survey included a block-by-block windshield survey of 5.3 square miles of City of Gardena and a small portion of the City of Los Angeles, which was historically part of old Gardena. From this windshield survey, 112 sites were chosen as a representative mixture of building types to give a balanced overview of the entire area. The survey report identifies 83 buildings selected primarily for their architectural significance and 29 for their historical/cultural significance. The survey report recommends 25 of the identified sites as a local historic site and were six recommended for nomination to the NRHP.

5.4.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

SIGNIFICANCE GUIDELINES

Historical Resources

Impacts to a significant cultural resource that affect characteristics that would qualify it for the NRHP or that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. These impacts could result from “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” (*CEQA Guidelines*, Section 15064.5 [b][1], 2000). Material impairment is defined as demolition or alteration “in an adverse manner [of] those characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register” (*CEQA Guidelines*, Section 15064.5[b][2][A]).



Archaeological Resources

A significant prehistoric archaeological impact would occur if grading and construction activities result in a substantial adverse change to archaeological resources determined to be “unique” or “historic.” “Unique” resources are defined in Public Resources Code Section 21083.2; “historic” resources are defined in Public Resources Code Section 21084.1 and *CEQA Guidelines* Section 15126.4.

Public Resources Code Section 21083.2(g) states:

As used in this section, “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; or*
- 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.*

CEQA SIGNIFICANCE CRITERIA

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to cultural resources. A project would result in a significant impact related to cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 (refer to Impact Statement 5.4-1);
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 (refer to Impact Statement 5.4-2); and/or
- Disturb any human remains, including those interred outside of dedicated cemeteries (refer to Impact Statement 5.4-3).

Based on these standards and significance thresholds and criteria, the Project’s effects have been categorized as either “no impact,” a “less than significant impact,” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a “significant unavoidable impact.”



5.4.5 IMPACTS AND MITIGATION MEASURES

Impact 5.4-1: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Impact Analysis: As described above, previously recorded cultural resources within the Project Area include six historic built environment resources. Further, the Project Area includes 10 structures that were identified in the 1981 Gardena Historical Resource Survey. Additionally, due to the age of development, potentially eligible sites may be located within the Project Area. Redevelopment and alteration of existing structures has the potential to impact known and potentially eligible historical resources. A substantial adverse change in the significance of an historic resource is defined in Section 15064.5 (b)(1) of the CEQA Guidelines as the “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.”

The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. One resource, P-19-190051, is located within a parcel that is proposed for land use and zone changes under Project implementation. The religious building at 15916 Crenshaw Boulevard (Calvary Baptist Church; P-19-190051) was documented and evaluated for historic significance K. A. Crawford on May 28, 2010. The building was described as constructed in the Modern style, two-story, asymmetrical, irregular shaped, and multi-level. The first floor was constructed in 1956 and the second story was added in 1991. The building was noted to be in good condition.

The building was evaluated for historical significance and recommended as not eligible for listing in the NRHP under any criteria. The status code 6Z (Found ineligible for National Register, California Register, or Local designation through survey evaluation) was applied in error as the resource had not been evaluated for listing in the CRHR or local registers.

In November 2012, the building was revisited by Dana E. Supernowicz of Historic Resource Associates. Ms. Supernowicz reevaluated the building for historic significance and recommended not eligible for listing in the NRHP under status code 6Y (Determined ineligible for NR by consensus through Section 106 process-Not evaluated for CR or Local Listing).

On May 31, 2023, architectural historian, Shannon Lopez of Cogstone Resource Management reviewed the 2008 and 2012 site record as well as recent photographs of the building’s exterior. There appears to be no notable alterations to the exterior of the building since it was first recorded. Cogstone reevaluated this building for historical significance and potential listing in the CRHR.

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.



After a review of historic newspapers, this building is not associated with events that have made a significant contribution to the broad patterns of local or regional history. Therefore, this building is recommended not eligible for listing in the California Register of Historical Resources (CRHR) under Criterion 1.

Criterion 2: Associated with the lives of persons important to local, California, or national history.

After a review of historic newspapers, this building is not associated with the lives of persons important to local, California, or national history. Therefore, this building is recommended not eligible for listing in the CRHR under Criterion 2.

Criterion 3: Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.

This building is an unremarkable representation of the Modern architectural style. The 1991 addition of the second story substantially impacts the building's overall integrity of design, materials, workmanship, and feeling. Due to the building's lack of exceptional architecture and loss of integrity, this building is recommended not eligible for listing in the CRHR under Criterion 3.

Criterion 4: It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Criterion 4 is most often applied to archaeological sites and districts but can also apply to buildings, structures, and/or objects. This building does not exhibit a local variation of a standard design or construction technique that can yield important information (such as construction expertise or availability of local materials). Recording of this building has collected all pertinent data but has not provided information important to history at any level. Due to a lack of significance, this resource is recommended not eligible for listing in the CRHR under Criterion 4.

As P-19-190051 (Calvary Baptist Church) lacks significance under all criteria, issue of integrity are moot. The resource is recommended as not eligible for listing in the CRHR or at the local level. Therefore, Project implementation would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 specific to P-19-190051 (Calvary Baptist Church); impacts would be less than significant.

As discussed above, the City conducted a historical resources survey, which concluded in 1981. Nine of the 10 extant structures identified in the 1981 Gardena Historical Resource Survey are located within a parcel that is proposed to receive a Housing Overlay under Project implementation, including: 2007 Marine Avenue, 17826 S Hobart Boulevard, 17904 S Hobart Boulevard, 15032 S Western Avenue, 16501 Western Avenue, 16522 S Western Avenue, 16535 S Western Avenue (16531 S Western Avenue), 1433 W 139th Street, and 1745 W 165th Place. 1820 W 162nd Street is located adjacent to a parcel proposed to receive a Housing Overlay under Project implementation. The remaining structures identified in the 1981 Gardena Historical Resource Survey are either no longer extant or are not located within or adjacent to parcels



proposed for land use and zone changes under Project. Resolution No. 4048, adopted by the City of Gardena in October 1989, designates the structures, sites, and land uses identified in the 1981 Gardena Historical Resource Survey as historically significant. The Resolution establishes procedures for preservation of these historical resources, including sending notification of the site's historical significance to the property owner and City Council at the time of application for a demolition permit or building permit for substantial alteration of the property. City staff and the property owner will then discuss the City's desire for the preservation of the existing structure or land use.

Although the proposed Project does not involve site-specific development and does not directly propose any changes to any historic resources, future development allowed under the proposed Project could cause a substantial adverse change in the significance of known historical resources or unknown historical resources which have not yet been identified. This is considered a potentially significant impact.

As future development projects are considered by the City, each project would be evaluated for conformance with the Gardena General Plan, Municipal Code, and other applicable State and local regulations relative to historic and potentially historic resources. In order to reduce potentially significant impacts to historical resources associated with future site-specific development, applicants for future proposed projects with intact extant building(s) more than 45 years old would be required to implement Mitigation Measure CUL-1, which would require preparation of a historic resource technical study evaluating the significance and data potential of the resource by a qualified architectural historian meeting Secretary of the Interior Standards to determine the significance of the structure and potential impacts of the proposed development in compliance with CEQA. If significance criteria are met, detailed mitigation recommendations would be required as part of the technical study. Development of mitigation measures would be required to consult *The Secretary of the Interior's Standards for the Treatment of Historic Properties* to provide guidance for the preservation, rehabilitation, restoration, and reconstruction of historic buildings. Upon compliance with federal, State, and local regulations, including the General Plan and implementation of Mitigation Measure CUL-1, the Project would not cause a substantial adverse change in the significance of a historical resource and impacts would be less than significant.

Mitigation Measures:

CUL-1: Applicants for future proposed projects involving sites with intact extant building(s) more than 45 years old shall provide a historic resource technical study, prepared by a qualified architectural historian meeting Secretary of the Interior Standards, evaluating the significance and data potential of the resource under CEQA. If significance criteria are met, detailed mitigation recommendations shall be required as part of the technical study. Development of mitigation measures shall consult *The Secretary of the Interior's Standards for the Treatment of Historic Properties* to provide guidance for the preservation, rehabilitation, restoration,



and reconstruction of historic buildings. When referring to these guidelines, the direct and indirect impacts of the project on a historic resource shall be considered to determine an appropriate treatment for a historic property.

In the event a historic building/structure is recommended eligible for listing (as the result of the technical study) but will be demolished or partially demolished as the result of the project, the drafting of a Historic American Building Survey-like (HABS-like) or Historic American Engineering Record-like (HAER-like) may be recommended as part of mitigation. If a *listed* historic building or structure will be demolished or partially demolished as the result of the project a full HABS or HAER document shall be prepared. Consultation with California SHPO shall be required to determine the level of documentation required on a case-by-case basis to be determined in consultation with the City of Gardena Community Development Department and a qualified architectural historian meeting Secretary of the Interior Standards.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

Impact 5.4-2: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact Analysis: As described above, previously recorded cultural resources within the Project Area include one prehistoric archaeological site and one historic archaeological site. Additionally, undiscovered archeological sites may be located within the Project Area. Redevelopment and development activities have the potential to impact known and unknown archaeological resources. Surface-level and subsurface archaeological sites and deposits can be affected by ground-disturbing activities associated with construction activities.

The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. There are no previously recorded archaeological resources within parcels that are proposed for land use and zone changes under Project implementation. Although the Project Area is primarily urbanized and has experienced extensive ground-disturbance, there is the potential that archaeological resources could occur below the surface. Although the proposed Project does not involve site-specific development, future development allowed under the proposed Project could cause a substantial adverse change in the significance of unknown archaeological resources which have not yet been identified. This is considered a potentially significant impact.

According to the SCCIC records search results, both of the previously recorded archaeological (one prehistoric-aged, one historic-aged) sites within the City are located in the southeast corner of the City. The Cultural Resources Assessment notes this small number of previously identified resources is likely due as much to limited attempts at identification as it is absence of resources, as only a small portion of the City (less than 5 percent) has been systematically surveyed for



cultural resources. Almost all land within the City is built out, but it is built upon alluvium with variable potential to preserve subsurface cultural resources. The Cultural Resources Assessment concludes that, due to previous disturbance by grading activities, the sensitivity for historic-aged cultural deposits is assessed to be low and cultural sensitivity for deeply buried prehistoric cultural resources is assessed to be low to moderate.

Although the Project Area is primarily urbanized and has experienced extensive ground-disturbance, there is the potential for future development activities to unearth unknown archeological resources occurring below the surface. In order to reduce potentially significant impacts to archeological resources associated with future site-specific development, applicants for future proposed ground disturbing projects would be required to implement Mitigation Measure CUL-2, which would require either a technical cultural resources assessment consisting of a record search, survey, background context and project specific recommendations performed by a qualified archaeologist meeting Secretary of the Interior Standards, or an agreement to full-time monitoring by an archaeologist and a Native American monitor. If resources are known or reasonably anticipated, the recommendations shall provide a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, provide a treatment plan for potential resources that includes data to be collected, requires professional identification, other special studies as appropriate, requires curation at a repository for artifacts meeting significance criteria, requires a comprehensive final mitigation compliance report including a catalog of specimens with museum numbers and an appendix containing a letter from the museum stating that they are in possession of the materials.

Archaeological resources are protected under federal, State, and local regulations as described above and compliance with the established regulatory requirements would reduce potential adverse impacts to archaeological resources associated with future development. Subsequent development projects would be required to comply with existing federal, State, and local regulations, including Mitigation Measure CUL-2, which would reduce potential impacts to archaeological resources to less than significant.

Mitigation Measures:

CUL-2: Applicants for future proposed ground disturbing projects shall be required to either: (1) provide a technical cultural resources assessment consisting of a record search, survey, background context and project specific recommendations performed by a qualified archaeologist meeting Secretary of the Interior Standards to the City of Gardena for review and approval; or if Applicants choose not to provide a technical cultural resources assessment (2) provide documentation to the City of Gardena demonstrating full-time monitoring by an archaeologist and a Native American monitor. If resources are known or reasonably anticipated, the recommendations shall provide a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, provide a treatment plan for potential



resources that includes data to be collected, requires professional identification, other special studies as appropriate, requires curation at a repository for artifacts meeting significance criteria, requires a comprehensive final mitigation compliance report including a catalog of specimens with museum numbers and an appendix containing a letter from the museum stating that they are in possession of the materials.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

Impact 5.4-3: Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?

Impact Analysis: Although no conditions exist that suggest human remains are likely to be found in the Project Area, future construction activities could have the potential to disturb or destroy buried Native American human remains as well as other human remains, including those interred outside of formal cemeteries. Health and Safety Code Sections 7050.5 to 7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in PRC Section 5097.98 would be implemented, including notification of the County Coroner, notification of the NAHC and consultation with the individual identified by the NAHC to be the “most likely descendant (MLD).” The MLD would have 48 hours to make recommendations to landowners for the disposition of any Native American human remains and grave goods found. Recommendations would be made for the treatment and disposition of the remains.

The Gardena General Plan includes policies to identify and protect historic resources within the City. Specifically, General Plan Community Resources Element, Conservation Plan Policy CN 5.3 protects and preserves cultural resources of the Gabrielino Native American Tribe found or uncovered during construction. Additionally, the Gardena Municipal Code Section 18.42.210, *Post-permit Requirements*, contains protections pertaining to human remains. Specifically, Section 18.42.210(D)(2) requires, in compliance with State law, that if human remains are unearthed, the project developer, pursuant to State Health and Safety Code Section 7050.5, will contact the County coroner and ensure no further disturbance occurs until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the Native American Heritage Commission (NAHC) must be notified within twenty-four hours.

Thus, compliance with the Gardena Municipal Code, Health and Safety Code Sections 7050.5 to 7055, and PRC Section 5097.98 would ensure that in the event human remains are discovered, the remains would be handled in accordance with applicable laws, and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.



Level of Significance: Less Than Significant Impact.

5.4.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the related projects in the City determined as having the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to cultural resources may occur. The cumulative projects' regional geologic setting and cultural resource deposit sensitivity would be similar; however, the local geologic setting and historical significance would vary according to the site location and specific conditions.

Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Impact Analysis: Previously recorded historic built environment resources have been identified within the Project Area. Additionally, due to the age of development within the City, there is the potential for eligible sites to be located within the Project Area. Future development within the Project Area and within the cumulative project sites has the potential to impact known and potentially eligible historical resources. With implementation of Mitigation Measure CUL-1, the Project would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5. As with the Project, the related cumulative projects would undergo environmental review pursuant to CEQA to evaluate potential impacts to historical resources. This would include studies of historical resources that are present or could be present within a development site. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. Based on the above, the Project's incremental contribution to cumulative historical resource impacts would be less than cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact Analysis: Previously recorded cultural resources within the Project Area include one prehistoric archaeological site and one historic archeological site. Additionally, undiscovered archeological sites may be located within the Project Area. Future development within the Project Area and within the cumulative project sites has the potential to impact known and unknown archaeological resources. With implementation of Mitigation Measure CUL-2, the Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. As with the Project, the related cumulative projects would undergo environmental review pursuant to CEQA to evaluate potential impacts to archaeological resources. This would include studies of archaeological resources that are present or could be present within a development site. Additionally, related projects would be subject to compliance



with the established Federal, State, and local regulatory framework concerning the protection of cultural resources on a project-by-project basis. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. Based on the above, the Project's incremental contribution to cumulative archaeological resource impacts would be less than cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, disturb any human remains, including those interred outside of dedicated cemeteries?

Impact Analysis: Although unlikely, there is the potential that previously undiscovered human remains could be encountered during construction activities associated with future development within the Project Area. Future development projects would be required to comply with the established State regulatory framework regarding human remains. Additionally, Gardena Municipal Code Section 18.42.210, *Post-permit Requirements*, contains protections pertaining to human remains, including ensuring compliance with State law if human remains are unearthed. Related cumulative projects would undergo environmental review on a project-by-project basis to evaluate the site-specific archaeological sensitivity. Additionally, related projects would be subject to compliance with the established State regulatory framework and City of Gardena Municipal Code concerning the discovery of human remains on a project-by-project basis. The proposed Project's compliance with the regulatory framework regarding the discovery of human remains would reduce potential Project impacts to a less than significant level; thus, the Project's incremental contribution to cumulative impacts to human remains would be less than cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.4.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with cultural resources would occur with the proposed Project.

5.4.8 REFERENCES

Cogstone, *Cultural and Paleontological Resource Assessment for the City of Gardena Land Use Plan & Zoning Amendment Project* prepared by Cogstone, July 2023.



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5.5 ENERGY

5.5.1 PURPOSE

The purpose of this section is to describe the existing environmental conditions and regulatory requirements related to energy and to evaluate the potential for implementation of the proposed Project to result in short-term construction and long-term operational energy consumption impacts. This section is primarily based upon the energy analysis and modeling prepared by De Novo Planning Group and included as Appendix E, Air Quality, Energy and Greenhouse Gas Emissions Modeling Data.

5.5.2 ENVIRONMENTAL SETTING

ENERGY CONSUMPTION

Energy in California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel and natural gas) are the most widely used form of energy in the State (U.S. Energy Information Administration, 2022a). However, renewable sources of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's current Renewable Portfolio Standard (RPS), which requires the State to derive at least 33 percent of electricity generated from renewable resources by 2020, and 60 percent by 2030.

Overall, in 2020, California's per capita energy usage was ranked 48th in the nation at 175 million British thermal units (Btu) per capita (U.S. Energy Information Administration, 2022a). Additionally, California's per capita rate of energy usage has been reduced by approximately one third since the 1970s (U.S. Energy Information Administration, 2022b). Many State regulations since the 1970s, including new building energy efficiency standards, vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the State constrained.

The consumption of nonrenewable energy (primarily gasoline and diesel fuel) associated with the operation of passenger, public transit, and commercial vehicles results in greenhouse gas (GHG) emissions that ultimately result in global climate change. Other fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

ELECTRICITY CONSUMPTION

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Approximately 70 percent of the electrical power needed to meet California's demand is produced in the State, while the remaining 30 percent is imported from the Pacific Northwest and the Southwest (California Energy



Commission, 2022a). In 2021, California’s in-state generated electricity was derived from natural gas (50.2 percent), nuclear sources (8.5 percent), large hydroelectric resources (6.2 percent), coal (0.2 percent), and renewable resources that include geothermal, biomass, small hydroelectric resources, wind, and solar (34.8 percent). The percentage of renewable resources as a proportion of California’s overall energy portfolio is increasing over time, as directed the State’s Renewable Portfolio Standard (RPS).

Southern California Edison (SCE) provides electricity to the Project Area. SCE, a subsidiary of Edison International, serves approximately 185 cities in 15 counties across central and Southern California (Southern California Edison, 2019). According to the California Energy Commission (CEC), approximately 103,597 million kilowatt-hours (GWh) of electricity were used in SCE’s service area in 2020 (California Energy Commission, 2022b). This is approximately 38 percent of the State total system electric generation of 272,576 GWh in 2020, which was a two percent decrease from the previous year (California Energy Commission, 2022c). Los Angeles County’s total electricity consumption in 2020 (residential and non-residential) was approximately 65,650 GWh (California Energy Commission, 2022d).

NATURAL GAS

Natural gas supplies are derived from underground sources and brought to the surface at gas wells. Once it is extracted, gas is purified and the odorant that allows gas leaks to be detected is added to the normally odorless gas. Natural gas suppliers, such as Southern California Gas Company (SoCalGas), then send the gas into transmission pipelines, which are usually buried underground. Compressors propel the gas through the pipeline system, which delivers it to homes and businesses.

The State produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest. In 2020, California produced 144 billion cubic feet of natural gas. SoCalGas provides natural gas for residential, industrial, and agency consumers within the City, including the Project Area.

PETROLEUM

The primary energy source for the United States is petroleum (oil), which is refined to produce fuels like gasoline, diesel, and jet fuel (U.S. Energy Information Administration, 2022c). Petroleum is a finite, nonrenewable energy source. California used approximately 524 million barrels of petroleum in 2020, with the majority (433 million barrels) used for the transportation sector (U.S. Energy Information Administration, 2022d). This total annual consumption equates to a daily use of approximately 1.4 million barrels of petroleum.



5.5.3 REGULATORY SETTING

FEDERAL

Federal Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National ambient air quality standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. Environmental Protection Agency (EPA) is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Energy Policy Act of 1992 (EPAct)

The Energy Policy Act of 1992 (EPAct) was passed to reduce the Country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain federal, state, and local government and private fleets to purchase a percentage



of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs.

[Energy Policy Act of 2005](#)

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the Act provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

[Clean Power Plan and New Source Performance Standards for Electric Generating Units 2015](#)

On October 23, 2015, the EPA published a final rule (effective December 22, 2015) establishing the carbon pollution emission guidelines for existing stationary sources: electric utility generating units (80 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, EPA 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, the EPA Administrator was directed 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.

[Intermodal Surface Transportation Efficiency Act \(ISTEA\)](#)

ISTEA (49 U.S.C. Section 101 et seq.) promoted the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that metropolitan planning organizations (MPOs), were to address in developing transportation plans and programs, including some energy-related factors. To meet the ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process was then to address these policies. Another requirement was to consider the consistency of transportation planning with federal, state, and local energy goals. Through this requirement, energy consumption was expected to become a criterion, along with cost and other values that determine the best transportation solution.



[The Fixing America's Surface Transportation Act \(FAST Act\)](#)

The Fixing America's Surface Transportation Act (FAST Act) went into effect on December 4, 2015, to provide long-term funding for surface transportation with a focus on improving mobility on America's highways, creating jobs and supporting economic growth, and accelerating project delivery and promoting innovation.

[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 carbon, nitrous oxide, and methane.

STATE

[Warren-Alquist Act](#)

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as CEC. The Act established state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission (CPUC) regulates privately-owned utilities in the energy, rail, telecommunications, and water fields.

[Energy Action Plan](#)

The first Energy Action Plan (EAP) emerged in 2003 from a crisis atmosphere in California's energy markets. The State's three major energy policy agencies (CEC, CPUC, and the Consumer Power and Conservation Financing Authority [established under deregulation and now defunct]) came together to develop one high-level, coherent approach to meeting California's electricity and natural gas needs. It was the first time that energy policy agencies formally collaborated to define a common vision and set of strategies to address California's future energy needs and emphasize the importance of the impacts of energy policy on the California environment.

In the October 2005 Energy Action Plan II, CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change.

The 2019 California Energy Efficiency Action Plan covers issues, opportunities, and savings estimates pertaining to energy efficiency in California's buildings, industrial, and agricultural sectors. The 2019 Energy Efficiency Action Plan fulfills the mandates in California Public Resources Code Sections 25310(c) and 25943(f). The 2019 Energy Efficiency Action Plan is separated into three goals that drive energy efficiency: doubling energy efficiency savings by 2030, removing and reducing barriers to energy efficiency in low-income and disadvantaged



communities, and reducing greenhouse gas emissions from the buildings sector. The energy efficiency savings estimates included in this Action Plan have been updated from the 2017 values.

[Assembly Bill 1493](#)

In 2002, recognizing that global warming would impose compelling and extraordinary impacts on California, the legislature adopted and the Governor signed Assembly Bill (AB) 1493, Chapter 200, Statutes of 2002, authored by Assemblymember Pavley. The bill recognized that global warming (climate change) is a public health concern, that motor vehicles are a major source of the state's greenhouse gas emissions, and that reducing these emissions will protect public health and the environment while stimulating the economy and enhancing job opportunities. Among other things, the bill directed the California Air Resources Board (CARB) to adopt regulations that achieve the maximum feasible and cost effective reduction of greenhouse gas emissions from passenger vehicles, beginning with the 2009 model year. (California Health and Safety Code, § 43018.5.) The Board approved those regulations, sometimes called the Pavley regulations, at its September 2004 hearing, and they were adopted in their final form in August 2005. In December 2005, CARB submitted a request to EPA for a waiver of preemption under the federal Clean Air Act to allow California to enforce its greenhouse gas emission standards.

In response, some motor vehicle manufacturers, automobile dealers, and their trade associations challenged these regulations in numerous federal and state court proceedings and opposed California's waiver request to EPA.

In March 2008, EPA denied California's request for a waiver. That decision was based, among other things, on a finding that California's request to reduce greenhouse gas emissions from passenger vehicles did not meet the Clean Air Act requirement of showing that the waiver was needed to meet "compelling and extraordinary conditions."

In May 2009, several automakers, California, and the federal government committed to a series of actions to resolve those current and potential future disputes over the standards through model year 2016. This agreement formed the genesis of a national program to reduce greenhouse gases and improve fuel economy from passenger vehicles to achieve equivalent or greater greenhouse gas benefits as the Pavley regulations for the 2012 through 2016 model years.

On July 8, 2009, EPA granted California a waiver for the Pavley regulations. (74 Fed. Reg. 32,744, July 8, 2009.)

After adopting these initial greenhouse gas standards for passenger vehicles, CARB adopted continuing standards for future model years.

[Assembly Bill 1007](#)

Assembly Bill 1007, (Pavley, Chapter 371, Statutes of 2005) directed the CEC to prepare a plan to increase the use of alternative fuels in California. As a result, the CEC prepared the State Alternative Fuels Plan in consultation with the state, federal, and local agencies. The plan



presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

[Climate Change Scoping Plan](#)

On December 11, 2008, CARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of the CARB's plans to achieve GHG reductions in California required by Assembly Bill (AB) 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce carbon dioxide-equivalent (CO₂e) emissions by 169 million metric tons (MMT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT of CO₂e under a business-as-usual scenario. This is a reduction of 42 MMT CO₂e, or almost 10 percent, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020. The Scoping Plan also breaks down the amount of GHG emissions reductions CARB recommends for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO₂e);
- The Low-Carbon Fuel Standard (15.0 MMT CO₂e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO₂e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO₂e).

CARB updated the Scoping Plan in 2013 (*First Update to the Scoping Plan*) and again in 2017. The 2013 Update built upon the initial Scoping Plan with new strategies and recommendations, and also set the groundwork to reach the long-term goals set forth by the State. Successful implementation of existing programs (as identified in previous iterations of the Scoping Plan) has allowed California to meet the 2020 target. The 2017 Update expanded the scope of the plan further by focusing on the strategy for achieving the State's 2030 GHG target of 40 percent emissions reductions below 1990 levels (to achieve the target codified into law by SB 32), and substantially advances toward the State's 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

The 2017 Update relied on the preexisting programs paired with an extended, more stringent Cap-and-Trade Program, to deliver climate, air quality, and other benefits. The 2017 Update identified new technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction goals.



CARB adopted the 2022 Scoping Plan Update (2022 Scoping Plan) on December 15, 2022. The 2022 Scoping Plan Update assesses progress towards the SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030, while laying out a path to achieving carbon neutrality no later than 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.

[Executive Order B-48-18: Zero-Emission Vehicles](#)

In January 2018, Executive Order (EO) B-48-18 was signed into law and requires all State entities to work with the private sector to have at least five million zero-emission vehicles (ZEVs) on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. This Executive Order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor’s Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan (Governor’s Interagency Working Group on Zero-Emission Vehicles 2016) to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to expand ZEV infrastructure at residential uses through the Low Carbon Fuel Standard Program, and recommend how to ensure affordability and accessibility for all drivers.

[Executive Order N-79-20](#)

On September 23, 2020 California Governor Gavin Newsom issued Executive Order N-79-20, tasking CARB with ensuring that all new passenger cars and trucks sold in the state will be Zero Emission Vehicles (ZEVs) by 2035. The Order further dictates that all medium- and heavy-duty trucks sold in the state shall be ZEVs by 2045. Prior to the Executive Order, CARB adopted the Advanced Clean Truck Rule that includes sales targets for ZEV heavy-duty trucks.

Additionally, the Order directs a series of deadlines for state and local action to reduce California’s carbon footprint as it relates to transit and fossil fuel consumption:

- The state’s Department of Conservation shall propose stricter health and safety rules regarding oil extraction by December 31, 2020.
- State and local agencies are to work with the private sector to create a “Zero-Emissions Vehicle Market Development Strategy” by January 31, 2021. Relevant state agencies will also be required to update the state’s assessment of ZEV infrastructure to reflect these goals.
- By July 15, 2021, state agencies will also identify near-term actions to support clean transportation development throughout the state, including ZEV projects, as well as develop a strategy and recommendations for closing and remediating oil extraction sites.



- Additionally, the California Environmental Protection Agency and the California Natural Resources Agency, in consultation with other agencies, must expedite regulatory processes to repurpose and transition upstream and downstream oil production facilities. The agencies must report on progress and provide an action plan by July 15, 2021.

California Building Energy Efficiency Standards

Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards (Standards), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. On January 1, 2010, the California Building Standards Commission adopted CALGreen and became the first state in the United States to adopt a statewide green building standards code.

The 2022 update to the California Building Energy Efficiency Standards (the current version of the Standards) went into effect on January 1, 2023. The Standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the Standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach.

Renewable Portfolio Standard

In 2002, the Legislature enacted Senate Bill 1078 (Stats. 2002, ch. 516), which established the Renewables Portfolio Standard program, requiring retail sellers of electricity, including electrical corporations, community choice aggregators, and electric service providers, to purchase a specified minimum percentage of electricity generated by eligible renewable energy resources such as wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. (See Pub. Utilities Code, Section 399.11 et seq. [subsequently amended].) The legislation set a target by which 20 percent of the State's electricity would be generated by renewable sources. (Pub. Utility Code, Section 399.11, subd. (a) [subsequently amended].) As described in the Legislative Counsel's Digest, Senate Bill 1078 required "[e]ach electrical corporation ... to increase its total procurement of eligible renewable energy resources by at least one percent per year so that 20 percent of its retail sales are procured from eligible renewable energy resources. If an electrical corporation fails to procure sufficient eligible renewable energy resources in a given year to meet an annual target, the electrical corporation would be required to procure additional eligible renewable resources in subsequent years to compensate for the shortfall, if funds are made available as described. An electrical corporation with at least 20 percent of retail sales procured from eligible renewable energy resources in any year would not be required to increase its procurement in the following year."

In 2006, the Legislature enacted Senate Bill 107 (Stats. 2006, ch. 464), which modified the Renewables Portfolio Standard to require that at least 20 percent of electricity retail sales be



served by renewable energy resources by year 2010. (Pub. Utility Code, Section 399.11, subd (a) [subsequently amended].)

Senate Bill X1-2 (Stats. 2011, 1st Ex. Sess., ch. 1) set even more aggressive statutory targets for renewable electricity, culminating in the requirement that 33 percent of the State’s electricity come from renewables by 2020. This legislation applies to all electricity retailers in the State, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must meet renewable energy goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020. (See Pub. Utility Code, Section 399.11 et seq. [subsequently amended].)

SB 350, discussed above, increases the Renewable Portfolio Standard to require 50 percent of electricity generated to be from renewables by 2030. (Pub. Utility Code, Section 399.11, subd (a); see also Section 399.30, subd. (c)(2).) Of equal significance, Senate Bill 350 also embodies a policy encouraging a substantial increase in the use of electric vehicles. As noted earlier, Section 740.12(b) of the Public Utilities Code now states that the PUC, in consultation with CARB and the CEC, must “direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, ... and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050.”

Executive Order, B-16-12, issued in 2012, embodied a similar vision of a future in which zero-emission vehicles (ZEV) will play a big part in helping the State meet its GHG reduction targets. Executive Order B-16-12 directed State government to accelerate the market for in California through fleet replacement and electric vehicle infrastructure. The Executive Order set the following targets:

- By 2015, all major cities in California will have adequate infrastructure and be “ZEV ready”;
- By 2020, the State will have established adequate infrastructure to support 1 million ZEVs in California;
- By 2025, there will be 1.5 million ZEVs on the road in California; and
- By 2050, virtually all personal transportation in the State will be based on ZEVs, and GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels.

In 2018, Senate Bill 100 (Stats. 2018, ch. 312) revised the above-described deadlines and targets so that the State will have to achieve a 50 percent renewable resources target by December 31, 2026 (instead of by 2030) and achieve a 60 percent target by December 31, 2030. The legislation also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045.



In summary, California has set a statutory goal of requiring that, by 2030, 60 percent of the electricity generated in California should be from renewable sources, with increased generation capacity sufficient to allow the mass conversion of the statewide vehicle fleet from petroleum-fueled vehicles to electrical vehicles and/or other ZEVs. By 2045, all electricity must come from renewable resources and other carbon-free resources. Former Governor Brown had an even more ambitious goal for the State of achieving carbon neutrality as soon as possible and by no later than 2045. This goal was reaffirmed in the Final 2022 Scoping Plan, which lays out a path to achieve State targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045. The Legislature is thus looking to California drivers to buy electric cars, powered by green energy, to help the State meet its aggressive statutory goal, created by SB 32, of reducing statewide GHG emissions by 2030 to 40 percent below 1990 levels. Another key prong to this strategy is to make petroleum-based fuels less carbon-intensive. A number of statutes in recent years have addressed that strategy.

[Senate Bill 1078 \(2002\), Senate Bill 107 \(2006\), Executive Order S-14-08 \(2008\), Senate Bill 350 \(2015\), and Senate Bill 100 \(2018\), Assembly Bill 1279 \(2022\), Senate Bill 1020 \(2022\)](#)

SB 1078 established the Renewable Portfolio Standard (RPS) program, which required retail sellers of electricity to provide at least 20 percent of their supply from renewable sources by 2017. This goal has subsequently been accelerated several times. SB 107 changed the target date to 2010 and Executive Order S-14-08 expanded the State's RPS to 33 percent renewable power by 2020. SB 350 expanded the RPS by requiring retail seller and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030, with interim goals of 40 percent by 2024 and 45 percent by 2027. SB 100 accelerated and expanded the standards set forth in SB 350 by updating the RPS program to 50 percent eligible renewable energy resources by 2025 and 60 percent by 2030. In addition, SB 100 sets a 100 percent clean, zero carbon, and renewable energy policy for California's electricity system by 2045. Additionally, AB 1279, the California Climate Crisis Act, declares the policy of the state both to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and achieve and maintain net negative greenhouse gas emissions thereafter, and to ensure that by 2045, statewide anthropogenic greenhouse gas emissions are reduced to at least 85 percent below the 1990 levels. Lastly, SB 1020 revised state policy to require that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035.

[2006 Appliance Efficiency Regulations](#)

The California Energy Commission adopted Appliance Efficiency Regulations (Title 20, CCR §§1601 through 1608) on October 11, 2006. The regulations were approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both



federally regulated appliances and non-federally regulated appliances. While these regulations are now often viewed as “business-as-usual,” they exceed the standards imposed by all other states and they reduce greenhouse gas (GHG) emissions by reducing energy demand.

LOCAL

[City of Gardena General Plan](#)

The City of Gardena General Plan Community Resources Element, Conservation Plan and Community Safety Element, Public Safety Plan contain the following goals and policies potentially relevant to the proposed Project:

[Community Resources Element, Conservation Plan](#)

CN Goal 4: Conserve energy resources through the use of technology and conservation methods.

Policy CN 4.1: Encourage innovative building designs that conserve and minimize energy consumption.

Policy CN 4.2: Require compliance with Title 24 regulations to conserve energy.

Policy CN 4.3: Encourage the residential and business community to install energy saving features and appliances in existing structures.

[Community Safety Element, Public Safety Plan](#)

PS Goal 6: A resilient, sustainable, and equitable community where risks to life, property, the economy, and the environment resulting from climate change, including extreme weather events, are minimized.

Policy PS 6.6: Energy Supply. Promote plans and programs that increase sustainable energy sources.

[City of Gardena Climate Action Plan 2017](#)

The City of Gardena, in cooperation with the South Bay Cities Council of Governments, has developed a Climate Action Plan (CAP) to reduce Greenhouse Gas (GHG) emissions within the City. The CAP 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. Chapter 8 of the CAP focuses on Energy Efficiency and provides goals and policies to become a more energy efficient city and reduce the City’s GHG emissions.

[City of Gardena Municipal Code](#)

Gardena Municipal Code Chapter 3.20, *Utility Users’ Tax*, imposes a tax on users of electrical and natural gas services within the City. Included in Chapter 3.20 are Section 3.20.030, *Communication Users’ Tax*; Section 3.20.040, *Electricity Users’ Tax*; Section 3.20.050, *Gas Users’ Tax*; and Section 3.20.060, *Collection of tax from service users receiving direct purchase of gas or electricity*.



Chapter 15.06, *Expedited Permit Process for Small Residential Rooftop Solar Systems*, adopts an expedited, streamlined solar permitting process that complies with the Solar Rights Act and AB 2188 (Chapter 521, Statutes 2014) to achieve timely and cost-effective installations of small residential rooftop solar energy systems. This chapter encourages the use of solar systems by removing unreasonable barriers, minimizing costs to property owners and the city, and expanding the ability of property owners to install solar energy systems.

5.5.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to energy. A project would result in a significant impact related to energy if it would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation (refer to Impact Statement 5.5-1); and/or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency (refer to Impact Statement 5.5-2).

Based on these standards and significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a "significant unavoidable impact."

5.5.5 IMPACTS AND MITIGATION MEASURES

Impact 5.5-1: Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis: The means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed Project would be considered "wasteful, inefficient, and unnecessary" if it were to violate State and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with an applicable plan, policy, or regulation.

The City is proposing to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. Overall, the proposed Project would provide new residential development opportunities to support the vision for development



consistent with the General Plan and the State’s Housing Element Law, including accommodating the City’s RHNA. This is primarily accommodated through the implementation of Housing Overlays on sites currently identified for non-residential development.

Although site-specific development is not currently proposed, for purposes of this analysis development of the net new development (i.e. development over existing conditions) is considered as part of the proposed Project. The amount of energy used by the Project would directly correlate to the size of the structures, the energy consumption of appliances, outdoor lighting, fuel used by vehicle trips generated during Project construction and operation, and fuel used by off-road construction vehicles during construction.

The following discussion provides calculated levels of energy use expected for the anticipated Project uses, based on commonly used modelling software (i.e., CalEEMod v.2022.1 and the California Air Resource Board’s EMFAC2021). It should be noted that many of the assumptions provided by CalEEMod are conservative relative to the Project; thus, this discussion provides a conservative estimate of proposed Project energy usage.

Electricity and Natural Gas

Electricity and natural gas used by the Project would be used primarily to power on-site buildings. Total annual natural gas (kBTU) and electricity (kWh) usage associated with the operation of the Project are shown in Table 5.5-1, Project Operational Natural Gas and Electricity Usage (Mitigated Scenario).

**Table 5.5-1
Project Operational Natural Gas and Electricity Usage (Mitigated Scenario)**

Emissions	Project Annual Consumption	Los Angeles County Annual Consumption	Percent Increase
Natural Gas Consumption (therms)	3155,459	2,921,000,000	0.1080%
Electricity Consumption (MWh/year)	60,286	68,486,000	0.0880%
Sources: CalEEMod version 2022.1; California Energy Commission, Electricity Consumption by County; Natural Gas Consumption by County.			

CalEEMod uses the California Commercial End Use Survey (CEUS) database to develop energy intensity value for non-residential buildings. As shown in Table 5.5-1, Project operational natural gas usage would be a 0.108 percent increase above the county’s typical annual electricity consumption, and an approximate 0.088 percent increase above the county’s typical natural gas consumption. These increases are minimal in the context of the county as a whole.



On-Road Vehicles (Operation)

The Project would generate vehicle trips during the operational phase. In order to calculate operational on-road vehicle energy usage and emissions, default trip lengths generated by CalEEMod (version 2022.1) were used, which are based on the Project location and urbanization level parameters selected within CalEEMod; refer to Appendix E. Based on fleet mix data provided by CalEEMod and Year 2040 gasoline miles per gallon (MPG) factors for individual vehicle classes as provided by EMFAC2021, a weighted MPG factor for operational on-road vehicles of approximately 30.3 MPG for gasoline vehicles were derived. Therefore, the Project would generate vehicle trips that would use approximately 23,345 gallons of gasoline per day or 8,520,910 gallons of gasoline per year; refer to Appendix E.

On-Road Vehicles (Construction)

The Project would also generate on-road vehicle trips during Project construction (from construction workers and vendors). Estimates of vehicle fuel consumed were derived based on the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by CalEEMod, and Year 2024 gasoline and diesel MPG factors provided by EMFAC2021. Table 5.5-2, On-Road Mobile Fuel Generated by Project Construction Activities – By Phase, describes gasoline and diesel fuel used by on-road mobile sources during each phase of the construction schedule. As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the Project would occur during the building construction phase.

**Table 5.5-2
On-Road Mobile Fuel Generated by Project Construction Activities – By Phase**

Construction Phase	# of Days	Total Daily Worker Trips ⁽¹⁾	Total Daily Vendor Trips ⁽¹⁾	Total Hauler Trips ⁽¹⁾	Gallons of Gasoline Fuel ⁽²⁾	Gallons of Diesel Fuel ⁽²⁾
Demolition	4,436	15	0	6	46,454	81,870
Site Preparation	4,436	18	0	0	54,196	0
Grading	4,436	20	0	0	61,939	0
Building Construction	4,436	9,452	1,403	0	29,272,246	10,134,988
Paving	4,436	15	0	0	46,454	0
Architectural Coating	4,436	1,890	0	0	5,853,210	0
Total					35,334,499	10,216,858
Sources: CalEEMod Version 2022.1; EMFAC2021.						
Notes:						
1. Provided by CalEEMod.						
2. Refer to Appendix E for further detail.						



Off-Road Vehicles (Construction)

Off-road construction vehicles would use diesel fuel during the construction phase of development. Off-road construction vehicles expected to be used during the construction phase include, but are not limited to, cranes, forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO₂ emissions expected to be generated by the proposed Project (as provided by the CalEEMod output), and a CO₂ to diesel fuel conversion factor (provided by the U.S. Energy Information Administration), the Project would use up to approximately 539,806 gallons of diesel fuel for off-road construction vehicles during the demolition, site preparation, grading, building construction, paving, and architectural coating phases; refer to Appendix E for detailed calculations.

Conclusion

Project implementation would use energy resources for the operation of new residential buildings (e.g., electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel fuel) generated by the Project (both during project construction and operation), and from off-road construction activities (e.g., diesel fuel). Each of these activities would require the use of energy resources. Future development projects associated with implementation of the Project would be required to conserve energy, to the extent feasible, and would be required to comply with Statewide and local measures regarding energy conservation, such as Title 24 building efficiency standards.

The proposed Project would be in compliance with all applicable federal, State, and local regulations regulating energy usage. For example, Southern California Edison (SCE) is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g., solar and wind) within its energy portfolio. SCE has achieved at least a 33 percent mix of renewable energy resources, and will be required to achieve a renewable mix of at least 60 percent by 2030. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards (“part 6”), would be applicable to the proposed Project. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g., the Pavley Bill and the Low Carbon Fuel Standard) are improving vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

As a result, the Project would not result in any significant adverse impacts related to Project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage, including construction, operations, maintenance, and/or removal. Both SCE, the electricity provider to the City, and Southern California Gas, the natural gas provider to the City, maintain sufficient capacity to serve development associated with implementation of the Project. Future development associated with the Project would be required to comply with all existing energy efficiency standards in place at the time, and would



not result in significant adverse impacts on energy resources. Therefore, the proposed Project would not result in a wasteful, inefficient, or unnecessary of energy resources during Project construction or operation. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.5-2: Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Impact Analysis: Table 5.5-3, Gardena Climate Action Plan Project Consistency Analysis, provides an analysis of the Project’s consistency with applicable policies in the *City of Gardena Climate Action Plan (CAP)*, 2017. Future development of Project would be required to comply with the most recent version of CALGreen in place at the time, which 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. As indicated in Table 5.5-3, the Project would be consistent with the measures identified in the City’s CAP and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; impacts would be less than significant.



**Table 5.5-3
Gardena Climate Action Plan Project Consistency Analysis**

Gardena Climate Action Plan Measure	Consistency Analysis
Measure LUT: G1 – Increase Density	<u>Consistent.</u> The Project would introduce Very High Density Residential, High Density Overlay 50, and Very High Density Overlay 70 land use designations that would allow for greater residential densities when compared to existing conditions. Additionally, the Project would apply the proposed Housing Overlay designations to numerous sites currently designated for non-residential uses. The implementation of the Housing Overlay designations would provide for new opportunities to develop residential uses at higher densities on sites where residential development was not previously allowed. Future development of residential uses consistent with the proposed Project would occur as infill development and/or redevelopment of underutilized sites.
Measure EE: B1 – Encourage or Require Energy Efficiency Standards Exceeding Title 24	<u>Consistent.</u> Future development project associated with Project implementation would be required to comply with the 2022 (or more current) version of the Title 24 CALGreen standards, which provide higher energy efficiency requirements as compared to the earlier versions of Title 24 standards.
Measure EE: E1 – Promote or Require Water Efficiency Through SB X7-7	<u>Consistent.</u> Future development of the Project would be required to comply with the 2022 (or more current) version of the Title 24 CALGreen standards, which include water efficiency standards that provide for greater water efficiency requirements contained in previous versions of the Title 24 standards.
Source: City of Gardena Climate Action Plan, December 2017.	

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less than Significant Impact.



5.5.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the related projects in the City determined as having the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to energy may occur. The cumulative projects' setting for energy would be similar for the region and for projects within the City.

Would the project, combined with other related cumulative projects, result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Impact Analysis: As described above, the Project would not result in any significant adverse impacts related to Project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage, including construction, operations, maintenance, and/or removal. As future development projects are received and reviewed by the City in subsequent years, those projects would be reviewed for consistency with the City's General Plan and Development Code and all relevant State-level programs and requirements. All future projects must implement the most current version of the Title 24 energy efficiency requirements, as required by State law. Consistency with the General Plan and other mandatory State-level programs would ensure that future project-level contributions to inefficient, wasteful or unnecessary energy use would be less than significant. Moreover, as identified above, Project implementation would not be expected to cause an inefficient, wasteful, or unnecessary use of energy resources nor conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As a result, the proposed Project's incremental contribution to cumulative energy impacts would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less than Significant Impact.

Would the project, combined with other related cumulative projects, conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Impact Analysis: As indicated in [Table 5.5-3](#), the Project would be consistent with the measures identified in the City's CAP and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Cumulative projects within the City are required to demonstrate consistency with the City's CAP. Additionally, future development associated with the Project and cumulative projects would be subject to Title 24 and CALGreen standards, as well as Gardena goals and policies, which would ensure that energy is being used efficiently. Thus, the Project and related projects would comply with energy conservation plans and efficiency standards and would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. As a result, the proposed Project's incremental contribution to potential conflicts with or obstruction of a State or local plan for renewable energy or energy efficiency would not be cumulatively considerable.



Mitigation Measures: No mitigation measure is required.

Level of Significance: Less than Significant Impact.

5.5.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with energy would occur with the proposed Project.

5.5.8 REFERENCES

California Energy Commission, *2021 Total System Electric Generation*, <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation>, accessed March 2, 2023a.

California Energy Commission, *Electricity Consumption by Planning Area*, <http://www.ecdms.energy.ca.gov/elecbyplan.aspx>, accessed March 2, 2023b.

California Energy Commission, *2020 Total Electricity System Power*, <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation/2020>, accessed March 2, 2023c.

California Energy Commission, *Electricity Consumption by County*, <https://ecdms.energy.ca.gov/elecbycounty.aspx>, accessed March 2, 2023d.

South Bay Cities Council of Governments, *Climate Action Plan: City of Gardena*, 2017.

U.S. Energy Information Administration, *California State Profile and Energy Estimates*, <https://www.eia.gov/state/?sid=CA#tabs-1>, accessed March 2, 2023a.

U.S. Energy Information Administration, *State Energy Data System: 1960-2020*, June 24, 2022.

U.S. Energy Information Administration, *Monthly Energy Review*, <https://www.eia.gov/totalenergy/data/monthly/>, accessed March 2, 2023b.

U.S. Energy Information Administration, *California State Profile and Energy Estimates: Table F16: Total Petroleum Consumption Estimates, 2020*, <https://www.eia.gov/state/data.php?sid=CA#ConsumptionExpenditures>, accessed March 2, 2023c.



5.6 GEOLOGY AND SOILS

5.6.1 PURPOSE

The purpose of this section is to describe the existing conditions and regulatory environment related to geology and soils and identify potential impacts that could result from Project implementation. This section is based in part on the Gardena General Plan, General Plan FEIR, and California Geological Survey, as well as the *Cultural and Paleontological Resource Assessment for the City of Gardena Land Use Plan & Zoning Amendment Project* prepared by Cogstone, May 2023 and included as Appendix F, Cultural and Paleontological Resources Assessment.

5.6.2 ENVIRONMENTAL SETTING

GEOLOGIC CONDITIONS

The City, which is located in the southwestern portion of the Southern California region, is subject to risks and hazards associated with potentially destructive earthquakes. Faults that could affect the City include the regional San Andreas and San Jacinto faults and the local Newport-Inglewood, Palos Verdes, Whittier-Elsinore, Sierra Madre-Cucamonga, San Fernando and Raymond Hill fault systems. These regional and local fault systems have the potential to generate the highest site acceleration when considering the maximum expected earthquake for each fault. According to the California Geologic Survey (CGS), a division under the California Department of Conservation, an Alquist-Priolo Earthquake Fault Zone, along the Newport-Inglewood Rose Canyon fault zone, is located at the northeast portion of the City (CGS 2023). As depicted in [Figure 5.6-1, *Earthquake Faults and Alquist-Priolo Zones*](#), the fault is classified as Holocene; the Holocene fault classification widely buffers the actual Alquist-Priolo Fault Zone and protrudes into the greater northeastern area of the City, roughly between Normandie Avenue and 139th Street (CGS 2023). No parcels proposed for General Plan land use or zoning changes under the proposed Project are located within the Alquist-Priolo Fault Zone.

Fault classifications are described in greater detail below.

[Regional Geology](#)

The City is located in the Los Angeles Basin which is a northwest-trending alleviated lowland plain bounded by the Transverse Ranges on the north, the Peninsular Ranges on the east, and the Pacific Ocean on the south and west. The Basin is composed of several major structural blocks. The contact between these blocks is the fault zones that traverse Southern California.

Gardena is located in the southwestern block, which is separated from the other by the Newport-Inglewood fault system or zone of deformation. In this block, marine deposition began upon a basement of metamorphic rocks in the middle or upper Miocene era depending on the locality and, with the accelerated subsidence of the basin, continues into upper Pliocene time. The City is located between two active strike-slip faults: the Newport-Inglewood zone and the Palos



Verdes Fault. The topography of the City is relatively flat with a mild downward slope toward the southwest. The US Geological Survey (USGS) indicates that elevations of the City are from 150 feet at the northeast corner of the City to approximately 50 feet above sea level at the southern portion of the City.

FAULTS

Faults are classified as Historic, Holocene, Late Quaternary, Quaternary, and Pre-Quaternary according to the age of most recent movement (CGS 2002). These classifications are described as follows:

- **Historic:** faults on which surface displacement has occurred within the past 200 years;
- **Holocene:** shows evidence of fault displacement within the past 11,000 years, but without historic record;
- **Late Quaternary:** shows evidence of fault displacement within the past 700,000 years, but may be younger due to a lack of overlying deposits that enable more accurate age estimates;
- **Quaternary:** shows evidence of displacement sometime during the past 1.6 million years; and
- **Pre-Quaternary:** without recognized displacement during the past 1.6 million years.

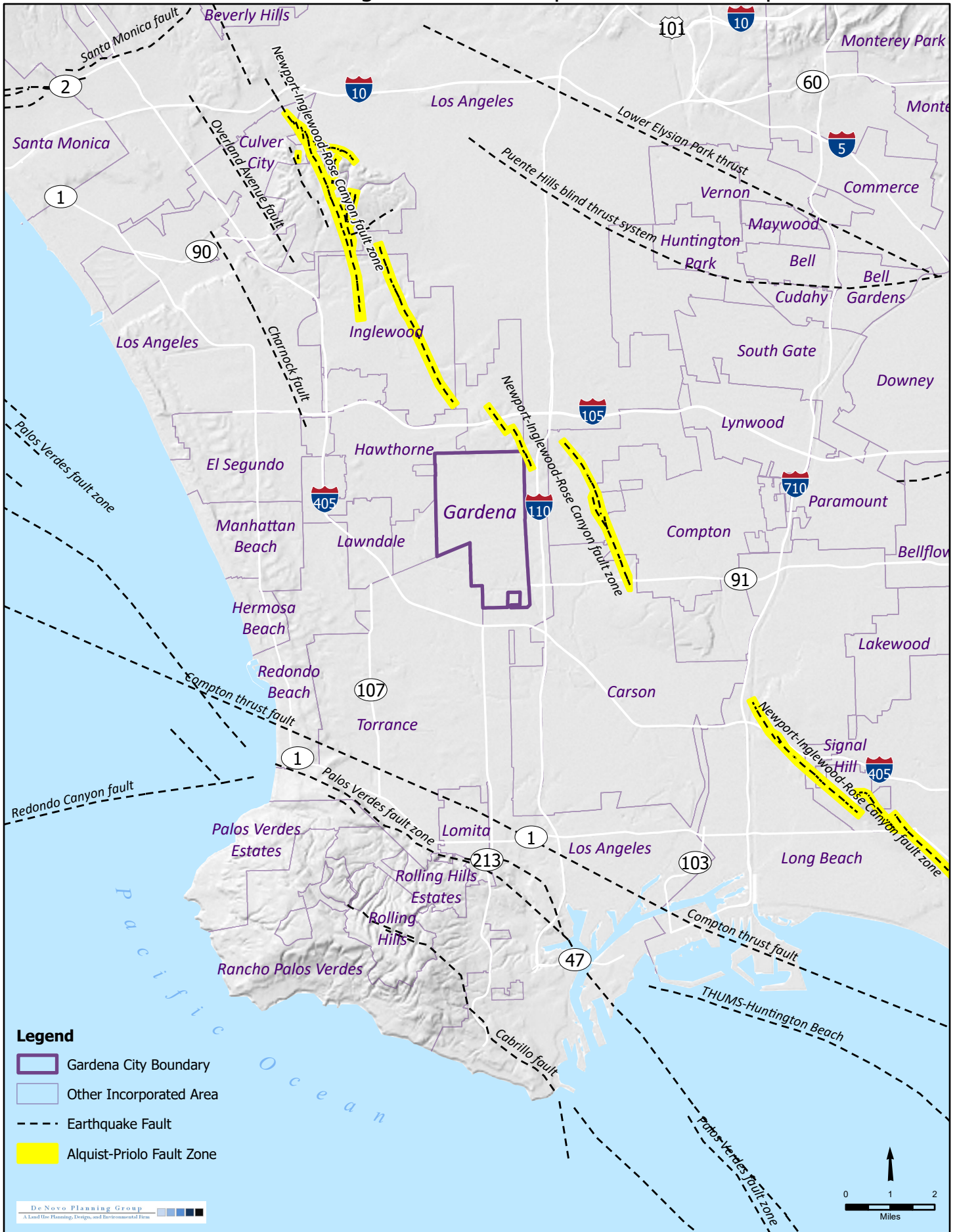
Faults are further distinguished as active, potentially active, or inactive (CGS 2002).

- **Active:** An active fault is a Historic or Holocene fault that has had surface displacement within the last 11,000 years;
- **Potentially Active:** A potentially active fault is a pre-Holocene Quaternary fault that has evidence of surface displacement between about 1.6 million and 11,000 years ago; and
- **Inactive:** An inactive fault is a pre-Quaternary fault that does not have evidence of surface displacement within the past 1.6 million years. The probability of fault rupture is considered low; however, this classification does not mean that inactive faults cannot, or will not, rupture.

Faults that could affect the City include the regional San Andreas and San Jacinto faults and the local Newport-Inglewood, Palos Verdes, Whittier-Elsinore, Sierra Madre-Cucamonga, San Fernando and Raymond Hill fault systems. According to the City of Gardena and City of Hawthorne Hazards Mitigation Plan, the faults that could most seriously impact the City include the San Andreas Fault, Newport-Inglewood Fault, Whittier-Elsinore Fault Zone, and Palos Verdes Fault (RMP 2012)¹.

¹ The City of Gardena is in the process of updating their single-jurisdiction Hazard Mitigation Plan and estimates potential adoption in Spring 2024.

Figure 5.6-1. Earthquake Faults and Alquist-Priolo Zones





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San Andres Fault Zone

Located approximately 50 miles north of the City, the San Andreas Fault Zone is approximately 800 miles long, extending from the Gulf of California north to Cape Mendocino. Abundant evidence of historic earthquakes indicates that the fault is active, including those that have caused extensive surface rupture and displacement of recent sediments. Large earthquakes have occurred along the fault at widely varying intervals, averaging 140 years. A maximum probable earthquake of M8.3 (magnitude of 8.3 on the Richter Scale) has been assigned to the San Andreas fault in Southern California (RMP 2012).

Newport-Inglewood Fault

The Newport-Inglewood Fault is considered the second most active fault in California. It runs from the City of Inglewood through Huntington Beach and out into the Pacific Ocean in the Newport Beach area. This fault is capable of producing earthquakes in the range of M6.3 to M7.5. The M6.5 1933 Long Beach earthquake occurred on the Newport-Inglewood fault causing 120 deaths, the collapsing of unreinforced masonry buildings, and severe damage (RMP 2012).

The Newport-Inglewood Fault is the only fault that comes in contact with the City of Gardena; the fault intersects the very most northeastern corner of Gardena city limits, in the vicinity of El Segundo Boulevard and Vermont Avenue (CGS 2023).

Whittier-Elsinore Fault Zone

The Whittier-Elsinore Fault is located approximately 15 miles northeast of the City along the southern base of the Puente Hills. Earthquakes with surface rupture on the Whittier Fault are estimated to have return intervals for a M6.5 and M7.5 of 100 and 1,200 years, respectively. The Whittier fault joins the Chino Fault near Prado Dam where they merge into the Elsinore Fault. The main trace of the Elsinore Fault has only seen one historical event greater than M5.2, which was the M6.0 Elsinore Earthquake of 1910. At the northern end, the fault splays into several faults, creating the Whittier-Elsinore Fault Zone. A “characteristic” M6.9 on the northwest segment of the Whittier- Elsinore Fault Zone has been estimated to have a return period of 450 years (RMP 2012).

Palos Verdes Fault Zone

The Palos Verdes Fault Zone is located approximately five miles southwest of Gardena along the northern front of the Palos Verdes Hills. This fault is located off the coast of Redondo Beach and Torrance and continues southward through the Palos Verdes Peninsula and offshore, outside the San Pedro Bay. The Palos Verdes Hills Fault is capable of a M6.0-7.0 earthquake. The issue of concern is the fault causing shaking and liquefaction within the City of Gardena (RMP 2012).

SESIMIC HAZARDS

Seismic hazards include both rupture (surface and subsurface) along active faults and ground shaking, which can occur over wider areas. Ground shaking, produced by various tectonic



phenomena, is the principal source of seismic hazards in areas devoid of active faults. All areas of the state are subject to some level of seismic ground shaking.

The Uniform California Earthquake Rupture Forecast, Version 3, or UCERF3, is the latest official earthquake rupture forecast (ERF) for the State of California. It provides estimates of the likelihood and severity of potentially damaging earthquake ruptures in the long- and near-term. Combining this with ground motion models produces estimates of the severity of ground shaking that can be expected during a given period (seismic hazard), and of the threat to the built environment (seismic risk). This information is used to inform engineering design and building codes, planning for disaster, and evaluating whether earthquake insurance premiums are sufficient for the prospective losses.

UCERF3 was prepared by the Working Group on California Earthquake Probabilities (WGCEP), a collaboration between the United States Geological Survey (USGS), the CGS, and the Southern California Earthquake Center (SCEC), with funding from the California Earthquake Authority (CEA). The UCERF3 Model represents the latest model from the WGCEP. Results for the Los Angeles region faults, which includes the Project Area, based on the UCERF3 are shown in Table 5.6-1, Likelihood of One or More Earthquakes by Size in the Next 30 Years (Starting from 2014).

**Table 5.6-1
Likelihood of One or More Earthquakes by Size in the Next 30 Years (Starting from 2014)**

Magnitude (greater than or equal to)	Average repeat time (years)	30-year likelihood of one or more events	Readiness
5	1.4	100%	1.0
6	10	96%	1.0
6.7	40	60%	1.1
7	61	46%	1.2
7.5	109	31%	1.3
8	532	7%	1.3

Source: USGS (United States Geological Survey), UCERF3: A New Earthquake Forecast for California's Complex Fault System, March 2015, <https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf>.

The USGS Earthquake Probabilities predicts the probabilities of earthquakes within greater California, the Southern California/Los Angeles Region, and the Northern California/San Francisco Region. The USGS Earthquake Probabilities predicts the probability that an earthquake will occur in the Los Angeles region within the next 30 years is:

60 percent that an earthquake measuring magnitude 6.7 will occur;

46 percent that an earthquake measuring magnitude 7 will occur; and



31 percent that an earthquake measuring magnitude 7.5 will occur.

SURFACE FAULT RUPTURE

An active earthquake fault, per California's Alquist-Priolo Act, is one that has ruptured within the Holocene Epoch ($\approx 11,000$ years). Based on this criterion, the CGS identifies Earthquake Fault Zones. These Earthquake Fault Zones are identified in Special Publication 42 (SP42), which is updated as new fault data become available. SP42 lists all counties and cities within California that are affected by designated Earthquake Fault Zones. The Fault Zones are delineated on maps within SP42 (Earthquake Fault Zone Maps).

Southern California is a region of high seismic activity. Similar to most cities in the region, Gardena is subject to risks associated with potentially destructive earthquakes. As discussed in the General Plan Community Development Element, Public Safety Plan, an Alquist-Priolo Earthquake Fault Zone is located at the northeast portion of the City in the vicinity of El Segundo Boulevard and Vermont Avenue. This is a known active fault zone delineated by the State Geologist and is considered part of the Newport- Inglewood fault system. The potential impacts related to fault rupture within the City are significant, as this fault is active.

LIQUEFACTION

Liquefaction is caused by a shock or strain from an earthquake and involves the sudden loss of soil strength and cohesion and the temporary transformation of soil into a fluid mass.

The area located along Artesia Boulevard and the Dominguez Flood Control Channel in the southern portion of the City is located within a liquefaction zone identified in the Seismic Hazard Zones Map prepared by the CGS (CGS 2023). A liquefaction zone is defined as an area where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 26931 would be required. Therefore, older structures within the liquefaction areas of the City that were not constructed or reinforced to meet earthquake standards are vulnerable to structural damage. Figure 5.6-2, Liquefaction Zones, illustrates the areas subject to potential liquefaction and seismic activity within the City, and shows that parcels that are part of the proposed Project along Artesia Boulevard are located within liquefaction zones.



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OTHER GEOLOGIC HAZARDS

Soils

Soil is generally defined as the unconsolidated mixture of mineral grains and organic material that mantles the land surface. Soils can develop on unconsolidated sediments and weathered bedrock. The characteristics of soil reflect the five major influences on their development: topography, climate, biological activity, parent (source) material, and time. Gardena city boundaries are split under two CGS quadrangles: the northern portion of the Torrance Quadrangle and the southern area of the Inglewood Quadrangle.

Late Pleistocene older alluvial and eolian deposits comprise most of the northern and eastern Torrance Quadrangle, which is roughly the southern portion of Gardena (CGS 1998b). The surface of the region typically consists of older alluvial deposits with, locally, a veneer of older, largely stabilized dune sands. Groundwater is considered deep throughout this area. The deposits are generally described as dense to very dense sands and silty sands; late Pleistocene marine terrace deposits, generally consisting of silty sand with local gravels are found throughout the Palos Verdes Peninsula (CGS 1998b).

The old Quaternary sedimentary deposits of the Inglewood Quadrangle are described as being medium dense to very dense sand, silt, and clay; within the western and southwestern portion of the Quadrangle some loose dune sand does occur (CGS 1998a). Further, Quaternary sediments found in the Inglewood Quadrangle include older eolian deposits (Qoe), which form a portion of the El Segundo Sand Hills that extends into the southwestern corner of the Quadrangle; older alluvium (Qoa) deposited around the margin of the Baldwin Hills and on the elevated plain and Rosecrans Hills to the south; and younger floodplain and stream deposits (Qya2) in the northeastern and south-central portion of the Inglewood Quadrangle (CGS 1998a).

Erosion

The U.S. Natural Resource Conservation Service (NRCS) delineates soil units and compiles soils data as part of the National Cooperative Soil Survey. The following description of erosion factors is provided by the NRCS Physical Properties Descriptions:

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. Erosion factor Kw indicates the erodibility of the whole soil, whereas Kf indicates the erodibility of the fine soils. The estimates are modified by the presence of rock fragments.

Soil erosion data for the Project Area was obtained from the NRCS. As identified by the NRCS web soil survey, the erosion factor K within the Project Area ranges from 0.24 to 0.43, which is considered moderate potential for erosion.



Expansive Soils

The NRCS delineates soil units and compiles soils data as part of the National Cooperative Soil Survey. The NRCS provides a description of linear extensibility (also known as shrink-swell potential or expansive potential). The shrink-swell potential is low if the soil has a linear extensibility of less than three percent; moderate if three to six percent; high if six to nine percent; and very high if more than nine percent. If the linear extensibility is more than three, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots; special design is commonly needed.

The linear extensibility of the soils within the Project Area and surrounding area ranges between low to very high. The Project Area and surrounding area contain soils classified as “urban lands” soils. One such soil type being Typic haploxerolls soil was found in the Project Area and has a linear extensibility that ranges between 0.7 percent and 1.2 percent, which is considered low. The Project Area and surrounding area also contains Centinela soil, which has a linear extensibility ranging from 1.0 percent to 10.1 percent, which is considered to be very high (NRCS 2023).

Landslides

Landslides are the result of the down-slope movement of unstable hillside materials under the influence of weathering and gravity over time. Strength of rock and soil, steepness of slope, and weight of the hillside material all play an important role in the stability of hillside areas. Weathering and absorption of water can weaken slopes, while the added weight of saturated materials or overlying construction can increase the chances of slope failure. Sudden landslides and debris flows can be triggered by heavy rainfall, excavation of weak slopes, and earthquake shaking, among other factors. Due to the predominant generally flat topography within the City and surrounding area, the Project Area has a low susceptibility to landslides.

Earthquake-Induced Landslide Zones are areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required. There are no earthquake-induced landslide seismic hazard zones mapped within the Project Area (CGS 2023).

Subsidence

Land subsidence is a gradual settling or sudden sinking of the Earth's surface due to removal or displacement of subsurface earth materials (USGS 2019). Common causes of land subsidence include: aquifer-system compaction associated with groundwater withdrawals; drainage of organic soils; underground mining; and natural compaction or collapse. Subsidence takes place gradually, usually over a period of several years. Soils with high shrink-swell (linear extensibility) potential can be particularly susceptible to subsidence during a loss of soil moisture. As discussed, the Project Area is underlain by older alluvium deposits, comprised of dense to very dense silts and sands. Groundwater of the Torrance Quadrangle region (including the Project Area) is



considered deep throughout the area (CGS 1998b). As discussed above, the linear extensibility of the soils within the Project Area and surrounding area ranges between low to very high (NRCS 2023). This indicates that the potential for land subsidence to occur within the Project Area ranges from low to moderate.

As discussed in Section 5.16, Utilities, the City of Gardena is served by the Golden State Water Company (GSWC) Southwest System (GSWC, 2021). According to the GSWC Southwest 2020 Urban Water Management Plan (2020 UWMP), the Southwest area receives potable water from local groundwater and imported water purchased from the Metropolitan Water District of Southern California (MWD). Groundwater is pumped from GSWC's 13 active wells, which pump local groundwater from the Central subbasin and West Coast subbasin of the Coastal Plain of Los Angeles Groundwater Basin.² Both the Central Basin and West Coast Basins are adjudicated. GSWC Southwest uses adjudicated groundwater supplies from both basins for use in its service area. Both the Central Basin and West Coast Basin groundwater systems have been thoroughly analyzed and both are meticulously monitored through each adjudication's requirements (GSWC, 2021). Management of the Central Basin and West Coast Basin reduces the likelihood of largescale extraction of groundwater that could cause subsidence (Tulley & Young 2021).

Collapsible Soils

Hydroconsolidation occurs when soil layers collapse, or settle, as water is added under loads. Natural deposits susceptible to hydroconsolidation are typically aeolian, alluvial, or colluvial materials, that have a high apparent strength when dry. The dry strength of the materials may be attributed to the clay and silt constituents in the soil and the presence of cementing agents (i.e., salts). Capillary tension may tend to bond soil grains. Once these soils are subjected to excessive moisture and foundation loads, the constituency including soluble salts or bonding agents is weakened or dissolved, capillary tensions are reduced and collapse occurs resulting in settlement. Existing alluvium within the Project Area may be susceptible to collapse and excessive settlements, which could create the risk of hydroconsolidation if these soils were exposed to excessive moisture.

PALEONTOLOGICAL RESOURCES

The Project Area is mapped primarily as middle to late Pleistocene old alluvium, with late Pleistocene to Holocene young alluvial fan deposits and young alluvium mapped at the surface in some areas.

A paleontological record search of the Project Area was obtained from the Natural History Museum of Los Angeles County. Additional records from the University of California Museum of Paleontology database, the PaleoBiology Database, and print sources were also searched for fossil records.

² According to the 2020 UWMP, the terms "Subbasin" and "Basin" are used interchangeably throughout the discussion of the Central Subbasin water supplies.



No recorded paleontological localities producing vertebrate fossils were found within one mile of the Project Area. A total of 13 localities are known from Pleistocene deposits between one and seven miles from the Project Area. Extinct megafauna from these sites include mammoth (*†Mammuthus* sp.), horse (*†Equus* sp.), pronghorn (*†Breameryx* sp.), camel (*†Camelidae*), and bison (*†Bison* sp.; Table 4). All of the fossils were a minimum of 5 feet deep in deposits mapped as late Pleistocene at the surface, while sediments mapped as Holocene at the surface yielded fossils starting at 24 feet deep.

5.6.3 REGULATORY SETTING

FEDERAL

[Earthquake Hazards Reduction Act](#)

The Earthquake Hazards Reduction Act of 1977 established the National Earthquake Hazards Reduction Program (NEHRP). Under the NEHRP, four federal agencies have responsibility for long-term earthquake risk reduction: the U.S. Geological Survey (USGS), the National Science Foundation (NSF), the Federal Emergency Management Agency (FEMA), and the National Institute of Standards and Technology (NIST). NEHRP's mission includes improved understanding, characterization, and prediction of hazards and vulnerability; improvements of building codes and land use practices; risk reduction through post- earthquake investigation and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results.

STATE

[Earthquake Fault Zoning Act \(Alquist-Priolo Act\)](#)

The State of California Alquist-Priolo Earthquake Fault Zoning Act (1972) was established to mitigate the hazard of surface faulting to structures for human occupancy. Pursuant to the act, the State geologist has established regulatory zones (known as earthquake fault zones) around surface traces of active faults. These have been mapped for affected cities, including the City of Gardena. Application for a development permit for any project within a delineated earthquake fault zone shall be accompanied by a geologic report, prepared by a geologist registered in the State of California, that is directed to the problem of potential surface fault displacement through a project site.

[Seismic Hazards Mapping Act](#)

The Seismic Hazard Mapping Act (SHMA) was adopted by the State in 1990 to protect the public from the effects of non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, ground amplification or other ground failure caused by earthquakes. The goal of the act is to minimize loss of life and property by identifying and mitigating seismic hazards. The California Geological Survey (CGS) is the primary agency responsible for the implementation of the SHMA. The CGS prepares maps identifying seismic hazard zones and provides them to local governments, which include areas susceptible to



amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. SHMA requires responsible agencies to only approve projects within these zones following a site-specific investigation to determine if the hazard is present, and if so, the inclusion of appropriate mitigation(s). In addition, the SHMA requires real estate sellers and agents at the time of sale to disclose whether a property is within one of the designated seismic hazard zones.

[California Building Standards Code, Title 24](#)

Title 24 of the California Code of Regulations (CCR) provides state regulations that govern the design and construction of buildings, associated facilities, and equipment. These regulations are also known as building standards (reference California Health and Safety Code § 18909). Cities and counties are required by state law to enforce CCR Title 24, and may adopt ordinances making more restrictive requirements than provided by CCR Title 24 due to local climatic, geological, or topographical conditions.

LOCAL

[City of Gardena General Plan](#)

The City of Gardena General Plan Community Safety Element, Public Safety Plan contains the following goals and policies potentially relevant to the proposed Project:

[Community Safety Element, Public Safety Plan](#)

PS Goal 3: Protect the community from dangers associated with geologic instability, seismic hazards and other natural hazards.

Policy PS 3.1: California Building Code. Require compliance with seismic safety standards in the California Building Code, as adopted and amended.

Policy PS 3.2: Geotechnical Studies. Require geotechnical studies for all new development projects in the City, including those located in an Alquist-Priolo Earthquake Fault Zone or areas subject to liquefaction.

[City of Gardena Municipal Code](#)

The Gardena Municipal Code includes Chapter 8.70, *Stormwater and Runoff Pollution*. The purpose of Chapter 8.70 is to protect the public health, welfare and safety and to reduce the quantity of pollutants being discharged to the waters of the United States. The Chapter focuses on eliminating non-stormwater discharges to the municipal stormwater system and the discharge of pollutants into the municipal storm drain system; reducing pollutants in stormwater discharges to the maximum extent practicable; and protecting and enhancing the overall quality of water in the US. Section 8.70.110 of the Gardena Municipal Code, *Pollutant source reduction*, allows for the City to require erosion control plans to address the potential discharge of construction-related pollutants.

Title 15, *Buildings and Construction*, regulates development activities within the City. Title 15 incorporates Chapter 15.04, *General Building Provisions*. Chapter 15.04 includes the adoption of



the California Building Standards Code, as well as several of the Code's amendments. The California Building Standards Code includes discussions on earthquake hazards reduction methods. The Building Code regulates construction and property use to ensure safe, healthy, and accessible structures for human occupancy.

Title 18, *Zoning*, Chapter 18.42, *General Provisions*, establishes general provisions and development standards for residential, mixed use and overlay zones. Section 18.42.200 (A), requires an applicant to submit a final geotechnical investigation for City review and approval to comply with its recommendations and any revisions deemed necessary by the City's Building Official.

Section 18.42.210 (A) requires the applicant be required to comply with all applicable mitigation measures set forth in a mitigation monitoring program for the City's General Plan or any element thereof as posted on the City's website.

Section 18.42.210 (C) addresses paleontological resources:

1. Prior to commencement of ground-disturbing activities a qualified vertebrate paleontologist (as defined by the Society for Vertebrate Paleontology) shall develop worker environmental awareness program (WEAP) training for construction personnel. This training shall be presented to construction personnel and include what fossil remains may be found within the project area and policies and procedures that must be followed in case of a discovery. Verification of the WEAP training shall be provided to the Gardena community development department.
2. If fossils or fossil-bearing deposits are encountered during ground-disturbing activities, work within a twenty-five-foot radius of the find shall halt and a professional vertebrate paleontologist (as defined by the Society for Vertebrate Paleontology) shall be contacted immediately to evaluate the find. The paleontologist shall have the authority to stop or divert construction, as necessary. Documentation and treatment of the discovery shall occur in accordance with Society of Vertebrate Paleontology standards. The significance of the find shall be evaluated pursuant to the state CEQA guidelines. If the discovery proves to be significant, before construction activities resume at the location of the find, additional work such as data recovery excavation may be warranted, as deemed necessary by the paleontologist.

5.6.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to geology and soils. Accordingly, a project may create a significant environmental impact if it would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:



- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42 (refer to Impact Statement 5.6-1);
- Strong seismic ground shaking (refer to Impact Statement 5.6-2);
- Seismic-related ground failure, including liquefaction (refer to Impact Statement 5.6-2); and
- Landslides (refer to Section 8.0, Effects Found Not To Be Significant).
- Result in substantial soil erosion or the loss of topsoil (refer to Impact Statement 5.6-3);
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse (refer to Impact Statement 5.6-4);
- 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 (refer to Impact Statement 5.6-4);
- 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 (refer to Section 8.0, Effects Found Not To Be Significant); or
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (refer to Impact Statement 5.6-5).

Based on these standards and significance thresholds and criteria, the Project’s effects have been categorized as either “no impact,” a “less than significant impact,” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a “significant unavoidable impact.”

5.6.5 IMPACTS AND MITIGATION MEASURES

Impact 5.6-1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Impact Analysis: The Project Area, like the rest of Southern California, is situated within a seismically active region as the result of being located near the active margin between the North American and Pacific tectonic plates. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Act’s main purpose is to prevent the construction of buildings used for human occupancy on the



surface trace of active faults. The Act requires the State Geologist to establish regulatory zones, known as “Alquist-Priolo Earthquake Fault Zones,” around the surface traces of active faults and to issue appropriate maps. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet). As discussed in Section 5.6.2, Environmental Setting, an Alquist-Priolo Earthquake Fault Zone is located at the northeast portion of the City in the vicinity of El Segundo Boulevard and Vermont Avenue. This is a known active fault zone delineated by the State Geologist and is considered part of the Newport-Inglewood fault system. Application for a development permit for any project within a delineated earthquake fault zone is required to be accompanied by a geologic report, prepared by a geologist registered in the State of California, that is directed to the problem of potential surface fault displacement through a project site.

The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. However, none of the parcels proposed for changes to their existing General Plan land use designations or zoning are located within an Alquist-Priolo Earthquake Fault Zone. Therefore, the proposed Project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as the Project would not provide for new residential development or increased residential densities within the delineated fault zone and impacts would be less than significant.

It is noted that the General Plan and General Plan EIR include General Plan Community Safety Element, Public Safety Plan Policy PS 2.4 and Mitigation Measure GEO-1, respectively, requiring that any development proposed within an Alquist-Priolo Fault Zone would be required to prepare site-specific geotechnical studies before any construction can occur. The mitigation measure (adopted in the Mitigation Monitoring and Reporting Program), requires development projects, including those located within an Alquist-Priolo Fault Zone, to prepare a geotechnical investigation that evaluates soils, groundwater, geological and seismic conditions, and requires construction to be in compliance with the findings and recommendations of the required investigations, and is now a standard requirement by the City. Additionally, Gardena Municipal Code Section 18.42.200 (A) requires an applicant submit a final geotechnical investigation for City review and approval and comply with its recommendations and any revisions deemed necessary by the City’s Building Official.

If an active fault is found on a property, structures generally would not be allowed to be constructed within 50 feet of the fault trace. Pursuant to Gardena Municipal Code Chapter 15.04, *General Building Provisions*, the City has adopted the California Building Standards Code (CBSC), subject to certain amendments and changes, including amendments specific to seismic conditions. Future development would be required to comply with all applicable regulations in the most recent CBSC as amended by the Gardena Municipal Code, which includes design requirements to mitigate the effects of potential hazards associated with seismic activity. The Gardena Building Services Division would review construction plans for compliance with the CBSC



and Gardena Municipal Code, as well as the site-specific geotechnical study's recommendations. Thus, compliance with the City's established regulatory framework and standard engineering practices and design criteria, which would be verified through the City's construction plan review process, would ensure potential impacts associated with potential rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map would be reduced to a less than significant impact.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.6-2: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

Strong seismic ground shaking or seismic-related ground failure, including liquefaction?

Impact Analysis: The City of Gardena is located in a seismically active area that has historically been affected by moderate to occasionally high levels of motion. As a result, during the life of any potential site development, it is likely the site would experience moderate to occasionally high ground shaking from nearby fault zones, as well as some background shaking from other seismically active areas of the southern California region. Although the proposed Project does not involve site-specific development, the intent is to provide adequate sites for residential development to accommodate the City's RHNA and to allow for additional residential development opportunities should they arise. Therefore, development associated with the Project could expose people or structures to potential adverse effects as a result of strong seismic ground shaking. The intensity of ground shaking would depend upon the earthquake's magnitude, distance to the epicenter, and geology of the area between the specific site and epicenter.

Liquefaction is a phenomenon where earthquake-induced ground vibrations increase the pore pressure in saturated, granular soils until it is equal to the confining, overburden pressure. Engineering research of soil liquefaction potential indicates that generally three basic factors must exist concurrently in order for liquefaction to occur. These factors include:

- A source of ground shaking, such as an earthquake, capable of generating soil mass distortions.
- A relatively loose silty and/or sandy soil.
- A relative shallow groundwater table (within approximately 50 feet below ground surface) or completely saturated soil conditions that will allow positive pore pressure generation.

As discussed in Section 5.6.2, Environmental Setting, the area located along Artesia Boulevard and the Dominguez Flood Control Channel in the southern portion of the City is located within a liquefaction zone. The Project proposes to change the General Plan land use and zones for several



parcels within this area, allowing for the future development of residential uses within areas identified as having the potential for liquefaction.

Pursuant to the General Plan Community Safety Element, Public Safety Plan Policy 3.2, and Municipal Code Section 18.42.200, geotechnical studies are required for all new development projects in the City, including those located in areas subject to liquefaction. Therefore, prior to any site-specific development, applicants would be required to conduct a site-specific geotechnical study to determine the geotechnical feasibility of the specific development being proposed at that time. Any recommendations presented in the geotechnical study would be required to be incorporated into the design and construction of the future development. The geotechnical study would include specific recommendations based on seismic design parameters for foundation design, retaining and screening walls, exterior flatwork, concrete mix design, corrosion, pavement design, and general earthwork and grading, among other factors. Further, design of any proposed structures in accordance with the current CBSC is anticipated to adequately mitigate concerns with ground shaking.

As discussed above, the City has adopted the 2022 CBSC (Gardena Municipal Code Chapter 15.04), subject to certain amendments and changes, including amendments specific to seismic conditions. Future development would be required to comply with all applicable regulations in the most recent CBSC as amended by the Gardena Municipal Code, which includes design requirements to mitigate the effects of potential hazards associated with seismic ground shaking. The Gardena Building and Safety Services Division would review construction plans for compliance with the CBSC and Gardena Municipal Code, as well as the geotechnical study's recommendations. Thus, compliance with the City's established regulatory framework and standard engineering practices and design criteria, which would be verified through the City's construction plan review process, potential impacts associated with strong seismic ground shaking and ground failure, including liquefaction would be reduced to a less than significant impact.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.6-3: Would the project result in substantial soil erosion or the loss of topsoil?

Impact Analysis: The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development when compared to existing conditions. Although the proposed Project does not involve site-specific development, the intent is to provide adequate sites for residential development to accommodate the City's RHNA and to allow for additional residential development opportunities should they arise. Implementation of the Project would provide for development and improvement projects that would involve some land clearing, mass grading,



and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. The Project Area is relatively flat and does not possess site conditions necessarily conducive to soil erosion. Depending upon the location of site-specific development, construction activities, and soil conditions, construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters. This is considered a potentially significant impact.

To help prevent substantial soil erosion, Gardena includes development and maintenance regulations throughout City codes. Gardena Municipal Code Chapter 8.70, *Stormwater and Runoff Pollution Control*, requires the reduction of pollutants being discharged to the waters of the U.S. through the elimination of non-stormwater discharges to the municipal stormwater system; elimination of the discharge of pollutants into the municipal storm drain system; reduction of pollutants in stormwater discharges to the maximum extent practicable; and protection and enhancement of the quality of the waters of the U.S. consistent with the provisions of the Clean Water Act. Gardena Municipal Code Section 8.70.110, *Pollutant source reduction*, requires construction projects that disturb one or more acres of soil by grading, clearing, and/or excavating or other activities to obtain a general construction activity stormwater permit from the State Water Resources Control Board prior to issuance of a grading permit. Projects that disturb less than one acre of soil are required to comply with the minimum BMPs to reduce the discharge of construction-related pollutants to the municipal separate storm sewer system (MS4). The type of BMPs required shall be based on such factors as the amount of soil disturbed, the types of pollutants used or stored at the site, and proximity to water bodies. Erosion control plans may be required at the discretion of the City. If required, the project applicant must submit an erosion control plan to the City for approval as a condition for grading permit issuance. Therefore, construction activities would be required to comply with the erosion and siltation control measures of the general construction activity stormwater permit, reducing potential impacts associated with soil erosion or the loss of topsoil during construction activities to a less than significant level.

Additionally, in accordance with the Gardena Municipal Code Section 8.70.110, *Pollutant source reduction*, new development and redevelopment projects would be required to comply with postconstruction runoff pollution reduction Best Management Practices (BMPs) implemented through the Standard Urban Water Management Plan (SUSMP). SUSMP conditions assigned by the City include low impact development (LID) BMPs; source control BMPs; and structural and nonstructural BMPs for specific types of uses. Development would be required to implement BMPs to ensure proposed improvements, including ensuring any proposed landscaped areas would be maintained and properly irrigated to reduce the amount of potential soil erosion or the loss of top soil. Following compliance with the established regulatory framework identified in the Gardena Municipal Code regarding stormwater and runoff pollution control, potential impacts associated with soil erosion and the loss of topsoil would be less than significant.



Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.6-4: 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, lateral spreading, subsidence, liquefaction or collapse or 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?

Impact Analysis: Refer to Responses GEO-2 regarding the potential for liquefaction.

Lateral Spreading: The potential for lateral spreading is present where open banks and unsupported cut slopes provide a free face (unsupported vertical slope face). Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes. Due to the generally flat topography within the City and surrounding area, the Project Area has a low susceptibility to lateral spreading.

Subsidence: Soils with high shrink-swell potential can be particularly susceptible to subsidence during a loss of soil moisture. The Project Area and surrounding area contain soils classified as “urban lands” soils that range from having low shrink-swell potential to very high shrink-swell potential. As previously discussed, groundwater is supplied to the City by GSWC-owned wells in the Central Basin and West Coast Basins, which are both adjudicated. Both the Central Basin and West Coast Basin groundwater systems have been thoroughly analyzed and both are meticulously monitored through each adjudication’s requirements. Management of the Central Basin and West Coast Basin reduces the likelihood of largescale extraction of groundwater that could cause subsidence.

Collapse: Collapsible soils occur predominantly at the base of mountain ranges, where Holocene-age alluvial fan and wash sediments have been deposited during rapid run-off events. Differential settlement of structures typically occurs when heavily irrigated landscape areas are near a building foundation. Examples of common problems associated with collapsible soils include tilting floors, cracking or separation in structures, sagging floors, and nonfunctional windows and doors. Existing alluvium within the Project Area may be susceptible to collapse and excessive settlements, which could create the risk of hydroconsolidation if these soils were exposed to excessive moisture.

Expansive soil: Expansive soils contain significant amounts of clay particles that swell considerably when wetted and shrink when dried. Expansive soil properties can cause substantial damage to building foundations, piles, pavements, underground utilities, and/or other improvements. Structural damage, such as warping and cracking of improvements, and rupture of underground utility lines, may occur if the expansive potential of soils is not considered during the design and construction of all improvements. There is the potential for layers of expansive clay to occur within the Project Area.



Conclusion

The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development when compared to existing conditions. Although the proposed Project does not involve site-specific development, the intent is to provide adequate sites for residential development to accommodate the City's RHNA and to allow for additional residential development opportunities should they arise. As stated, prior to development of any site, applicants would be required to prepare a geotechnical study to determine the geotechnical feasibility of the specific development being proposed at that time. With regards to lateral spreading, subsidence, collapse, and/or expansive soils, if a risk is identified, design criteria and specification options may include removal of the problematic soils and replacement, as needed, with properly conditioned and compacted fill material that is designed to withstand the forces exerted during the expected shrink-swell cycles and settlements. Design criteria and specifications set forth in the design-level geotechnical investigation would ensure impacts from problematic soils are minimized. Any recommendations presented in the geotechnical study would be required to be incorporated into the design and construction of the proposed development. The geotechnical study would include specific recommendations based on seismic design parameters for foundation design, retaining and screening walls, exterior flatwork, concrete mix design, corrosion, pavement design, and general earthwork and grading, among other factors.

As future residential development projects are considered within the Project Area, each project would be required to comply with all applicable regulations in the most recent CBSC as amended by the Gardena Municipal Code. The Gardena Building and Safety Services Division would review construction plans for compliance with the CBSC and Gardena Municipal Code, as well as the geotechnical study's recommendations. Thus, compliance with the City's established regulatory framework and standard engineering practices and design criteria, which would be verified through the City's construction plan review process, would ensure potential impacts associated with a geologic unit or soil that is unstable or would become unstable, including expansive soil conditions would be reduced to a less than significant impact.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.6-5: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact Analysis: As discussed in Section 5.6-2, Environmental Setting, the Project Area is mapped primarily as middle to late Pleistocene old alluvium, with late Pleistocene to Holocene young alluvial fan deposits and young alluvium mapped at the surface in some areas. A records search



revealed that all of the fossils previously recovered within a seven-mile radius were a minimum of five feet deep in deposits mapped as Pleistocene at the surface; areas mapped as Holocene at the surface produced fossils starting at 24 feet deep. Given this, old alluvium less than five feet below the modern surface is assigned a low potential for fossils, and old alluvium more than five feet below the surface are assigned a moderate potential for fossils. The young alluvial fan deposits and young alluvium are assigned a low potential for fossils above 20 feet below the modern surface due to the lack of fossils in these deposits; more than 20 feet below the modern surface, sediments are interpreted to have moderate potential for fossils due to similar deposits producing fossils at that depth near to the Project Area.

Although the proposed Project does not involve site-specific development, the intent is to provide adequate sites for residential development to accommodate the City's RHNA and to allow for additional residential development opportunities should they arise. Drilling or pile driving activities regardless of depth, have a low potential to produce fossils meeting significance criteria because any fossils brought up by the auger during drilling will not have information about formation, depth or context. However, future residential development could occur within soils and at depths having the potential for paleontological resources based upon fossils found in similar sediments nearby. In compliance with the City's Municipal Code Section 18.42.210, prior to ground-disturbance activities, a qualified vertebrate paleontologist would be required to provided WEAP Training for construction personnel. If fossils or fossil bearing deposits are encountered during ground disturbing activities, work would halt and a professional vertebrate paleontologist would be contacted to assess and evaluate the find pursuant to State CEQA Guidelines. Compliance with the City's Municipal Code requirements would reduce potential impacts to unanticipated paleontological resources associated with ground disturbance activities within areas identified as having a low potential for fossils.

In order to reduce potentially significant impacts to paleontological resources associated with future site-specific development in undisturbed sediments ranked moderate or above, project applicants would be required to implement Mitigation Measure GEO-1, which would require either a technical paleontological assessment consisting of a record search, survey, background context, and project specific recommendations or an agreement to conduct monitoring of all excavations below five feet. If resources are known or reasonably anticipated, recommendations would be required to include a detailed mitigation plan requiring monitoring during grading and other earthmoving activities in undisturbed sediments. The recommendations would provide a fossil recovery protocol that includes data to be collected; professional identification, radiocarbon dates and other special studies as appropriate; curation at local curation facility for fossils meeting significance criteria; a comprehensive final mitigation compliance report including a catalog of fossil specimens with museum numbers; and an appendix containing a letter from the museum stating that they are in possession of the fossils. With implementation of Mitigation Measure GEO-1, potential impacts to paleontological resources within undisturbed sediments ranked moderate or above would be reduced to a less than significant level.



Mitigation Measures:

GEO-1: Applicants for future proposed projects with planned impacts in undisturbed or native sediments (i.e., sediments that have not been moved or displaced since they were naturally deposited) ranked moderate or above shall be required to either (1) provide a technical paleontological assessment consisting of a record search, survey, background context and project specific recommendations performed by a qualified professional paleontologist who meets the standards set forth by the Society of Vertebrate Paleontology or (2) agree to monitoring all excavations below five feet. If resources are known or reasonably anticipated, the recommendations shall provide a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, provide a fossil recovery protocol that includes data to be collected, require professional identification, radiocarbon dates and other special studies as appropriate, require curation at a local curation facility such as the John D. Cooper Center operated by the County of Orange for fossils meeting significance criteria, require a comprehensive final mitigation compliance report including a catalog of fossil specimens with museum numbers and an appendix containing a letter from the museum stating that they are in possession of the fossils.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

5.6.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the related projects in the City determined as having the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to geology and soils may occur. The cumulative projects' regional geologic setting and regional seismicity would be similar; however, the local geologic setting, surficial geology, and subsurface soil conditions would vary according to the site location and specific conditions.

Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Impact Analysis: An Alquist-Priolo Earthquake Fault Zone is located at the northeast portion of the City in the vicinity of El Segundo Boulevard and Vermont Avenue. This is a known active fault zone delineated by the State Geologist and is considered part of the Newport-Inglewood fault system. As discussed above, none of the parcels proposed for changes to their existing General Plan land use designations or zoning are located within an Alquist-Priolo Earthquake Fault Zone. Therefore, the proposed Project would not contribute to cumulative impacts and impacts in this regard are not cumulatively considerable.



Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking or seismic-related ground failure, including liquefaction?

Impact Analysis: The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development when compared to existing conditions potentially exposing residents to strong seismic ground shaking or seismic-related ground failure, including liquefaction. Future residential development and cumulative development would generally experience similar ground shaking associated with seismic activity. Additionally, potential impacts associated with liquefaction could occur within project sites and cumulative project sites within the area located along Artesia Boulevard and the Dominguez Flood Control Channel, identified as being within a potential liquefaction zone.

However, future residential development within the Project Area and cumulative projects would be required to conduct a site-specific geotechnical study to determine the geotechnical feasibility of the specific development being proposed at that time. Any recommendations presented in the geotechnical study would be required to be incorporated into the design and construction of the future development. The geotechnical study would include specific recommendations based on seismic design parameters for foundation design, retaining and screening walls, exterior flatwork, concrete mix design, corrosion, pavement design, and general earthwork and grading, among other factors.

Future development would be required to comply with all applicable regulations in the most recent CBSC as amended by the Gardena Municipal Code, which includes design requirements to mitigate the effects of potential hazards associated with seismic ground shaking and liquefaction. The Gardena Building and Safety Services Division would review construction plans for compliance with the CBSC and Gardena Municipal Code, as well as the geotechnical study's recommendations. Therefore, the Project's incremental effects involving exposure of people and structures to potential substantial adverse effects involving strong seismic ground shaking or seismic-related ground failure, including liquefaction would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.



Would the project, combined with other related cumulative projects result in substantial soil erosion or the loss of topsoil?

Impact Analysis: Future Project development sites and cumulative development sites within the City and surrounding areas may contain soils that have erosion potential. Implementation of the Construction activities associated with Project implementation and cumulative development projects would involve some land clearing, mass grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction.

Site specific geology and soil conditions would be evaluated on a project-by-project basis. However, all future residential development associated with the proposed Project and cumulative projects within the City and region would be required to comply with stormwater runoff and pollution control requirements required by the regional water quality control board and implemented by the specific jurisdiction in which the development occurs. Construction activities within the City would be required to comply with the City's Municipal Code which implements erosion and siltation control measures of the general construction activity stormwater permit, reducing potential impacts associated with soil erosion or the loss of topsoil during construction activities. Additionally, new development and redevelopment projects would be required to comply with postconstruction runoff pollution reduction BMPs implemented through the SUSMP. The proposed Project would be required to comply with the established regulatory framework identified in the Gardena Municipal Code regarding stormwater and runoff pollution control. Thus, the Project's incremental effects involving substantial soil erosion or the loss of top soil would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects 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 or 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?

Impact Analysis: Due to the generally flat topography within the City and surrounding area, the potential for lateral spreading within the Project Area is considered to be low. Further, the Project Area is not identified as having the potential for subsidence. Soils exposed to excessive moisture within the Project Area could be at risk of hydroconsolidation and soils with layers of expansive clay could result in structural damage associated with expansive soils. The geotechnical and soil characteristics of future development associated with the Project and any cumulative development within the City would be evaluated on a project-by-project basis and appropriate mitigation measures would be required to reduce potential impacts associated with unstable geologic units or soils.



Future residential development associated with implementation of the proposed Project would be required to prepare a geotechnical study for the specific site being proposed for development. The Gardena Building and Safety Services Division would review construction plans for compliance with the CBSC and Gardena Municipal Code, as well as the geotechnical study's recommendations. Therefore, the Project's incremental effects involving unstable geologic units or soils would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact Analysis: The Project Area has the potential to contain paleontological resources. As discussed above, compliance with the City's Municipal Code and implementation of Mitigation Measures GEO-1 would reduce potential impacts to paleontological resources associated with future Project Area construction activities to a less than significant level. There is the potential for cumulative project sites within the City to have soils that contain paleontological resources. Construction activities associated with the cumulative projects have the potential to directly or indirectly destroy paleontological resources specific to those development sites. However, as with the Project, cumulative development projects would be required to comply with the City's Municipal Code regarding paleontological resources. Additionally, individual projects would undergo environmental and design review on a project-by-project basis pursuant to CEQA to evaluate potential impacts to paleontological resources. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. The Project's incremental effects involving paleontological resources would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.6.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with geology and soils would occur with the proposed Project.

5.6.8 REFERENCES

California Geological Survey (CGS), *California Geomorphic Provinces*. California Geological Survey Note 36. Sacramento, CA. California Department of Conservation, 2002.

California Geologic Survey (CGS), *DOC Maps: Geologic Hazards, Interactive Web Map*, <https://maps.conservation.ca.gov/geologic Hazards/>, accessed January 17, 2023.



California Geological Survey (CGS), *Seismic Hazard Zone Report for the Inglewood 7.5-minute quadrangle, Los Angeles County, 1998a.*

California Geological Survey (CGS), *Seismic Hazard Zone Report for the Torrance 7.5-minute quadrangle, Los Angeles County, 1998b.*

Golden State Water Company (GSWC), *Southwest Service Area 2020 Urban Water Management Plan*, July 2021.

Natural Resources Conservation Service (NRCS), *Web Soil Survey Interactive Map*, <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>, accessed January 17, 2023.

Risk Management Professionals (RMP), *City of Gardena, City of Hawthorne Draft Hazard Mitigation Plan*, August 2012.

Scott, E. and Springer, K., *CEQA and fossil preservation in southern California, The Environmental Monitor*, 2003.

Tully & Young; Zajero. *Golden State Water Company, Southwest Service Area 2020 Urban Water Management Plan*, July 15, 2021.

United States Geological Survey (USGS), *UCERF3: A New Earthquake Forecast for California's Complex Fault System*, March 2015, <https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf>, accessed January 13, 2023.

United States Geological Survey (USGS), *Land Subsidence*, March 2019, <https://www.usgs.gov/mission-areas/water-resources/science/land-subsidence>, accessed January 13, 2023.



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5.7 GREENHOUSE GAS EMISSIONS

5.7.1 PURPOSE

This section identifies the existing climate conditions, the current state of climate change science, and greenhouse gas (GHG) emissions sources within California and the Project Area and provides an analysis of potential impacts associated with implementation of the Project. This section is primarily based upon greenhouse gas emissions analysis and modeling prepared by De Novo Planning Group and included as Appendix E, Air Quality, Energy and Greenhouse Gas Emissions Modeling Data.

5.7.2 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGES LINKAGES

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. This is called the greenhouse effect, and leads to global warming as well as an overall global climate change, which includes long-term shifts in temperatures and weather patterns.

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor (H₂O), N₂O, and chlorofluorocarbons (CFCs).

Gases in the atmosphere can contribute to the greenhouse effect both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other greenhouse gases, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the earth (U.S. Environmental Protection Agency, 2011).

Naturally occurring greenhouse gases include water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and ozone (O₃). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. There are also several gases that do not have a direct global warming effect but indirectly affect terrestrial and/or solar radiation absorption by influencing the formation or destruction of greenhouse gases, including tropospheric and stratospheric ozone. These gases include carbon monoxide (CO), oxides of nitrogen (NO_x), and non-CH₄ volatile



organic compounds (NMVOCs). Aerosols, which are extremely small particles or liquid droplets, such as those produced by sulfur dioxide (SO₂) or elemental carbon emissions, can also affect the absorptive characteristics of the atmosphere (U.S. Environmental Protection Agency, 2011).

Although the direct greenhouse gases CO₂, CH₄, and N₂O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three greenhouse gases have increased globally by 40, 150, and 20 percent, respectively.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial sector.

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced approximately 418.2 million gross metric tons of carbon dioxide equivalents (MMTCO₂e) in 2019, meeting the annual Statewide target set by the California Air Resources Board (CARB), which required that California emissions be below 431 MMTCO₂e by 2020 (CARB, 2021). To meet CARB's Statewide targets, California emissions must further be reduced to below 260 MMTCO₂e by 2030.

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2019, accounting for 41 percent of total GHG emissions in the State (CARB, 2021). This category was followed by the industrial sector (24 percent), the electricity generation sector (including both in-State and out-of-State sources) (14 percent), the agriculture and forestry sector (7 percent), the residential energy consumption sector (8 percent), and the commercial energy consumption sector (6 percent).

EFFECTS OF GLOBAL CLIMATE CHANGE

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems, and disruption to coastal wetlands and habitat.



If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of water supply for the State. The snowpack portion of the supply could potentially decline by 50 percent to 75 percent by the end of the 21st century. This phenomenon could lead to significant challenges securing an adequate water supply for a growing State population. Further, the increased ocean temperature could result in increased moisture flux into the State; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels. If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion, and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. According to the most recent California Climate Change Assessment (*California's Fourth Climate Change Assessment*), the impacts of global warming in California are anticipated to include, but are not limited to, the following.

Wildfires

In recent years, the area burned by wildfires has increased in parallel with increasing air temperatures. Wildfires have also been occurring at higher elevations in the Sierra Nevada mountains, a trend which is expected to continue under future climate change. Climate change will likely modify the vegetation in California, affecting the characteristics of fires on the land. Land use and development patterns also play an important role in future fire activity. Because of these complexities, projections of wildfire in future decades in California range from modest changes from historical conditions to relatively large increases in wildfire regimes depending on the time period for the projection and what interacting factors are included in the analysis.

Public Health

Extreme heat conditions are defined as weather that is much hotter than average for a particular time and place—and sometimes more humid, too. Extreme heat is not just a nuisance; it kills hundreds of Americans every year and causes many more to become seriously ill (U.S. Environmental Protection Agency, 2016). Nineteen heat-related events occurred from 1999 to 2009 that had significant impacts on human health, resulting in about 11,000 excess hospitalizations. However, the National Weather Service issued Heat Advisories for only six of the events. Heat-Health Events (HHEs), which better predict risk to populations vulnerable to heat, will worsen drastically throughout the State: for example, by midcentury, the Central Valley is projected to experience average HHEs that are two weeks longer, and HHEs could occur four to ten times more often in the Northern Sierra region.



Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. Climate change poses direct and indirect risks to public health, as people will experience earlier death and worsening illnesses. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions.

Energy Resources

Higher temperatures will increase annual electricity demand for homes, driven mainly by the increased use of air conditioning units. High demand is projected in inland and Southern California, and more moderate increases are projected in cooler coastal areas. However, the increased annual residential energy demand for electricity is expected to be offset by reduced use of natural gas for space heating. Increases in peak hourly demand during the hot months of the year could be more pronounced than changes in annual demand. This is a critical finding for California's electric system, because generating capacity must match peak electricity demand.

It should also be noted that with the electrification of vehicles, there will also be a significant increase in residential energy use in the near future. Those increases are offset by the reduction of internal combustion use.

Water Supply

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major State fresh water supply.

Current management practices for water supply and flood management in California may need to be revised for a changing climate. This is in part because such practices were designed for historical climatic conditions, which are changing and will continue to change during the rest of this century and beyond. As one example, the reduction in the Sierra Nevada snowpack, which provides natural water storage, will have implications throughout California's water management system. Even under the wetter climate projections, the loss of snowpack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

Agriculture

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products Statewide. Although higher carbon



dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts, as well as milk due to the reduced quality of grazing food such as alfalfa.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued climate change will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different invasive species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Climate change will make forests more susceptible to extreme wildfires. *California's Fourth Climate Change Assessment* found that by 2100, if greenhouse gas emissions continue to rise, the frequency of extreme wildfires burning over approximately 25,000 acres would increase by nearly 50 percent, and that average area burned Statewide would increase by 77 percent by the end of the century. In the areas that have the highest fire risk, wildfire insurance is estimated to see costs rise by 18 percent by 2055 and the amount of property insured would decrease.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the State. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the State's forests is also expected to decrease as a result of global warming.

Rising Sea Levels

The United States Geological Survey (USGS) estimates that, under mid to high sea-level rise scenarios, 31 to 67 percent of southern California beaches may completely erode by 2100 without large-scale human interventions (USGS, 2017). Statewide damages could reach nearly \$17.9 billion from inundation of residential and commercial buildings under 50 centimeters (approximately 20 inches) of sea-level rise, which is close to the 95th percentile of potential sea-level rise by the middle of this century. A 100-year coastal flood, on top of this level of sea-level rise, would almost double the costs.



Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Rising sea levels would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

5.7.3 REGULATORY SETTING

FEDERAL

Federal Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National ambient air quality standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. Environmental Protection Agency (EPA) is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency's (EPA) 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 EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO₂, CH₄, 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 EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S.



The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

[Energy Policy Act of 1992 \(EPAAct\)](#)

The Energy Policy Act of 1992 (EPAAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAAct requires certain federal, state, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs.

[Energy Policy Act of 2005](#)

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the act provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for a clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

[Clean Power Plan and New Source Performance Standards for Electric Generating Units 2015](#)

On October 23, 2015, the EPA published a final rule (effective December 22, 2015) establishing the carbon pollution emission guidelines for existing stationary sources: electric utility generating units (80 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 EPA 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, the EPA Administrator was directed 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.



[Intermodal Surface Transportation Efficiency Act \(ISTEA\)](#)

ISTEA (49 U.S.C. Section 101 et seq.) promoted the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that metropolitan planning organizations (MPOs), were to address in developing transportation plans and programs, including some energy-related factors. To meet the ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process was then to address these policies. Another requirement was to consider the consistency of transportation planning with federal, state, and local energy goals. Through this requirement, energy consumption was expected to become a criterion, along with cost and other values that determine the best transportation solution.

[The Fixing America's Surface Transportation Act \(FAST Act\)](#)

The Fixing America's Surface Transportation Act (FAST Act) went into effect on December 4, 2015, to provide long-term funding for surface transportation with a focus on improving mobility on America's highways, creating jobs and supporting economic growth, and accelerating project delivery and promoting innovation.

[U.S. Federal Climate Change Policy](#)

According to the EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The federal government's goal is to reduce net GHG emissions by 50-52 percent from 2005 levels in 2030 and reach net-zero emissions no later than 2050 (U.S. Department of State, 2021). In addition, the EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR", "Climate Leaders", and Methane Voluntary Programs. However, as of this writing, there are no adopted federal plans, policies, regulations, or laws directly regulating GHG emissions.

[Mandatory Greenhouse Gas Reporting Rule](#)

On September 22, 2009, EPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement will provide EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons or more of CO₂ per year. This publicly available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial greenhouse gases along with vehicle and engine manufacturers will report at the corporate level. An estimated 85 percent of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.



[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 carbon, nitrous oxide, and methane.

STATE

[California Air Resources Board](#)

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, CARB conducts research, sets state ambient air quality standards (California Ambient Air Quality Standards [CAAQS]), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (Title 13 California Code of Regulations [CCR], §2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure generally does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks. While this measure primarily targets diesel particulate matter emissions, it has co-benefits of minimizing GHG emissions from unnecessary truck idling.

On July 26, 2007, CARB adopted emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. This regulation aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. Additionally, in 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, §2025, subsection (h)). While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies.

[California Executive Orders S-3-05 and S-20-06, and Assembly Bill 32](#)

On June 1, 2005, Governor Schwarzenegger signed EO S-3-05. The goal of this EO is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. EO-S-20-06 establishes responsibilities and roles of the Secretary of Cal/EPA and State agencies in climate change.



In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” EO S-20-06 further directs State agencies to begin implementing AB 32, including the recommendations made by the State’s Climate Action Team.

[Climate Change Scoping Plan](#)

On December 11, 2008, CARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of CARB’s plans to achieve GHG reductions in California required by Assembly Bill (AB) 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce carbon dioxide-equivalent (CO₂e) emissions by 169 million metric tons (MMT), or approximately 30 percent, from the State’s projected 2020 emissions level of 596 MMT of CO₂e under a business-as-usual scenario. (This is a reduction of 42 MMT CO₂e, or almost 10 percent, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.) The Scoping Plan also breaks down the amount of GHG emissions reductions CARB recommends for each emissions sector of the State’s GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO₂e);
- The Low-Carbon Fuel Standard (15.0 MMT CO₂e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO₂e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO₂e).

CARB updated the Scoping Plan in 2013 (*First Update to the Scoping Plan*) and again in 2017. The 2013 Update built upon the initial Scoping Plan with new strategies and recommendations, and also set the groundwork to reach the long-term goals set forth by the State. Successful implementation of existing programs (as identified in previous iterations of the Scoping Plan) has allowed California to meet the 2020 target. The 2017 Update expanded the scope of the plan further by focusing on the strategy for achieving the State’s 2030 GHG target of 40 percent emissions reductions below 1990 levels (to achieve the target codified into law by SB 32), and substantially advanced toward the State’s 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

The 2017 Update relied on the preexisting programs paired with an extended, more stringent Cap-and-Trade Program, to deliver climate, air quality, and other benefits. The 2017 Update identified new technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction goals.



CARB adopted the 2022 Scoping Plan Update (2022 Scoping Plan) on December 15, 2022. The 2022 Scoping Plan Update assesses progress towards the SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030, while laying out a path to achieving carbon neutrality no later than 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.

[Executive Order S-13-08](#)

EO S-13-08 was issued on November 14, 2008. The EO is intended to hasten California’s response to the impacts of global climate change, particularly sea level rise, and directs State agencies to take specified actions to assess and plan for such impacts, including requesting the National Academy of Sciences to prepare a Sea Level Rise Assessment Report, directing the Business, Transportation, and Housing Agency to assess the vulnerability of the State’s transportation systems to sea level rise, and requiring the Office of Planning and Research and the Natural Resources Agency to provide land use planning guidance related to sea level rise and other climate change impacts.

The order also required State agencies to develop adaptation strategies to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years. The adaption strategies report summarizes key climate change impacts to the State for the following areas: public health; ocean and coastal resources; water supply and flood protection; agriculture; forestry; biodiversity and habitat; and transportation and energy infrastructure. The report recommends strategies and specific responsibilities related to water supply, planning and land use, public health, fire protection, and energy conservation.

[Assembly Bill 1493](#)

In 2002, recognizing that global warming would impose compelling and extraordinary impacts on California, the legislature adopted and the Governor signed Assembly Bill (AB) 1493, Chapter 200, Statutes of 2002, authored by Assemblymember Pavley. The bill recognized that global warming (climate change) is a public health concern, that motor vehicles are a major source of the state’s greenhouse gas emissions, and that reducing these emissions will protect public health and the environment while stimulating the economy and enhancing job opportunities. Among other things, the bill directed CARB to adopt regulations that achieve the maximum feasible and cost effective reduction of greenhouse gas emissions from passenger vehicles, beginning with the 2009 model year. (California Health and Safety Code, § 43018.5.) The Board approved those regulations, sometimes called the Pavley regulations, at its September 2004 hearing, and they were adopted in their final form in August 2005. In December 2005, CARB submitted a request to EPA for a waiver of preemption under the federal Clean Air Act to allow California to enforce its greenhouse gas emission standards.

In response, some motor vehicle manufacturers, automobile dealers, and their trade associations challenged these regulations in numerous federal and state court proceedings and opposed California’s waiver request to EPA.



In March 2008, EPA denied California’s request for a waiver. That decision was based, among other things, on a finding that California’s request to reduce greenhouse gas emissions from passenger vehicles did not meet the Clean Air Act requirement of showing that the waiver was needed to meet “compelling and extraordinary conditions.”

In May 2009, several automakers, California, and the federal government committed to a series of actions to resolve those current and potential future disputes over the standards through model year 2016. This agreement formed the genesis of a national program to reduce greenhouse gases and improve fuel economy from passenger vehicles to achieve equivalent or greater greenhouse gas benefits as the Pavley regulations for the 2012 through 2016 model years.

On July 8, 2009, EPA granted California a waiver for the Pavley regulations. (74 Fed. Reg. 32,744, July 8, 2009.)

After adopting these initial greenhouse gas standards for passenger vehicles, CARB adopted continuing standards for future model years.

[Assembly Bill 1007](#)

Assembly Bill 1007, (Pavley, Chapter 371, Statutes of 2005) directed the CEC to prepare a plan to increase the use of alternative fuels in California. As a result, the CEC prepared the State Alternative Fuels Plan in consultation with the State, federal, and local agencies. The plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-State production. The Plan assessed various alternative fuels and developed fuel portfolios to meet California’s goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-State production of biofuels without causing a significant degradation of public health and environmental quality.

[Bioenergy Action Plan – Executive Order #S-06-06](#)

Executive Order (EO) #S-06-06 establishes targets for the use and production of biofuels and biopower and directs State agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The EO establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels within California by 2010, 40 percent by 2020, and 75 percent by 2050. The EO also calls for the State to meet a target for use of biomass electricity.

[Senate Bill 32](#)

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown (Office of Governor Edmund G. Brown Jr., 2016). SB 32 and AB 197 amend HSC Division 25.5, establish a new GHG reduction target of 40 percent below



1990 levels by 2030, and include provisions to ensure the benefits of state climate policies reach into disadvantaged communities.

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law. SB 743 was passed to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. SB 743 changes the way that public agencies evaluate the transportation impacts of projects under CEQA. The revisions to the State CEQA Guidelines establish new criteria for determining the significance of a project's transportation impacts that will 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 GHGs. The 2017 Update to the Scoping Plan identified that slower VMT growth from more efficient land use development patterns would promote achievement of the State's climate goals.

The Office of Planning and Research (OPR) published the Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) to provide recommendations for jurisdictions to apply VMT metrics and thresholds compliant with SB 743. OPR's advisory includes recommendations pertaining to screening criteria, metrics, and significant impact thresholds. OPR's recommendations are not binding and lead agencies ultimately have the discretion to set or apply their own significance thresholds, provided they are based on significant evidence.

For land use and transportation projects, SB 743-compliant CEQA analysis became mandatory on July 1, 2020. More detail about SB 743 is provided in the setting section of Section 5.14, Transportation.

Executive Order B-48-18: Zero-Emission Vehicles

In January 2018, EO B-48-18 was signed into law and requires all State entities to work with the private sector to have at least five million zero-emission vehicles (ZEVs) on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. This Executive Order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan (Governor's Interagency Working Group on Zero-Emission Vehicles 2016) to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to expand ZEV infrastructure at residential uses through the Low Carbon Fuel Standard Program, and recommend how to ensure affordability and accessibility for all drivers.



[Assembly Bill 2076: California Strategy to Reduce Petroleum Dependence](#)

In response to the requirements of Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), the CEC and CARB developed a strategy to reduce petroleum dependence in California. The strategy, *Reducing California's Petroleum Dependence*, was adopted by the CEC and CARB in 2003. The strategy recommends that California reduce on-road gasoline and diesel fuel demand to 15 percent below 2003 demand levels by 2020 and maintain that level for the foreseeable future; the Governor and Legislature work to establish national fuel economy standards that double the fuel efficiency of new cars, light trucks, and sport utility vehicles (SUVs); and increase the use of non-petroleum fuels to 20 percent of on-road fuel consumption by 2020 and 30 percent by 2030.

[Assembly Bill 2188: Solar Permitting Efficiency Act](#)

Assembly Bill (AB) 2188, enacted in California in 2015, required local governments to adopt a solar ordinance by September 30, 2015 that creates a streamlined permitting process that conforms to the best practices for expeditious and efficient permitting of small residential rooftop solar systems. The act is designed to lower the cost of solar installations in California and further expand the accessibility of solar to more California homeowners. The bulk of the time and cost savings associated with a streamlined permitting process comes from the use of a standardized eligibility checklist and a simplified plan. This bill also shortens the number of days for those seeking Homeowner's Association (HOA) approval for a written denial of a proposed solar installation.

[Governor's Low Carbon Fuel Standard \(Executive Order #S-01-07\)](#)

Executive Order #S-01-07 establishes a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 through establishment of a Low Carbon Fuel Standard. The Low Carbon Fuel Standard is incorporated into the State Alternative Fuels Plan and is one of the proposed discrete early action GHG reduction measures identified by CARB pursuant to AB 32.

[Senate Bill 97](#)

Senate Bill (SB) 97 (Chapter 185, 2007) required OPR to develop recommended amendments to the State CEQA Guidelines for addressing greenhouse gas emissions. OPR prepared its recommended amendments to the State CEQA Guidelines to provide guidance to public agencies regarding the analysis and mitigation of greenhouse gas emissions and the effects of greenhouse gas emissions in draft CEQA documents. The Amendments became effective on March 18, 2010.

[Senate Bill 375](#)

SB 375 (Stats. 2008, ch. 728) (SB 375) was built on AB 32 (California's 2006 climate change law). SB 375's core provision is a requirement for regional transportation agencies to develop a Sustainable Communities Strategy (SCS) in order to reduce GHG emissions from passenger vehicles. The SCS is one component of the existing Regional Transportation Plan (RTP).



The SCS outlines the region’s plan for combining transportation resources, such as roads and mass transit, with a realistic land use pattern, in order to meet a State target for reducing GHG emissions. The strategy must take into account the region’s housing needs, transportation demands, and protection of resource and farmlands.

Additionally, SB 375 modified the State’s Housing Element Law to achieve consistency between the land use pattern outlined in the SCS and the Regional Housing Needs Assessment allocation. The legislation also substantially improved cities’ and counties’ accountability for carrying out their housing element plans.

Finally, SB 375 amended CEQA (Pub. Resources Code, Section 21000 et seq.) to ease the environmental review of developments that help reduce the growth of GHG emissions.

[Executive Order B-30-15](#)

On April 29, 2015, Governor Brown issued EO B-30-15, which establishes a State GHG reduction target of 40 percent below 1990 levels by 2030. The new emission reduction target provides for a mid-term goal that would help the State to continue on course from reducing GHG emissions to 1990 levels by 2020 (per AB 32) to the ultimate goal of reducing emissions 80 percent under 1990 levels by 2050 (per EO S-03-05). This is in line with the scientifically established levels needed in the U.S. to limit global warming below two degrees Celsius – the warming threshold at which scientists say there will likely be major climate disruptions. EO B-30-15 also addresses the need for climate adaptation and directs State government to:

- Incorporate climate change impacts into the State’s Five-Year Infrastructure Plan;
- Update the Safeguarding California Plan, the State climate adaptation strategy, to identify how climate change will affect California infrastructure and industry and what actions the State can take to reduce the risks posed by climate change;
- Factor climate change into State agencies’ planning and investment decisions; and
- Implement measures under existing agency and departmental authority to reduce GHG emissions.

[Advanced Clean Cars Program](#)

In January 2012, CARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The new rules strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program’s zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California’s new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle



manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the State. The program will have significant energy demand implications as battery, fuel cell, and/or plug-in hybrid electric vehicle sales increase overtime, creating new demand for electricity services both in residential and commercial buildings (e.g., charging stations) as well as demand for new EV and hydrogen fuel cell charging stations. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. According to CARB, by 2025, when the rules will be fully implemented, the Statewide fleet of new cars and light trucks will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions than the Statewide fleet in 2016.

[California Building Energy Efficiency Standards](#)

Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards (Standards), was established in 1978 in response to a legislative mandate to reduce California’s energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. On January 1, 2010, the California Building Standards Commission adopted CALGreen and became the first state in the United States to adopt a statewide green building standards code.

The 2022 California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as “Title 24,” became effective on January 1, 2023. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The Standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the Standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach.

The CEC estimates that the 2022 Title 24 standards will reduce 10 million metric tons of GHG over 30 years (CEC, 2021). When compared to the 2019 Title 24 standards, the 2022 update focuses on: encouraging electric heat pump technology and use; establishing electric-ready requirements when natural gas is installed; expanding solar photovoltaic (PV) system and battery storage standards; and strengthening ventilation standards to improve indoor air quality.

[California Green Building Standards \(CALGreen\)](#)

The 2022 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as CALGreen, went into effect on January 1, 2023. CALGreen is the first-in-the-nation mandatory green buildings standards code. The California Building Standards Commission developed CALGreen in an effort to meet the State’s landmark initiative Assembly Bill (AB) 32 goals, which established a comprehensive program of cost-effective reductions of



greenhouse gas (GHG) emissions to 1990 levels by 2020. CALGreen was developed to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, and healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. CALGreen 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 expensive, and that there is a significant cost-savings potential in green building practices and materials (U.S. Green Building Council, 2022).

[Executive Order B-55-18](#)

EO B-55-18, issued by Governor Brown in September 2018, establishes a statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing Statewide targets of reducing the State's GHG emissions.

[Senate Bill 1078 \(2002\), Senate Bill 107 \(2006\), Executive Order S-14-08 \(2008\), Senate Bill 350 \(2015\), and Senate Bill 100 \(2018\)](#)

SB 1078 established the Renewable Portfolio Standard (RPS) program, which required retail sellers of electricity to provide at least 20 percent of their supply from renewable sources by 2017. This goal has subsequently been accelerated several times. SB 107 changed the target date to 2010 and Executive Order S-14-08 expanded the State's RPS to 33 percent renewable power by 2020. SB 350 expanded the RPS by requiring retail seller and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030, with interim goals of 40 percent by 2024 and 45 percent by 2027. SB 100 accelerated and expanded the standards set forth in SB 350 by updating the RPS program to 50 percent eligible renewable energy resources by 2025 and 60 percent by 2030. In addition, SB 100 sets a 100 percent clean, zero carbon, and renewable energy policy for California's electricity system by 2045.

[Assembly Bill 939, Assembly Bill 341, and Assembly Bill 1826](#)

The Integrated Solid Waste Management Act of 1989 (AB 939) (California Public Resources Code Section 40050 et seq.) established an integrated waste management system that focuses on source reduction, recycling, composting, and land disposal of waste. AB 939 requires every city and county in California to divert 50 percent of its waste from landfills whether through waste reduction, recycling, or other means. AB 341, which took effect on July 1, 2012, amended the California Integrated Waste Management Act of 1989 to set California's recycling goal of 75 percent by the year 2020. AB 1826 requires recycling of organic matter by businesses generating such wastes in amounts over certain thresholds. AB 1826 also requires that local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses and multi-family developments that consist of five or more units.



Senate Bill 1383

SB 1383, issued by Governor Brown in September 2016, set Statewide methane emissions reduction targets to reduce emissions of short-lived climate pollutants (SLCP). The SLCPs included under this bill – including methane, fluorinated gases, and black carbon – are GHGs that are much more potent than carbon dioxide and can have detrimental effects on human health and climate change. SB 1383 requires CARB to adopt a strategy to reduce methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The methane emission reduction goals include a 75 percent reduction in the level of statewide disposal of organic waste from 2014 levels by 2025.

Senate Bill 379

In 2015, SB 379 revised California Government Code Section 65302 et seq. to require that cities and counties update their safety elements to address climate adaptation and resiliency strategies applicable to their jurisdiction. The updates are required at the next update of their local hazard mitigation plan (LHMP) on or after January 1, 2017. Local jurisdictions without an LHMP must update their safety elements beginning on or before January 1, 2022. The safety element update must include a vulnerability assessment identifying the risks that climate change poses to the local jurisdiction, and feasible implementation strategies to protect the community.

Assembly Bill 1279

Assembly Bill 1279, passed in 2022, declares the State’s objective to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative greenhouse gas emissions thereafter. This is in addition to, and does not replace or supersede, Statewide greenhouse gas emissions reduction targets.

Cap-and-Trade Program

The Climate Change Scoping Plan identifies a Cap-and-Trade Program as a key strategy CARB would employ to help California meet its GHG reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from 1990 levels by 2050. Pursuant to its authority under HSC Division 25.5, CARB designed and adopted a California Cap-and-Trade Program to reduce GHG emissions from major sources (deemed “covered entities”) by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve the State’s emission-reduction mandate of returning to 1990 levels of emissions by 2020 and 40 percent below 1990 levels by 2030 (17 CCR §§95800 to 96023). Under the Cap-and-Trade Program, an overall limit is established for GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 metric tons CO₂e per year), caps decline over time, and facilities subject to the cap can trade permits to emit GHGs. The statewide cap for GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emission reductions throughout the Program’s duration (17 CCR §§95800 to 96023). On July 17, 2017 the California legislature passed AB 398, extending the Cap-and- Trade Program through 2030.



An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on a statewide basis.

If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program would be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program would be responsible for relatively more emissions reductions. In other words, the Cap-and-Trade Program functions similarly to an insurance policy for meeting California's GHG emissions reduction mandates.

REGIONAL AND LOCAL

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 SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan (AQMP). In March 1992, 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 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 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.

The legislative and regulatory activity detailed above is expected to require significant development and implementation of energy efficient technologies and shifting of energy production to renewable sources.

SCAG's Connect SoCal: Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

SCAG is the metropolitan planning organization (MPO) for the region in which the City of Gardena is located. In 2020, SCAG adopted Connect SoCal, the 2020-2045 RTP/SCS, which is an update to the previous 2016 RTP/SCS. The 2020 RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2020 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving a 19 percent reduction by 2035 compared to the 2005 level.

SCAG's 2020 RTP/SCS builds on the land use policies that were incorporated into the 2016 RTP/SCS, and provides specific strategies for successful implementation. These strategies include



implementing the Sustainable Communities Program (SCP) – Housing and Sustainable Development (HSD) which will both accelerate housing production as well as enable implementation of the Sustainable Communities Strategy of Connect SoCal; encouraging use of active transportation, or human powered transportation such as bicycles, tricycles, wheelchairs, electric wheelchairs/scooters, skates, and skateboards; and supporting alternative fueled vehicles. The 2020 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in infill areas well served by transit.

In addition, the 2020 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). The 2020 RTP/SCS strategies support local planning and projects that serve short trips, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. The 2020 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and State funding, and to expand the potential for all people to use active transportation.

[South Coast Air Quality Management District Air Quality Management Plan](#)

The South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) is the regional blueprint for achieving air quality standards in the South Coast Air Basin, an area that includes Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties. Through a combination of regulatory and incentive approaches via partnerships at all levels of government, healthy air quality is within reach.

SCAQMD approved the Final 2022 AQMP on December 2, 2022. The Final 2022 AQMP builds upon measures already in place from previous AQMPs to reduce air pollution and meet the federal ozone standard established by the EPA in 2015. It includes a variety of additional actions and strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission emissions technologies, when cost-effective and feasible, and low NOx technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other Clean Air Act measures to achieve the 2015 8-hour ozone standard.

[South Bay Bicycle Master Plan: Draft Final Plan](#)

The South Bay Bicycle Master Plan (August 2011) is intended to guide the development and maintenance of a comprehensive bicycle network and set of programs and policies throughout the cities of El Segundo, Gardena, Hermosa Beach, Lawndale, Manhattan Beach, Redondo Beach, and Torrance over a period of 20 years. The Plan recommends programs meant to promote and increase bicycle ridership for all levels of ability across the South Bay.

[City of Gardena Climate Action Plan 2017](#)

The City of Gardena, in cooperation with the South Bay Cities Council of Governments, has developed a Climate Action Plan (CAP) to reduce GHG emissions within the City. The City's CAP



serves as a guide for action by setting GHG emission reduction goals and establishing strategies and policy to achieve desired outcomes over the next 20 years. The CAP 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.

[City of Gardena General Plan](#)

The City of Gardena Community Development Element, Land Use Plan and Circulation Plan contain the following goals and policies potentially relevant to the proposed Project:

[Community Development Element, Land Use Plan](#)

LU Policy 3.6: New commercial and industrial developments shall meet or exceed local and state requirements pertaining to noise, air, water, seismic safety and any other applicable environmental regulations.

[Community Development Element, Circulation Plan](#)

CI Goal 1: Promote a safe and efficient circulation system that benefits residents and businesses, and integrates with the greater Los Angeles/South Bay transportation system.

CI Policy 1.1: Prioritize long-term sustainability for the City of Gardena, in alignment with regional and state goals, by promoting infill development, reduced reliance on single-occupancy vehicle trips, and improved multi-modal transportation networks, with the goal of reducing air pollution and greenhouse gas emissions, thereby improving the health and quality of life for residents.

CI Goal 3: Develop Complete Streets to promote alternative modes of transportation that are safe and efficient for commuters, and available to persons of all income levels and disabilities.

CI Policy 3.1: Work with Gardena Municipal Bus Lines and MTA to increase the use of public transit, establish or modify routes, and improve connectivity to regional services.

CI Policy 3.2: Maintain, to the extent fiscally feasible, and regularly evaluate the efficiency and effectiveness of the Gardena Municipal Bus Lines and Dial-a-Ride services for City residents.

CI Policy 3.3: Maintain and expand sidewalk installation and repair programs, particularly in areas where sidewalks link residential neighborhoods to local schools, parks, and shopping areas.

CI Policy 3.4: Maintain a citywide bicycle route and maintenance plan that promotes efficient and safe bikeways integrated with the MTA's regional bicycle system.



5.7.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to greenhouse gas emissions and climate change-related impacts. A project would result in a significant impact related to greenhouse gas emissions if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (refer to Impact Statement 5.7-1); and/or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (also refer to Impact Statement 5.7-1).

Based on these standards and significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a "significant unavoidable impact."

5.7.5 IMPACTS AND MITIGATION MEASURES

Impact 5.7-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis: Potential development of the Project would generate GHGs during the construction and operational phases. The Project's primary source of construction-related GHGs would result from emissions of CO₂ associated with construction and worker vehicle trips; refer to Table 5.7-1, Construction GHG Emissions (Metric Tons/Year). Additionally, development of the Project would require grading, and would also include site preparation, building construction, and architectural coating phases.

As shown in Table 5.7-1, Project construction-related activities would generate a maximum of approximately 389,296.3 MTCO₂e of GHG emissions over the course of construction. Construction GHG emissions are typically summed and amortized over the Project's lifetime (assumed to be 30 years), then added to the operational emissions.¹ The amortized Project emissions would be approximately 12,976.5 MTCO₂e per year. Once construction is complete, the generation of construction-related GHG emissions would cease.

¹ The Project lifetime is based on SCAQMD's standard 30-year assumption (South Coast Air Quality Management District, Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13, August 26, 2009).



**Table 5.7-1
Construction GHG Emissions (Metric Tons/Year)**

Year	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
2024	0	26,089.0	26,089.0	1.1	1.4	26,584.7
2025	0	25,549.7	25,549.7	1.1	1.4	26,032.2
2026	0	25,098.8	25,098.8	1.1	1.4	25,577.5
2027	0	24,662.0	24,662.0	0.5	1.4	25,112.7
2028	0	24,302.2	24,302.2	0.5	1.4	24,749.7
2029	0	23,815.2	23,815.2	0.5	1.4	24,257.7
2030	0	23,403.1	23,403.1	0.4	1.3	23,831.2
2031	0	23,001.9	23,001.9	0.4	1.3	23,427.7
2032	0	22,691.4	22,691.4	0.4	1.3	23,105.2
2033	0	22,269.8	22,269.8	0.4	0.7	22,515.7
2034	0	21,939.2	21,939.2	0.4	0.7	22,171.3
2035	0	21,636.6	21,636.6	0.4	0.7	21,865.0
2036	0	21,430.5	21,430.5	0.4	0.7	21,646.9
2037	0	21,126.5	21,126.5	0.3	0.7	21,340.2
2038	0	20,928.3	20,928.3	0.3	0.6	21,129.6
2039	0	20,733.6	20,733.6	0.3	0.6	20,933.9
2040	0	20,618.5	20,618.5	0.3	0.6	20,818.5
Total	0	389,296.3	389,296.3	8.8	17.6	395,099.7

Source: CalEEMod version 2022.1

The operational phase of the Project would generate GHGs primarily from the Project’s operational vehicle trips and building energy (electricity and natural gas) usage; refer to [Table 5.7-2, Operational GHG Emissions \(Metric Tons/Year\)](#). Other sources of GHG emissions would be minimal.



**Table 5.7-2
Operational GHG Emissions (Metric Tons/Year)**

Category	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Area	0	226	226	<0.1	<0.1	227
Energy	0	23,870	23,870	2	0.1	23,972
Mobile	0	75,205	75,205	3	3	76,208
Waste	866	0	866	87	0	3,031
Water	155	394.0	549	16	0.4	1,063
Total	1,021	99,695	100,716	108	4	104,501

Source: CalEEMod version 2022.1

Table 5.7-3, *Net Operational GHG Emissions (Metric Tons/Year)*, provides the net operational emissions associated with the proposed Project, after accounting for GHG emissions associated with existing development. As shown in Table 5.7-3, emission calculations generated from CalEEMod demonstrate that Project operations would generate a net benefit in operational criteria pollutant emissions since the existing scenario generates greater emissions than the proposed Project. Therefore, Project operational impacts would be less than significant.

**Table 5.7-3
Net Operational GHG Emissions (Metric Tons/Year)**

Source	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Existing Conditions						
Total	1,090	290,425	291,515	110	12	297,778
Proposed Project						
Total	1,021	99,695	100,716	108	4	104,501
Net Emissions						
Total	-69	-190,730	-190,799	-2	-8	-193,277

Source: CalEEMod Version 2022.1; refer to Appendix E for model outputs.



Consistency with Applicable GHG Plans, Policies, or Regulations

Gardena Climate Action Plan Consistency

As stated, the CAP's 2020 and 2035 reduction targets (i.e., below baseline emission levels) parallel the State's commitment to reducing GHG emissions under AB 32. Through 2035, the CAP is a qualifying plan under CEQA Guidelines Section 15183.5. In the coming years, as the CAP is reviewed and revised, measures will be implemented to achieve the 2035 target. The CAP includes monitoring and a target for tracking progress with re-inventorying at later dates.

2022 Scoping Plan Consistency

The goal to reduce GHG emissions to 1990 levels by 2020 (Executive Order S-3-05) was codified by the California Legislature as AB 32. In 2008, CARB approved a 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 2022 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2030 target, as well as to achieve the State's target of carbon neutrality by year 2045. These measures build upon those identified in the previous Scoping Plan updates. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted subsequently as required to achieve Statewide GHG emissions targets.

Table 5.7-4, Project Consistency with the 2022 Scoping Plan, summarizes the Project's consistency with applicable policies and measures of the 2022 Scoping Plan. As indicated in Table 5.7-4, the Project would not conflict with any of the provisions of the 2022 Scoping Plan and would support four of the action categories through energy efficiency, water conservation, recycling, and landscaping.



**Table 5.7-4
 Project Consistency with the 2022 Scoping Plan**

Sector/Source	Category/Description	Consistency Analysis
Area		
SCAQMD Rule 445 (Wood Burning Devices)	Restricts the installation of wood-burning devices in new development.	<u>Mandatory Compliance</u> . Approximately 15 percent of California’s major anthropogenic sources of black carbon include fireplaces and woodstoves. ¹ The Project would not include hearths (woodstove and fireplaces) as mandated by this rule.
Energy		
California Renewables Portfolio Standard, Senate Bill 350 (SB 350) and Senate Bill 100 (SB 100)	Increases the proportion of electricity from renewable sources to 33 percent renewable power by 2020. SB 350 requires 50 percent by 2030. SB 100 requires 44 percent by 2024, 52 percent by 2027, and 60 percent by 2030. It also requires the State Energy Resources Conservation and Development Commission to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.	<u>No Conflict</u> . The Project would utilize electricity provided by Southern California Edison (SCE), which is required to meet the 2020, 2030, 2045, and 2050 performance standards. In 2018, 31 percent of SCE’s electricity came from renewable resources. ² By 2030 SCE plans to achieve 80 percent carbon-free energy. ³
All Electric Appliances for New Residential and Commercial Buildings	All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.	<u>Mandatory Compliance</u> . Project-specific plans would be required to demonstrate that only all electric appliances would be installed for residential land uses starting in 2026, consistent with this requirement.



Table 5.7-4 (continued)
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
<p>California Code of Regulations, Title 24, Building Standards Code</p>	<p>Requires compliance with energy efficiency standards for residential and nonresidential buildings.</p>	<p><u>Mandatory Compliance.</u> Future development associated with Project implementation would be required to meet the applicable requirements of the 2022 (or more current) Title 24 Building Energy Efficiency Standards. Gardena Municipal Code, Chapter 15.04, <i>General Building Provisions</i>, adopts by reference California Building Standards Code Title 24 in their entirety, subject to amendments and changes.</p>
<p>California Green Building Standards (CALGreen) Code Requirements</p>	<p>All bathroom exhaust fans are required to be ENERGY STAR compliant.</p>	<p><u>Mandatory Compliance.</u> Project construction plans would be required to demonstrate that energy efficiency appliances, including bathroom exhaust fans, and equipment are ENERGY STAR compliant.</p>
	<p>HVAC system designs are required to meet American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards.</p>	<p><u>Mandatory Compliance.</u> Project construction plans would be required to demonstrate that the HVAC system meets the ASHRAE standards.</p>
	<p>Air filtration systems are required to meet a minimum efficiency reporting value (MERV) 8 or higher.</p>	<p><u>Mandatory Compliance.</u> Project developments would be required to install air filtration systems (MERV 8 or higher) as part of its compliance with 2022 (or more current) Title 24 Section 401.2, Filters.</p>
	<p>Refrigerants used in newly installed HVAC systems shall not contain any chlorofluorocarbons.</p>	<p><u>Mandatory Compliance.</u> Project development must meet this requirement as part of its compliance with the CALGreen Code.</p>
	<p>Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to eight percent of total parking spaces is required for such vehicles.</p>	<p><u>Mandatory Compliance.</u> Project developments would meet this requirement as part of its compliance the CALGreen Code.</p>



Table 5.7-4 (continued)
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
Mobile Sources		
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.	<u>Consistent</u> . The Project would be consistent with this strategy by supporting the use of zero-emission and low-emission vehicles; refer to CALGreen Code discussion above.
Senate Bill (SB) 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the state's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035.	<u>Consistent</u> . As demonstrated in <u>Table 5.7-5</u> , the Project would comply with the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), and therefore, the Project would be consistent with SB 375.
Water		
CCR, Title 24, Building Standards Code	Title 24 includes water efficiency requirements for new residential and non-residential uses.	<u>Mandatory Compliance</u> . Refer to the discussion under 2022 Title 24 Building Standards Code and CALGreen Code, above.



Table 5.7-4 (continued)
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
Water Conservation Act of 2009 (Senate Bill X7-7)	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal. This is an implementing measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convene, treat, and distribute the water; it also reduces emissions from wastewater treatment.	<u>Consistent</u> . Refer to the discussion under 2022 Title 24 Building Standards Code and CALGreen Code, above. Also, refer to Section 5.9, Hydrology and Water Quality.
Solid Waste		
California Integrated Waste Management Act (IWMA) of 1989 and Assembly Bill (AB) 341	The IWMA mandates that State agencies develop and implement an integrated waste management plan which outlines the steps to divert at least 50 percent of solid waste from disposal facilities. AB 341 directs the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling and sets a Statewide goal for 75 percent disposal reduction by the year 2020.	<u>Mandatory Compliance</u> . Future projects associated with implementation of the Project would be required to comply with AB 341, which requires multifamily residential developments of five units or more to arrange for recycling services. This would reduce the overall amount of solid waste disposed of at landfills. The decrease in solid waste would in return decrease the amount of methane released from decomposing solid waste.



Table 5.7-4 (continued)
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
<p>Notes:</p> <ol style="list-style-type: none"> California Air Resources Board, <i>California's 2017 Climate Change Scoping Plan</i>, Figure 4: California 2013 Anthropogenic Black Carbon Emission Sources, November 2017. California Energy Commission, <i>2018 Power Content Label Southern California Edison</i>, https://www.energy.ca.gov/sites/default/files/2020-01/2018_PCL_Southern_California_Edison.pdf, accessed June 24, 2020. Southern California Edison, <i>The Clean Power and Electrification Pathway</i>, https://newsroom.edison.com/internal_redirect/cms.ipressroom.com.s3.amazonaws.com/166/files/20187/g17-pathway-to-2030-white-paper.pdf, accessed June 24, 2020. 		

SCAG RTP/SCS Consistency

On September 3, 2020, SCAG’s Regional Council adopted Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy [2020 RTP/SCS]). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region’s future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG’s RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15.

The RTP/SCS contains over 4,000 transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region’s network, and expand mobility choices for everyone. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve State GHG emissions reduction goals and Federal Clean Air Act (FCAA) requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the RTP/SCS is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the State.



The Project’s consistency with the RTP/SCS goals is analyzed in detail in Table 5.7-5, Project Consistency with the 2020-2045 RTP/SCS.

**Table 5.7-5
Project Consistency with the 2020-2045 RTP/SCS**

SCAG Goals	Consistency Analysis
Goal 1: Encourage regional economic prosperity and global competitiveness.	<u>Consistent</u> . The Project would provide for increased residential development at higher densities in proximity to areas served by transit, jobs, and services, which would promote economic prosperity and development of the Project Area in an orderly and market-driven manner, consistent with local priorities.
Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.	<u>Consistent</u> . Although this Project is not a transportation improvement project, the Project would allow for infill residential development at higher densities in locations near existing transit routes, goods, and services. The availability of public transportation and the focus on increasing density relative to the existing public transportation, enables Project implementation to reduce VMT per capita under cumulative buildout conditions, and associated transportation-related emissions, compared to existing conditions and the existing land use plan for the Project Area.
Goal 3: Enhance the preservation, security, and resilience of the regional transportation system.	<u>Not applicable</u> . This is not a transportation improvement project and is therefore not applicable.
Goal 4: Increase person and goods movement and travel choices within the transportation system.	<u>Not applicable</u> . This is not a transportation improvement project and is therefore not applicable. However, the Project would not reduce person and goods movement and travel choices within the transportation system.
Goal 5: Reduce greenhouse gas emissions and improve air quality.	<u>Consistent</u> . The Project Area is located within an urban area. The Project would provide for increased residential development within an urbanized area served by existing transit, and would reduce VMT per capita under the City’s cumulative buildout conditions when compared to the existing condition and the existing land use plan for the Project Area, which would reduce GHG and air quality emissions.



Table 5.7-5 (continued)
Project Consistency with the 2020-2045 RTP/SCS

SCAG Goals	Consistency Analysis
Goal 6: Support healthy and equitable communities	<p><u>Consistent</u>. The Project would provide for increased residential development at higher densities in proximity to goods and services, as well as in proximity to transit. Further, Project implementation would provide for a denser urban environment with improved amenities that support active (non-motorized) transportation opportunities, including walking and bicycling within the Project Area. Additionally, the Project would reduce VMT per service population compared to the existing condition and the existing land use plan for the Project Area, which would reduce GHG and air quality emissions. Overall, the Project provides for implementation of the City’s adopted Housing Element, which is required to affirmatively further fair housing (AFFH) that further supports equitable communities, including fair housing enforcement, providing a range of housing options, locational choices, and price points to accommodate diverse needs, prioritize resources to implement neighborhood improvements to bridge disparities, pursuing actions to reduce or mitigate the displacement of existing tenants, and ensuring disadvantaged areas are represented in the advisement or decision-making related to housing. Therefore, the Project would support the goal of supporting healthy and equitable communities.</p>
Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.	<p><u>Not applicable</u>. This is not a project-specific policy and is therefore not applicable.</p>
Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	<p><u>Not applicable</u>. This is not a project-specific policy and is therefore not applicable.</p>



Table 5.7-5 (continued)
Project Consistency with the 2020-2045 RTP/SCS

SCAG Goals	Consistency Analysis
Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.	<u>Consistent</u> . The Project would allow for a variety of housing types at varying densities, which are supported by a variety of transportation options.
Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats.	<u>Not applicable</u> . The Project Area is urbanized and primarily developed with minimal vacant lots. The Project Area does not include any changes to natural or agricultural lands.
Source: Southern California Association of Governments, <i>Connect SoCal – The Regional Transportation Plan/Sustainable Communities Strategy</i> , 2020.	

Compliance with applicable State standards would ensure consistency with State and regional GHG reduction planning efforts. The goals stated in the RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in [Table 5.7-5](#), the proposed Project would be consistent with the stated goals of the RTP/SCS. Therefore, the proposed Project would not result in any significant impacts or interfere with SCAG’s ability to achieve the region’s post-2020 mobile source GHG reduction targets.

Implementation of the proposed Project would allow for the development of up to 12,167 net new housing units with a population increase of approximately 33,338 people. It is noted that residential development associated with implementation of the proposed land use designations would result in a reduction of the non-residential development capacity anticipated by the General Plan, as sites currently anticipated for non-residential development would be developed with residential uses.

Although the proposed Project would provide for increased population growth within the Project Area when compared to SCAG’s growth projections, the proposed Project is intended to identify and plan for future population growth and housing development within the City. The Project would implement the goals and policies of the General Plan and accommodate the City’s fair share of statewide housing needs, which are allocated by SCAG, based on regional numbers provided by the HCD on a regular basis (every five to eight years). The City of Gardena 2021-2029 Housing Element was adopted in February 2023 and accommodates the City’s share of the RHNA for the 2021-2029 planning period of 5,735 units, as well as an approximate 22 percent buffer for affordable units, as recommended by the Department of Housing and Community Development. The City’s 2021-2029 Housing Element identifies the implementation of Housing Overlays as the primary opportunity to accommodate the City’s RHNA allocation. In addition to implementation of the housing overlays to the parcels (Inventory Sites) identified in the 2021-



2029 Housing Element, the City identified opportunities for the exploration of additional residential development by proposing to apply the housing overlays to additional parcels (Non-inventory Sites) and introducing and applying Very High-Density Residential land use designations and zones. The Project has the potential to yield an additional 12,167 dwelling units and 33,338 residents over the 2021 conditions based on a DOF persons per household of 2.74. This would be an approximately 56 percent increase over existing conditions and an approximately 42 percent increase over SCAG's projected future conditions (2045). Thus, Project implementation would exceed the population projections anticipated by SCAG's growth forecasts.

SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts for local Los Angeles County governments, among other counties. SCAG provides household, population, and employment projection estimates in five-year increments through 2045. While Project growth projections are anticipated to exceed SCAG's 2045 population, SCAG's projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. It is likely that through a combination of market changes, catalytic projects, updated land use direction in the General Plan, and other factors, Gardena could capture either more or less of expected regional growth than forecasted by SCAG. Discrepancies between Project and regional forecasts can also be attributed to the RHNA process. The proposed Project is intended to accommodate the City's 2021-2029 RHNA; SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs and associated General Plan growth projections will be included as part of SCAG's future growth forecasts.

As discussed in Section 5.12, Population and Housing, the proposed Project does not include site-specific development and would provide for the planning of the potential growth associated with the RHNA and additional residential development, which would also be considered as part of future updates to plans and programs, including the next update to SCAG's RTP/SCS. The General Plan includes policies that reduce environmental impacts associated with growth, such as air quality, noise, and traffic; Sections 5.1 through 5.16 and 6.0 of this Draft EIR provide a discussion of environmental effects associated with overall development allowed under the proposed Project. Each of these EIR sections include relevant policies and action items that would reduce potential environmental impacts associated with growth, to the greatest extent feasible. Further, as demonstrated above, the Project would be consistent with SCAG's RTP/SCS goals. The Project would allow for infill residential development at higher densities in locations near existing transit routes, goods, and services. The availability of public transportation and the focus on increasing density relative to the existing public transportation, enables Project implementation to reduce VMT per capita under cumulative buildout conditions, and associated transportation-related emissions, compared to existing conditions and the existing land use plan for the Project Area.

Overall, the Project would not generate GHG emissions that would have a significant impact on the environment or conflict with any applicable plans, policies, or regulations, including GHG



reduction actions/strategies in the City's CAP, the 2022 Scoping Plan and the 2020-2045 RTP/SCS, or the requirements contained with the CAP. Therefore, the Project's incremental contribution to GHG emissions and climate change would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.7.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the related projects in the City determined as having the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to greenhouse gas emissions may occur. The cumulative projects' setting for greenhouse gas emissions would be similar for the region and for projects within the City.

Would the Project, combined with other related cumulative projects, generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis: The topic of GHG emissions is inherently a cumulative impact. Though significance thresholds can be developed by air districts, as well as State and federal regulatory agencies, these thresholds and their related goals are ultimately designed to effect change at a global level. In 2018, California greenhouse gas emissions totaled 425 million metric tons CO₂e.^{2,3} As described under Impact 5.7-1, the Project would be consistent with the applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gases, and would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Since greenhouse gases are by their nature cumulative, the impact analysis under Impact 5.7-1 is also applicable herein. Project operations would not generate a cumulatively considerable greenhouse gas impact. As a result, the proposed Project's incremental contribution to cumulative greenhouse gas emissions impacts would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less than Significant Impact.

5.7.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with greenhouse gas emissions would occur under the proposed Project.

² <https://www.arb.ca.gov/cc/inventory/data/data.htm>

³ https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2018/ghg_inventory_trends_00-18.pdf



5.7.8 REFERENCES

- Alta Planning + Design, *South Bay Bicycle Master Plan: Draft Final Plan*, August 2011.
- California Air Resources Board (CARB), *California Greenhouse Gas Emissions for 2000 to 2019: Trends of Emissions and Other Indicators*,
https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf, July 2021, accessed May 1, 2023.
- California Climate Change Assessment, *California's Fourth Climate Change Assessment*, 2019.
- California Energy Commission, *Inventory of California Greenhouse Gas Emissions and Sinks 1990 to 2004 (CEC-600-2006-013-SF.)*,
<http://web.archive.org/web/20170323185651/http://www.energy.ca.gov/2006publications/CEC-600-2006-013/CEC-600-2006-013-SF.PDF>
- California Energy Commission (CEC), *2022 Building Energy Efficiency Standards Summary*, August 2021.
- City of Gardena, *Climate Action Plan*, 2017, <https://www.cityofgardena.org/development-and-planning/>
- Intergovernmental Panel on Climate Change, "Climate Change 2013: The Physical Science Basis, Summary for Policymakers.",
http://www.climatechange2013.org/images/report/WG1AR5_SPM_FINAL.pdf
- South Bay Cities Council of Governments (SBCCOG), *Sustainable South Bay: An Integrated Land Use and Transportation Strategy*, July 2009.
- Southern California Association of Governments, *Connect SoCal (2020-2045 Regional transportation Plan/Sustainable Communities Strategy*, Adopted Final Connect SoCal,
<https://scag.ca.gov/read-plan-adopted-final-plan>, September, 2020.
- U.S. Department of State, *The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050*, November 2021.
- U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2009*, April 2011.
- U.S. Environmental Protection Agency, *Climate Change and Extreme Heat, What You Can Do to Prepare*, October 2016.
- United States Geological Survey (USGS), *Disappearing Beaches: Modeling Shoreline Change in Southern California*, <https://www.usgs.gov/programs/cmhrp/news/disappearing-beaches-modeling-shoreline-change-southern-california>, May 2017, accessed May 1, 2023



U.S. Green Building Council, *Press Room: Benefits of Green Building*,
<https://www.usgbc.org/press/benefits-of-green-building>, accessed May 1, 2023.



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5.8 HAZARDS AND HAZARDOUS MATERIALS

5.8.1 PURPOSE

The purpose of this section is to describe the existing conditions and regulatory environment related to hazards and hazardous materials and identify potential impacts that could result from implementation of the Land Use Plan and Zoning Amendment Project.

For the purpose of this analysis, the term “hazardous material” refers to both hazardous substances and hazardous waste. Other hazards, such as potential airport-related safety hazards for people residing/working in the Project Area, interference with an adopted emergency response plan, and exposure of people/structures to risk involving wildland fires, are also addressed in this section.

5.8.2 ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS AND WASTE

Hazardous Materials

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating irreversible illness; or (2) pose a substantial present or potential hazard to human health and safety, or the environment when improperly treated, stored, transported, or disposed. Hazardous materials are mainly present because of industries involving chemical byproducts from manufacturing, petrochemicals, and hazardous building materials.

A material is defined as “hazardous” if it appears on a list of hazardous materials prepared by a federal, tribal, State, or local regulatory agency, or if it possesses characteristics defined as “hazardous” by such an agency.

Hazardous Waste

Hazardous waste is the subset of hazardous materials that have been abandoned, discarded, or recycled and is not properly contained, including contaminated soil or groundwater with concentrations of chemicals, infectious agents, or toxic elements sufficiently high to increase human mortality or to destroy the ecological environment. If a hazardous material is spilled and cannot be effectively picked up and used as a product, it is considered to be hazardous waste. If a hazardous material is unused, and it is obvious there is no realistic intent to use the material, it is also considered to be a hazardous waste. Examples of hazardous materials include flammable and combustible materials, corrosives, explosives, oxidizers, poisons, materials that react violently with water, radioactive materials, and chemicals.



Transportation of Hazardous Materials

The transportation of hazardous materials within California is subject to various federal, State, and local regulations. The City has no direct authority to regulate the transport of hazardous materials on State highways or rail lines. Transportation of hazardous materials by truck and rail is regulated by the U.S. Department of Transportation (DOT). DOT regulations establish criteria for safe handling procedures. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery, or the loading of such materials (California Vehicle Code Section 31602(b), 32104(a)). The California Highway Patrol (CHP) designates through routes to be used for the transportation of hazardous materials. Transportation of hazardous materials is restricted to these routes except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users.

HAZARDOUS SITES

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act (CEQA) requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency (Cal EPA) to develop and maintain an annually updated Cortese List. The California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List.

The Cortese List is comprised of information from the following:

EnviroStor Data Management System

The DTSC maintains the EnviroStor Data Management System, which provides information on hazardous waste facilities (both permitted and corrective action) as well as any available site cleanup information. This site cleanup information includes: Federal Superfund Sites (NPL), State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Corrective Action Sites, Tiered Permit Sites, and Evaluation/Investigation Sites. The hazardous waste facilities include: Permitted–Operating, Post-Closure Permitted, and Historical Non-Operating.

There are 13 “Active” status sites listed in the EnviroStor database within the Project Area (DTSC 2023). Several active sites are identified for Housing Overlays and/or are located within close proximity to parcels that are proposed for land use and zone changes as part of the Project.



Gardena Sumps, located at 1450 Artesia Boulevard in the southern region of the City, is an active contaminated site under the State’s response.¹ Parcels that are directly adjacent to this site are part of the Project. However, no new development is anticipated; the Project proposes to rezone the adjacent parcels to reflect existing development. 2403 Marine Avenue is another active contaminated site under the State’s response located towards the center of the City, and is proposed to receive a Housing Overlay as part of the Project. Sonic Plating Company, a corrective action hazardous site is located at 1930 Rosecrans Avenue. The Plating Company site is located in the center of the City, and is proposed to receive a Housing Overlay as part of the Project.

GeoTracker

GeoTracker is the California State Water Resource Control Board’s (SWRCB’s) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, Site Cleanup Program).

There are 123 locations in the City placed on the GeoTracker list. Of those 123 sites, three within the Project Area remain “Open” and are Leaking Underground Storage Tank (LUST) Cleanup Sites. The Savings Oil Company site at 1401 Rosecrans Avenue is in the Site Assessment phase. The site is currently an auto repair services use and is directly adjacent to parcels that are part of the Project. The Southwestern Precision Company site located at 1939 144th Street is eligible for closure. The site, which is located directly south of parcels that are part of the Project, is centrally located in the City and contains an auto repair services shop. The United Oil #44/Rapid Gas #44 site located at 18130 Western Avenue South is in remediation as of 2007. The site at 18130 South Western Avenue, is located along the southern border of City limits, on a parcel that is proposed for a land use and zone change, as part of the proposed Project. The site is currently being utilized as a gas station. All three of these sites are in a stage of cleanup (SWRCB 2023).

Solid Waste Information System (SWIS)

The Solid Waste Information System (SWIS) is a database of solid waste facilities that is maintained by California’s Department of Resources Recycling and Recovery (CalRecycle). The SWIS database identifies active, planned, and closed sites. There are two active facilities listed in the SWIS database located within Gardena: American Waste Transfer Station (19-AA-0001), located at 1449 West Rosecrans and CleanStreet (19-AA-1150), located at 1916 West 169th Street (CalRecycle, 2023a). A third facility, California Waste Services (CWS) (19-AR-1225), located at 621 West 152nd Street is listed as being within the City of Gardena; however, this site is located east of Vermont Avenue within Los Angeles.

¹ The applicant for a project at 1450 Artesia Boulevard requests approval to adopt a new specific plan (the 1450 Artesia Specific Plan), a zone text Amendment, a zone map Amendment, a development agreement, site plan review, and lot line adjustment. A project-specific EIR is currently being prepared for this proposed project which is identified as a cumulative project within this EIR. Refer to Section 4.0, Basis of Cumulative Analysis.



The American Waste Transfer Station is an active solid waste facility that is centrally located within the City; the Station is located on a parcel that is proposed for a land use and zone change, as part of the proposed Project. As provided by CalRecycle, the American Waste Transfer Station has a maximum permitted throughput of 2,225 tons per day, and a maximum permit capacity of 4,032 tons per day (CalRecycle 2023b).

CleanStreet is an active solid waste operation site with a maximum permitted throughput of 15 tons per day, and a maximum permit capacity of 5,475 tons per year (CalRecycle 2023d). CleanStreet is located directly adjacent to parcels that are part of the Project.

California Waste Services is an active large volume Construction and Demolition/Inert (CDI) Debris Processing Facility with a maximum permitted throughput of 1,000 tons per day, and a maximum permit capacity of 300,000 tons per year (CalRecycle 2023c). There are no parcels that are part of the Project adjacent to the Waste site; the nearest Project parcel to California Waste Services, Memorial Hospital of Gardena, is located less than half a mile west.

HAZARDS FROM AIR TRAFFIC

The Los Angeles County Airport Land Use Commission (ALUC) adopts plans to protect and promote the safety and welfare of airport users and residents in the airport vicinity. Specifically, these plans seek to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities encroach upon or adversely affect the use of navigable airspace.

Major Regional Airport Facilities

Los Angeles International Airport (LAX)

The closest major airport to the City of Gardena is the Los Angeles International Airport (LAX). Located in the City of Los Angeles, LAX is the primary airport serving the Greater Los Angeles Area and is a hub for several major United States carriers. Besides serving an extensive domestic network, LAX is also a key international gateway, with flights to six continents and 71 international destinations. LAX is the busiest air carrier airport in terms of passenger volume and also handles the majority of the air cargo within the five-county Southern California region (City of Los Angeles 2004).

LAX is approximately six miles northwest of the Project Area; the Project Area is not located within the boundaries of the LAX Airport Influence Area (AIA).

Local Airport Facilities

Hawthorne Municipal Airport/Jack Northrop Field

Hawthorne Municipal Airport, also known as Jack Northrop Field, is an FAA-designated general aviation reliever airport that has a single runway measuring 4,884 feet long by 100 feet wide and is owned by the City of Hawthorne. The Hawthorne Municipal Airport is located approximately one mile northwest of the Project Area. The Project Area is not located within the boundaries of



the Hawthorne Municipal Airport Influence Area (AIA); the Hawthorne Municipal Airport AIA is contained within the boundaries of the City of Hawthorne.

The City of Hawthorne General Plan Noise Element provides noise contours (Figures 5A and 5B) for the City of Hawthorne, which includes the airport. The noise contours associated with the airport do not extend beyond the municipal boundaries of the City of Hawthorne.

[Compton Woodley Airport](#)

The Compton/Woodley Airport, a general aviation airport facility operated by the County of Los Angeles, is located on the northeast corner of Alondra Boulevard and Central Avenue. The airport was established in 1924 and is the oldest, continuously operating airport in the Los Angeles basin and the only one without a traffic control tower. The airport covers 77 acres, of which 47 are used for the runway/taxiway system and 30 for the existing building area (City of Compton 2011).

The Project Area is approximately four miles west of the Compton/Woodley Airport, and is not located within the boundaries of its AIA.

[Torrance Airport/Zamperini Field](#)

Torrance Airport serves as a general aviation airport with approximately 543 based aircraft. While home to primarily private aircraft, it also houses several Fixed Base Operators (FBOs) which are available for flight instruction, aircraft repair, and charter flights. The Airport is also the headquarters for Robinson Helicopters, the largest manufacturer of private helicopters in the United States (City of Torrance 2023).

The Project Area is located approximately seven miles north of the Torrance Airport, and is not within the boundaries of its AIA.

OTHER POTENTIAL HAZARDS

[Wildland Fire Hazards](#)

The State has charged the California Department of Forestry and Fire Protection (CALFIRE) with the identification of Fire Hazard Severity Zones within State Responsibility Areas (SRA). In addition, CALFIRE must recommend Very High Fire Hazard Severity Zones identified within any Local Responsibility Areas (LRA). The Fire Hazard Severity Zones maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards. According to the CALFIRE Fire Hazard Severity Zones Maps, the Project Area is not located within a Fire Hazard Severity Zone (CALFIRE 2023).

[Asbestos-Containing Materials \(ACM\)](#)

Asbestos, a natural fiber used in the manufacturing of different building materials, has been identified as a human carcinogen. Most friable (i.e., easily broken or crushed) asbestos-containing materials (ACM) were banned in building materials by 1978. By 1989, most major manufacturers had voluntarily removed non-friable ACM (i.e., flooring, roofing, and mastics/sealants) from the market. These materials, however, were not banned completely. The



Project Area includes existing development from and prior to the 1960s; therefore, the presence of ACM is likely in some structures.

Lead-Based Paint

Lead-based paint has been identified by the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA), and the Department of Housing and Urban Development (HUD) as a potential health risk to humans, particularly children, based on its effects to the central nervous system, kidneys, and bloodstream. The risk of lead-based paint has been classified by HUD based upon the age and condition of the painted surface. The Project Area includes existing development from and prior to the 1960s; therefore, the presence of lead-based paint is likely in some structures.

EMERGENCY RESPONSE AND EVACUATION ROUTES

The overall goal for emergency preparedness is to maintain regulations, plans, and protocol to reduce hazards and risks. This includes thorough implementation of plans and programs that directly relate to the goals of the Safety Plan, such as the City's hazard mitigation plan (currently in the process of being updated), and the City Emergency Operations Plan (EOP).

According to the General Plan Public Safety Plan, the City of Gardena maintains a contractual agreement with the Los Angeles County Fire Department (LACoFD) to provide fire protection and emergency medical services for the City. Emergency response within the City is divided into two districts, with Marine Avenue as the division line. The City supports a high level of multi-jurisdictional cooperation and communication for emergency planning and response management.

City and County personnel prepare for disaster situations by developing effective plans, conducting training and exercises, and ensuring facilities and equipment are ready for response. The City of Gardena EOP, adopted in 2017, utilizes the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). Both SEMS and NIMS are emergency management systems that provide a consistent template for all levels of government, non-governmental organizations, and the private sector to work together to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of their cause, size, location, or complexity.

As discussed in the City EOP, Gardena is included as part of the Los Angeles County Operational Area, and requests all mutual aid (except fire and law resources) through the Los Angeles County Operational Area. In times of emergency, the Sheriff of Los Angeles County has the overall responsibility to coordinate and support emergency operations within the County. The Operational Area would be the focal point for the information transfer and support requests by cities within the County. The Operational Area Coordinator and supporting staff would constitute the Operational Area Emergency Management Staff. Fire and law mutual aid is coordinated through the designated Regional Fire and Law Coordinators (City of Gardena 2017).



The City's major arterials generally serve as the primary routes for evacuation; however, evacuation routes will depend upon the emergency event and area affected. Law enforcement will identify the appropriate routes and assist residents leaving the City in the event an evacuation of all or part of the City is required. As part of the Public Safety Element Update (2021), the City of Gardena prepared an analysis to identify residential developments in zones that do not have at least two emergency evacuation routes. The analysis identified two parcels in a zone that warranted further study. Upon further analysis, both parcels were determined to have access to a loop road with at least two exit points. While all residential developments meet City standards, the City continues to coordinate with LACoFD and Gardena PD to provide ongoing education to residents about how to safely evacuate in the event of an emergency.

5.8.3 REGULATORY SETTING

FEDERAL

[Toxic Substances Control Act, Resource Conservation and Recovery Act \(RCRA\), Hazardous and Solid Waste Act](#)

The Federal Toxic Substances Control Act of 1976 and Resource Conservation and Recovery Act (RCRA) established a program administered by the U.S. EPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the “cradle to grave” system of regulating hazardous wastes.

[Comprehensive Environmental Response, Compensation and Liability Act](#)

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) is a law developed to protect the water, air, and soil resources from the risks created by past chemical disposal practices. This law is also referred to as the Superfund Act and regulates sites on the National Priority List (also known as Superfund sites). This law (U.S. Code Title 42, Chapter 103) provides broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified.

[Emergency Planning and Community Right-to-Know Act](#)

The federal Emergency Planning and Community Right-To-Know Act (EPCRA) was enacted to inform communities and residents of chemical hazards in their area. Businesses are required to report the locations and quantities of chemicals stored onsite to both State and local agencies. EPCRA requires the U.S. EPA to maintain and publish a digital database list of toxic chemical releases and other waste management activities reported by certain industry groups and Federal facilities. This database, known as the Toxic Release Inventory, gives the community more power to hold companies accountable for their chemical management.



[Clean Water Act](#)

The Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1972. The CWA is the principal statute governing water quality. It establishes the basic structure for regulating discharges of pollutants into the Waters of the United States and gives the EPA the authority to implement pollution control programs, such as setting wastewater standards for the industry. Under the CWA, the EPA has developed national water quality criteria recommendations for pollutants in surface waters. The statute's goal is to end all discharges entirely and to restore, maintain, and preserve the integrity of the Nation's waters. The CWA regulates both the direct and indirect discharge of pollutants into the Nation's waters. The CWA sets water quality standards for all contaminants in surface waters and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges, requires States to establish site-specific water quality standards for navigable bodies of water, and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA also funded the construction of sewage treatment plants and recognized the need for planning to address nonpoint sources of pollution.

[Hazardous Waste Operations and Emergency Response Standards](#)

The Occupational Safety and Health Administration (OSHA) issued the Hazardous Waste Operations and Emergency Response (HAZWOPER) standards, 29 Code of Federal Regulations (CFR) 1910.120 and 29 CFR 1926.65, to protect workers and enable them to handle hazardous substances safely and effectively. The latter standard is for the construction industry and is identical to 29 CFR 1910.120. The HAZWOPER standard covers employers performing the following general categories of work operations: hazardous waste site cleanup operations; operations involving hazardous waste that are conducted at treatment, storage, and disposal facilities; and emergency response operations involving hazardous substance releases. The HAZWOPER standards provide information and training criteria to employers, emergency response workers, and other workers potentially exposed to hazardous substances to improve workplace safety and health and reduce workplace injuries and illnesses from exposures to hazardous substances. It is critical that employers and their workers understand the scope and application of HAZWOPER and can determine which sections apply to their specific work operations.

[Code of Federal Regulations, Title 40, Section 61 Subpart M](#)

Title 40 CFR Section 61 Subpart M, *National Emissions Standards for Asbestos*, sets forth emissions standards for asbestos from demolition and renovation activities, and for waste disposal from such activities.

[Code of Federal Regulations, Title 40, Section 761.61](#)

Title 40 CFR Section 761.61, *PCB Remediation Waste*, provides cleanup and disposal options for PCB remediation waste. Any person cleaning up and disposing of PCBs managed under Title 40



CFR Section 761.61 is required to do so based on the concentration at which the PCBs are found. This section does not prohibit any person from implementing temporary emergency measures to prevent, treat, or contain further releases or mitigate migration to the environment of PCBs or PCB remediation waste.

[Code of Federal Regulations, Title 29, Section 1926.62](#)

Title 29 CFR Section 1926.62, *Lead*, sets standards for occupational health and environmental controls for lead exposure in construction, regardless of the lead content of paints and other materials. The standards include requirements addressing exposure assessment, methods of compliance, respiratory protection, protective clothing and equipment, hygiene facilities and practices, medical surveillance, medical removal protection, employee information and training, signs, recordkeeping, and observation and monitoring.

[U.S. Environmental Protection Agency's Lead Renovation, Repair and Painting Program Rules](#)

EPA's 2008 Lead-Based Paint Renovation, Repair and Painting Rule (as amended in 2010 and 2011) aims to protect the public from LBP hazards associated with renovation, repair, and painting activities. These activities can create hazardous lead dust when surfaces with lead paint, even from many decades ago, are disturbed. The rule requires workers to be certified and trained in the use of lead-safe work practices, and requires renovation, repair, and painting professionals to be EPA-certified. These requirements became fully effective April 22, 2010.

[Federal Air Regulations, Part 77](#)

The Federal Aviation Administration (FAA) is charged with the review of construction activities that occur in the vicinity of airports. Their role in reviewing these activities is to ensure new structures do not result in hazards to navigation and thus derogate the safety of the National Airspace System. The regulations contained in Federal Aviation Regulation (FAR) Part 77 are designed to ensure no hazards are allowed to exist that would endanger the public. Proposed structures are also evaluated against Terminal En Route Procedures, which ensure a structure does not adversely impact flight procedures. The construction of tall structures, such as buildings, construction cranes, and cell towers, in the vicinity of an airport can be hazardous to the navigation of airplanes. The FAA, through FAR Part 77, established a method of identifying surfaces that should be free from penetration by obstructions in order to maintain sufficient airspace around airports. FAR Part 77, in effect, identifies the maximum height at which a structure would be considered an obstacle at any given point around an airport. The extent of the off-airport coverage needing to be evaluated for tall-structure impacts can extend miles from an airport facility. In addition, FAR Part 77 establishes standards for determining whether objects constructed near airports would be considered obstructions in navigable airspace, sets forth notice requirements of certain types of proposed construction or alterations, and provides for aeronautical studies to determine the potential impacts of a structure on the flight of aircraft through navigable airspace.



STATE

State Water Resources Control Board

Brownfields are underutilized properties where reuse is hindered by the actual or suspected presence of pollution or contamination. The goals of the SWRCB's Brownfield Program are to:

- Expedite and facilitate site cleanups and closures for Brownfields sites to support reuse of those sites;
- Preserve open space and greenfields;
- Protect groundwater and surface water resources, safeguard public health, and promote environmental justice; and
- Streamline site assessment, clean up, monitoring, and closure requirements and procedures within the various SWRCB site cleanup programs.

Site cleanup responsibilities for brownfields primarily reside within four main programs at the SWRCB: the Underground Storage Tank Program, the Site Cleanup Program, the Department of Defense Program and the Land Disposal Program. These SWRCB cleanup programs are charged with ensuring sites are remediated to protect the State of California's surface and groundwater and return it to beneficial use.

California Air Resources Board

California Air Resources Board (CARB), a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and State air pollution control programs within California. In this capacity, CARB conducts research, sets State ambient air quality standards (California Ambient Air Quality Standards [CAAQS]), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (Title 13 California Code of Regulations [CCR], §2485). The California Air Toxics Program establishes the process for the identification and control of toxic air contaminants and includes provisions to make the public aware of significant toxic exposures and for reducing risk.

The Toxic Air Contaminant Identification and Control Act (Assembly Bill [AB] 1807) created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) supplements the AB 1807 program, by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.



Under AB 1807, CARB is required to use certain criteria in the prioritization for the identification and control of air toxics. In selecting substances for review, CARB must consider criteria relating to “the risk of harm to public health, amount or potential amount of emissions, manner of, and exposure to, usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community.” AB 1807 also requires CARB to use available information gathered from the AB 2588 program to include in the prioritization of compounds. This report includes available information on each of the above factors required under the mandates of the AB 1807 program. AB 2588 air toxics “Hot Spots” program requires facilities to report their air toxics emissions, ascertain health risks, and to notify nearby residents of significant risks. In September 1992, the “Hot Spots” Act was amended by Senate Bill 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

[California Health and Safety Code Sections 17920.10 and 105256](#)

California Health and Safety Code sections 17920.10 and 105256 pertain to hazards and hazardous materials containing lead.

California Health and Safety Code section 17920.10 regulates violations regarding lead hazards. “Lead hazards” refers to any deteriorated lead-based paint, lead-contaminated dust, lead-contaminated soil, or disturbing lead-based paint without containment. Any building (or portion thereof) including any dwelling unit, guestroom, or suite of rooms, or the premises on which it is located, is deemed to be in violation of the California Health and Safety Code.

California Health and Safety Code section 105256 applies whenever a local enforcement agency determines that a condition at a location or premises, or the activity of any person at the location or premises, is creating or has created a lead hazard at the location or premises, the local enforcement agency may order the owner of the location or premises to abate the lead hazard, and may order the person whose activity is creating or has created the lead hazard, to cease and desist.

LOCAL

[South Coast Air Quality Management District](#)

The South Coast Air Quality Management District (SCAQMD), in coordination with CARB is responsible for developing and implementing rules and regulations regarding air toxics on a local level. SCAQMD establishes permitting requirements, inspects emission sources, and enforces measures through educational programs and/or fines.

The purpose of SCAQMD’s Rule 1403 is to specify work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials (ACWM). All operators are required to



maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

Rule 1166 governs the emission of volatile organic compounds (VOCs) from excavating, grading, handling, and treating VOC-contaminated soil as a result of leakage from storage or transfer operations, accidental spillage, or other deposition. The requirements for excavating an UST, transfer pipe, or VOC-contaminated soils include operating pursuant to an approved mitigation plan, notification, VOC monitoring, and procedure for handling and transporting contaminated soils.

Rule 1401 governs any new, modified, or relocation of permit units (article, machine, equipment, or facility) that emit toxic air contaminants. The rule establishes allowable risks (maximum individual cancer risk, cancer burden, and noncancer acute and chronic hazard index) from operating permit units. Regulation 13 (Rules 1300 – 1325) establishes pre-construction review requirements for the installation or modification of a source facility (i.e., power plant, engine, equipment) of nonattainment air contaminant, ozone-depleting compounds (ODCs), or ammonia.

[Certified Unified Program Agency](#)

The Certified Unified Program Agency (CUPA) program is designed to consolidate, coordinate, and consistently administer permits, inspection activities, and enforcement activities throughout the County. LACoFD Health Hazardous Materials Division (HHMD) is the CUPA that administers the following programs within Los Angeles County; the Hazardous Waste Generator Program, the Hazardous Materials Release Response Plans and Inventory Program, the California Accidental Release Prevention Program (Cal-ARP), the Aboveground Storage Tank Program and the Underground Storage Tank Program (LACoFD 2023a).

The mission of the LACoFD Health Hazardous Materials Division is to protect the public health and the environment throughout LA County from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes through coordinated efforts of inspections, enforcement, site mitigation oversight, and emergency response. The HHMD provides 24-hour emergency services in response to hazardous materials spills or releases and abandonment (LACoFD 2023b).

[City of Gardena Emergency Operations Plan 2016](#)

This City of Gardena Emergency Operations Plan (EOP) addresses the planned response to an actual or threatened extraordinary incident, disaster, or emergency associated with natural, technological, and human caused hazards, or a national security emergency in or affecting the City of Gardena. This plan outlines the roles and responsibilities assigned to city employees for response and short-term recovery activities, and is flexible enough for use to address all hazards. It is designed to include the City of Gardena as part of the Los Angeles County Operational Area. The plan incorporates concepts and principles from the California SEMS, NIMS, and the Incident Command System (ICS) into the City's emergency operations.



City of Gardena General Plan

The City of Gardena General Plan Community Development Element, Land Use Plan; Community Safety Element, Public Safety Plan; and Environmental Justice Element contain the following goals and policies potentially relevant to the proposed Project:

Community Development Element, Land Use Plan

Policy LU 3.7: Require the mitigation or remediation of potential hazardous conditions in the City.

Community Safety Element, Public Safety

Policy PS 1.6: Adequate Facilities and Personnel. Require that adequate police and fire service facilities and personnel be maintained to provide services at sufficient levels

Policy PS 1.7: Development Review. Ensure that law enforcement, crime prevention, and fire safety concerns are considered in the review of planning and development proposals in the City

Policy PS 1.11: Emergency Evacuation Routes and Access. Work with LACoFD and the Gardena Police Department to define minimum standards for evacuation of residential areas and to maintain, update, and regularly exercise emergency access, protocols, and evacuation routes to assess their effectiveness under a range of emergency scenarios. If areas with inadequate evacuation routes are identified, develop appropriate mitigation measures, improvement plans, or education programs to ensure safe evacuation.

Policy PS 2.2: Building and Fire Codes. Require that all buildings and facilities within Gardena comply with local, State, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards.

Policy PS 2.4: Urban Fire Risks. Work with LACoFD to maintain an ongoing fire inspection program to reduce fire hazards associated with multifamily development, critical facilities, public assembly facilities, industrial buildings, and nonresidential buildings.

Policy PS. 2.5: Water Supply. Coordinate with applicable water providers and LACoFD to ensure that water supply and pressure for new and existing development is adequate for structural fire suppression.



Policy PS 2.7: New Development.

- a. Require adequate fire protection services, fire protection plans, and emergency vehicle access for new development.
- b. Locate, design, and construct new development to minimize the risk of structural loss from fires.
- c. Install visible home and street addressing and signage

Policy PS 4.1: Sensitive Receptors. Ensure that the storage, processing and transfer of hazardous materials are not located in areas that could potentially harm resident and other sensitive receptors (i.e., schools, parks, hospitals) and are adequately buffered from environmentally sensitive areas.

Policy PS 4.3: Updated Inventory. Maintain an updated inventory of businesses that handle, store, process and transport hazardous materials/waste within the City.

Policy PS 4.4: Planning Procedures. Maintain planning procedures for the handling and transportation of hazardous materials and ensure that the procedures are in compliance with applicable County, State and Federal regulations.

Policy PS 4.5: Land Uses. Require a conditional use permit for land uses that generate, use, store, or process hazardous materials.

Environmental Justice Element

Policy EJ 1.3: Require the mitigation or remediation of hazardous conditions in the City. (See also Policy LU 3.7)

Policy EJ 1.4: Promote innovative development and design techniques, new material and construction methods to stimulate residential development that protects the environment. (See Policy DS 2.15)

Policy EJ 1.5: Prioritize long-term sustainability for the City of Gardena, in alignment with regional and state goals, by promoting infill development, reduced reliance on single occupancy vehicle trips, and improved multi-modal transportation networks, with the goal of reducing air pollution and greenhouse gas emissions, thereby improving the health and quality of life for residents. (See Policy CI 1.1)

Policy EJ 1.7: Encourage and support the proper disposal of hazardous waste and waste oil. Monitor businesses that generate hazardous waste materials to ensure compliance with approved disposal procedures. (See Policy CN 2.6)

Policy EJ 1.12: Incorporate noise considerations into land use planning decisions. (See Goal N 2)



City of Gardena Municipal Code

Gardena Municipal Code Title 8 monitors and regulates Health and Safety within the community. Chapter 8.08, *Fire Code*, adopts by reference Title 32, Fire Code of the Los Angeles County Code, also known as the “California Fire Code,” with certain amendments, additions, and deletions.

Chapter 8.20, *Solid waste and recyclable collection and disposal*, establishes protocols for the proper collection and disposal of solid waste in order to protect the public peace, health, safety and welfare of the citizens. Collection and disposal of solid waste is a matter requiring the control and regulation by the City. In addition to solid waste, this chapter regulates hazardous substances, materials, and waste as well.

The purpose of Chapter 8.70, *Stormwater and runoff pollution control*, is to protect the public health, welfare and safety and to reduce the quantity of pollutants being discharged to the waters of the United States, including any movement or discharge of any hazardous materials.

Gardena Municipal Code Title 15 monitors and regulates Buildings and Construction through the establishment of construction, operation, and maintenance provisions. Chapter 15.04, *General Building Provisions*, adopts the 2022 California Building Standards Code (CBSC), including the California Building Code (CBC), the California Residential Code, the California Plumbing Code, the California Energy Code, the California Historical Building Code, and the California Green Building Standards Code (“Cal Green”) with local amendments.

Municipal Code Chapter 15.32, *Asbestos Removal*, requires demolition permits and building permits for the renovation of existing buildings involving one hundred square feet or more of asbestos containing materials (ACM) to be accompanied by: notification of the finding of ACM, the removal techniques to be utilized, clean-up procedures, the location of the waste disposal site where such material will be deposited, the scheduled starting and completion dates of demolition and renovation, the procedures to be followed in the event that unexpected asbestos is found or previously nonfriable asbestos material becomes friable, and such other information as is deemed necessary by the building official issuing such permits.

Title 18, *Zoning*, Chapter 18.42, *General Provisions*, establishes general provisions and development standards for residential, mixed use and overlay zones. Section 18.42.210 (A) requires the applicant be required to comply with all applicable mitigation measures set forth in a mitigation monitoring program for the City’s General Plan or any element thereof as posted on the City’s website.

Section 18.42.200 (G), requires preparation and compliance with recommendations included within a Phase I Environmental Site Assessment for all new residential construction and all construction involving grading or other ground disturbance below a depth of twelve inches.



5.8.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to hazards and hazardous materials. A project would result in a significant impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (refer to Impact Statement 5.8-1);
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (refer to Impact Statement 5.8-2);
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (refer to Impact Statement 5.8-3);
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment (refer to Impact Statement 5.8-4);
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area (refer to Section 8.0, Effects Found Not To Be Significant);
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (refer to Impact Statement 5.8-5); and/or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires (refer to Section 8.0, Effects Found Not To Be Significant).

Based on these standards and significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a "significant unavoidable impact."

5.8.5 IMPACTS AND MITIGATION MEASURES

Impact 5.8-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact Analysis: The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For most of the parcels the proposed amendments allow for new residential development or increased residential development when compared to existing conditions.



Project implementation would allow for the future development of residential uses. Construction activities could potentially involve the removal of existing structures and materials in order to allow for the redevelopment of a specific site with residential uses. Refer to Response HAZ-2 regarding existing on-site conditions. Generally, the exposure of persons to hazardous materials could occur in the following manners: 1) improper handling or use of hazardous materials or hazardous wastes during construction or operation of future development, particularly by untrained personnel; 2) an accident during transport; 3) environmentally unsound disposal methods; or 4) fire, explosion or other emergencies. The severity of potential effects varies with the activity conducted, the concentration and type of hazardous material or wastes present, and the proximity of sensitive receptors.

Construction activities associated with the development of residential uses may involve the routine transport, use, or disposal of hazardous materials, such as petroleum-based fuels or hydraulic fluid used for construction equipment. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for hazards associated with the transport and use of hazardous materials. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law.

Residential uses do not typically involve the use or storage of hazardous substances other than limited quantities of hazardous materials such as solvents, fertilizers, pesticides, and other materials used for regular maintenance of buildings and landscaping by property owners. The quantities of these materials would not typically be at an amount that would pose a significant hazard to the public or the environment. While the risk of exposure to hazardous materials cannot be eliminated, measures can be implemented to reduce risk to acceptable levels. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable federal, State, and local laws and regulations, which would ensure that risks involving the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with implementation of the proposed Project would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.8-2: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact Analysis: One of the means through which human exposure to hazardous substance could occur is through accidental release. Incidents that result in an accidental release of hazardous substance into the environment can cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. Human exposure of



contaminated soil, soil vapor, or water can have potential health effects on a variety of factors, including the nature of the contaminant and the degree of exposure.

The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For most of the parcels the proposed amendments allow for new residential development or increased residential development when compared to existing conditions. Many of the parcels identified for potential residential development have historically been or are developed with commercial and industrial uses and are located in proximity to existing commercial- and industrial-developed parcels. Therefore, there is the potential that some of the parcels have experienced incidents that resulted in release of hazardous substances into the environment.

Short Term Construction-Related Accidental Release of Hazardous Materials

Although the proposed Project does not involve site-specific development, future construction activities associated with new residential development could result in upset and/or accident conditions associated with existing site conditions, involving the release of hazardous materials into the environment.

Demolition

Future development accommodated through the Project is anticipated to involve demolition of existing structures as redevelopment opportunities arise. As discussed above, the Project Area includes existing development with the potential to contain lead-based paint, ACM, and/or other contaminants, which are typically present in buildings and structures constructed prior to 1978. All demolition that could result in the release of ACM or LBPs must be conducted according to Federal and State standards, including but not limited to, California *Health and Safety Code* Sections 17920.10 and 105256 and California Code of Regulations Title 8, Section 1532.1. The National Emission Standards for Hazardous Air Pollutants mandates that building owners conduct an asbestos survey to determine the presence of ACMs prior to the commencement of any remedial work, including demolition. If ACM material is found, abatement of asbestos would be required prior to any demolition activities. If paint is separated from building materials (chemically or physically) during demolition of structures, the paint waste would be required to be evaluated independently from the building material by a qualified Environmental Professional. If LBP is found, abatement would be required to be completed by a qualified Lead Specialist prior to any demolition activities. Further, Gardena Municipal Code Chapter 15.32, Asbestos Removal, requires demolition permits and building permits for the renovation of existing buildings involving ACM. Permits are to be accompanied by specific procedures including removal techniques to be utilized, clean-up procedures, the location of the waste disposal site where such material will be deposited, the procedures to be followed in the event that unexpected asbestos is found, and other such information, as is deemed necessary by the building official before approval.



Future development of residential uses associated with implementation of the proposed Project that would involve demolition of a structure with the potential for LBP or ACMs would be required to comply with California *Health and Safety Code* Sections 17920.10 and 105256 and California Code of Regulations Title 8, Section 1532.1, as well as SCAQMD Rule 1403, regarding the potential for LBP and ACMs, which would reduce potential impacts to a less than significant level.

Soil and Groundwater Contamination in Unknown Contaminated Sites

Future development accommodated through the Project could involve grading and excavation activities which could expose construction workers and the public to previously unknown hazardous substances present in the soil or groundwater. Exposure to contaminants could occur if the contaminants migrated to surrounding areas or if contaminated zones were disturbed at the contaminated location. Grading and excavation activities could also reveal previously unidentified underground storage tanks. Although underground storage tank removal activities could pose risks to workers and the public, potential risks would be minimized by managing the tank according to existing LACoFD HHMD standards. Potential impacts to groundwater would be dependent upon the type of contaminant, the amount released, and depth to groundwater at the time of the release.

The public could also be exposed to hazardous materials if new development or redevelopment were to be located on a current or historical hazardous material site. There are 13 active cleanup sites within the Project Area listed in the EnviroStor database. As discussed in Section 5.8.2, Environmental Setting, several of these active sites are located on, or directly adjacent to, parcels that are part of the proposed Project with the potential for future development of residential uses. Further, there are three open LUST sites in the Project Area that are located on a parcel that is part of the Project. Gardena Sumps, located at 1450 Artesia Boulevard in the southern region of the City, is an active contaminated site under the State's response. Parcels that are directly adjacent to this site are part of the Project. However, no new development is anticipated; the Project proposes to rezone the adjacent parcels to reflect existing development. Sonic Plating Company, a corrective action hazardous site located at 1930 Rosecrans Avenue, and 2403 Marine Avenue, an active contaminated site under the State's response, are proposed to receive a Housing Overlay as part of the Project. However, all of the open LUST sites in the Project Area are in some stage of remediation. Future development associated with the Project would be reviewed at the project-level to determine whether any development sites are listed on a hazardous materials site. Any residential development activities that may occur on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the regulatory agencies, such as DTSC and the Los Angeles Regional Water Quality Control Board (RWQCB). Any remediation and cleanup activities would be required to meet specific residential regulatory standards to allow for residential development to occur within the site.



To prevent hazardous conditions, existing federal, State, and local laws, including those listed under Section 5.8.3, Regulatory Setting, would be enforced at the construction sites. Cal/OSHA has regulations concerning the use of hazardous materials, including requirements for safety training, exposure warnings, availability of safety equipment, and preparation of emergency action/prevention plans. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable State and local regulations for the cleanup and disposal of that contaminant. All contaminated waste encountered would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility.

In addition to the requirements associated with federal, State, and local regulations, the General Plan includes policies to address potential impacts associated with potentially contaminated sites. General Plan Community Development Element, Land Use Plan Policy LU 3.7 requires mitigation or remediation of potentially hazardous conditions in the City. Public Safety Plan Goal 4, Hazardous Waste, is the overarching goal that aims to protect public health, safety, and the environment from harmful exposure to hazardous materials. Policy PS 4.3 Updated Inventory, prompts the City to maintain an updated inventory of businesses that handle, store, process, and transport hazardous materials and waste within the City. Policy PS 4.4, Planning Procedures, maintains planning procedures for the handling and transportation of hazardous materials and ensures that the procedures comply with applicable county, State and federal regulations. Adherence to policies, such as Public Safety Plan Policies PS 4.3 and 4.4, allows the City to maintain awareness of, and current information on, hazardous sites, which reduces the possibilities of significant hazard harming the public or the environment. Further, General Plan 2006 Certified EIR mitigation (adopted in the Mitigation Monitoring and Reporting Program) would require a Phase I Environmental Assessment of a site in which the City is involved with the financing or acquisition of the property and Municipal Code Section 18.42.200 (G), requires preparation and compliance with recommendations included within a Phase I Environmental Site Assessment for all new residential construction and all construction involving grading or other ground disturbance below a depth of twelve inches. Thus, compliance with General Plan goals, policies, and actions, and existing regulations, including Municipal Code Sections 18.42.200 and 18.42.210 would reduce potential impacts involving the release of hazardous materials into the environment as a result of on-site contamination to a less than significant level.

[Long-Term Operations-Related Accidental Release of Hazardous Materials](#)

Due to the nature of residential uses, substantial use of hazardous materials as part of long-term operations are not anticipated. As discussed above, the use of hazardous materials and substances would involve minimal amounts of cleaning and degreasing solvents, fertilizers, pesticides, and other materials used in the regular maintenance of buildings and landscaping. Additionally, residential uses would not result in significant transport, use or disposal of hazardous materials.



The Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.8-3: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact Analysis: The City of Gardena is served by a variety of preschools, elementary, middle, and high schools; refer to Section 5.13, Public Services of this EIR. The proposed Project would allow for new residential development or increased residential development when compared to existing conditions on parcels located throughout the City. Thus, future residential development would likely occur within 0.25-mile of a school. However, as discussed above, due to the nature and operating characteristics of residential uses, the use or storage of hazardous substances other than limited quantities of hazardous materials such as solvents, fertilizers, pesticides, and other materials used for regular maintenance and landscaping are not anticipated. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable Federal, State, and local laws and regulations would reduce potential impacts to schools within the area. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.8-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact Analysis: Government Code Section 65962.5, commonly referred to as the “Cortese List,” requires the DTSC and the State Water Resources Control Board (SWRCB) to compile and update a regulatory sites list (pursuant to the criteria of the Section). The California Department of Health Services is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Health and Safety Code Section 116395. Government Code Section 65962.5 requires the local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations, to compile, as appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste.

There are 13 “Active” status sites listed in the EnviroStor database within the Project Area (DTSC 2023). As discussed in Section 5.8.2, Environmental Setting, several of these active sites are



located within, or directly adjacent to, parcels that are proposed for land use and zone changes under Project implementation. Further, there are four open LUST sites in the Project Area; three of them are directly adjacent to parcels proposed for land use and zone changes under the Project. However, as noted, all LUST sites are in some stage of remediation. Future development associated with the Project would be reviewed at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities that may occur on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the regulatory agencies, such as DTSC and the Los Angeles RWQCB.

There are two active facilities listed in the SWIS database located within Gardena. However, only the American Waste Service is located on a parcel that is part of the proposed Project; the other two waste sites are located within a half-mile of Project parcels.

Although site-specific development is not currently proposed, there is the potential that future residential development associated with implementation of the proposed Project could occur on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 at that time. Development would be required to comply with the Gardena General Plan, which includes policies to address potential impacts associated with hazardous materials sites. As stated, Policy LU 3.7 requires mitigation or remediation of potentially hazardous conditions in the City and Policy PS 3.3 requires the City maintain an updated inventory of businesses that handle, store, process, and transport hazardous materials/waste within the City. The General Plan EIR also identifies mitigation that for construction requiring soil excavation and soil filling in areas of known commercial and industrial uses, proper sampling shall be required prior to the disposal of the excavated soil. Municipal Code Section 18.42.200 (G), requires preparation and compliance with recommendations included within a Phase I Environmental Site Assessment for all new residential construction and all construction involving grading or other ground disturbance below a depth of twelve inches. Thus, compliance with General Plan goals, policies, and actions, and existing regulations, including Municipal Code Sections 18.42.200 and 18.42.210 would reduce potential impacts associated with development of a site located on a list of hazardous materials sites to a less than significant level.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.8-5: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: The City of Gardena Emergency Operations Plan (EOP) addresses the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The City's EOP establishes the emergency organization, assigns tasks, and specifies policies and general procedures. The EOP is designed to include Gardena in the overall California Standardized Emergency Management



System (SEMS), which provides a framework for coordinating multi-agency responses in the case of emergencies. In the event of an emergency, first responders would coordinate any emergency response or emergency evacuation activities within the City. The EOP does not provide a specific evacuation route map, as evacuation measures would be implemented based on the specific emergency and area affected.

The General Plan Safety Plan includes policies to address emergency response and evacuation. Public Safety Policies PS 1.1, Emergency Planning, PS 1.2, Emergency Coordination, PS 1.6, Adequate Facilities and Personnel, and PS 1.7, Development Review, ensure that safety concerns are properly addressed in the review of planning and development proposals. Policy PS 1.11, Emergency Evacuation Routes and Access, identifies that LACoFD and the Gardena Police Department regulate minimum standards for evacuation of residential areas and, maintain, update, and regularly exercise emergency access, protocols, and evacuation routes to assess their effectiveness under a range of emergency scenarios; if areas with inadequate evacuation routes are identified, appropriate mitigation measures, improvement plans, or education programs are to be developed to ensure safe evacuation. Policy PS 2.7, New Development, requires adequate fire protection services, fire protection plans, and emergency vehicle access for new development.

Project implementation would allow for increased residential development throughout the City, resulting in an increase in population. The General Plan Public Safety Plan states that major arterials generally serve as the primary routes for evacuation. However, the Public Safety Plan explains that evacuation routes would depend upon the emergency event and location. Law enforcement is charged with identifying appropriate routes and assisting residents leaving the City in the event an evacuation. Currently, all residential developments meet City standards and provide at least two emergency evacuation routes. Future residential development is not anticipated to result in the modification of roadways surrounding the specific development site or the placement of any permanent physical barriers on adjacent roadways. There is the potential that traffic lanes located immediately adjacent to a development site may be temporarily closed or controlled by construction personnel during construction activities. Any temporary closure would be required to receive permission from the traffic authority in accordance with Gardena Municipal Code Section 13.56.430, *Road closure or interference with highway use*. However, this would be temporary and emergency access to the site and surrounding area would be required to be maintained at all times. Additionally, all construction staging would be required to occur within the boundaries of the development site and would not interfere with circulation along adjacent or any other nearby roadways.

As site-specific development is not currently proposed, it is unknown if future residential development would involve the removal of existing driveways or the construction of new driveways or any associated improvements, such as curb, gutter, and sidewalks. The applicant of any proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. LACoFD) would review the proposed development for access requirements, minimum driveway



widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site. The proposed development would be required to comply with all applicable Building and Fire Code requirements and would submit construction plans to the Fire Department's Engineering Building Plan Check Unit for review and approval prior to issuance of any building permit. Approval by the Fire Department would ensure that construction and operation would not impair implementation of or physically interfere with the City's EOP or emergency evacuation plan and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.8.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the related projects in the City determined as having the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to hazards and hazardous materials may occur. The geographic setting for hazards and hazardous materials are typically localized and considers development within the City.

Would the project, combined with other related cumulative projects, create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact Analysis: Construction activities associated with future residential development and development associated with the cumulative projects may involve the routine transport, use, or disposal of hazardous materials. However, the construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for hazards associated with the transport and use of hazardous materials. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law.

Residential, commercial (restaurant/retail), and self-storage/warehouse uses anticipated by the Project and cumulative development projects do not typically involve the use or storage of hazardous substances other than limited quantities of hazardous materials such as solvents, fertilizers, pesticides, and other materials used for regular maintenance of buildings and landscaping. The quantities of these materials would not typically be at an amount that would pose a significant hazard to the public or the environment. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable federal, State, and local laws and regulations, which would ensure that risks involving the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes would be less than significant. Thus, the



Project's incremental effects involving hazards associated with the routine transport, use, or disposal of hazardous materials would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact Analysis: Future Project development sites and cumulative development sites within the City could create a significant hazard to the public or the environment through upset and accident conditions involving the release of hazardous materials into the environment. Implementation of construction activities associated with Project implementation and cumulative development projects would involve some demolition, mass grading, excavation, and other ground-disturbing activities that could temporarily create a significant hazard to the public or the environment through release of hazardous materials. Future site-specific development would be reviewed at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities that may occur on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the regulatory agencies, such as DTSC and the Los Angeles RWQCB. Additionally, local requirements, including Municipal Code Section 18.42.200 (G), requires preparation and compliance with recommendations included within a Phase I Environmental Site Assessment for all new residential construction and all construction involving grading or other ground disturbance below a depth of twelve inches. Thus, the Project's incremental effects involving hazards associated with the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact Analysis: Future Project development sites and cumulative development sites within the City may emit hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school during construction phases. All future use, storage, transport, and disposal of hazardous materials associated with the proposed Project and cumulative projects within the City and region would be governed by existing regulations of several agencies, including DTSC, EPA, U.S. DOT, Cal/OSHA, and Los Angeles County CUPA. Site-specific development would adhere to standard construction practices which determines that any hazardous materials released are to be appropriately contained and remediated as required by



local, State, and Federal law. Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. All development within the City is required to adhere to existing regulations which ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable federal, State, and local laws and regulations would reduce potential impacts to schools within the area. Thus, the Project's incremental effects involving emission of hazardous materials within a one-quarter mile of a school would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

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

Impact Analysis: Future development associated with implementation of the Project and cumulative projects would be evaluated at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities occurring on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of federal, State, and local regulations, including the DTSC and the Los Angeles RWQCB, prior to construction. Therefore, the Project's incremental effects involving exposure of people and structures to potential substantial adverse effects involving hazardous materials sites would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: Future residential development associated with Project implementation and cumulative development could impair implementation of or physically interfere with an adopted emergency response plan. Implementation of construction activities associated with Project implementation and cumulative development projects would involve some land clearing, mass grading, and other construction activities that could temporarily interfere with emergency response plans or emergency evacuation plans. Major arterials within the City generally serve as the primary routes for evacuation. However, evacuation routes would depend upon the emergency event and location. Gardena law enforcement is charged with identifying appropriate routes and assisting residents leaving the City in the event an evacuation. While all residential



developments meet City evacuation standards, the City would continue to coordinate with LACoFD and Gardena Police Department to provide ongoing education to residents about how to safely evacuate in the event of an emergency.

As site-specific development is not currently proposed, it is unknown if implementation of the Project would involve the removal of existing driveways or the construction of new driveways or any associated improvements, such as curb, gutter, and sidewalks. Proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The proposed development would be required to comply with all applicable Building and Fire Code requirements and would submit construction plans to the Fire Department's Engineering Building Plan Check Unit for review and approval prior to issuance of any building permit. Approval by the LACoFD would ensure that construction and operation would not impair implementation of or physically interfere with the City's EOP or emergency evacuation plan. Thus, the Project's incremental effects involving interface of emergency plans would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.8.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Hazards and hazardous materials impacts associated with the implementation of the Project would be less than significant. No significant unavoidable hazards and hazardous materials impacts would occur as a result of the proposed Project.

5.8.8 REFERENCES

CalRecycle, *SWIS Facility/Site Search*, <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search>, accessed February 10, 2023a.

CalRecycle, *SWIS Facility/Site Activity Details: American Waste Transfer Station (19-AA-001)*, <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3520?siteID=991>, accessed February 10, 2023b.

CalRecycle, *SWIS Facility/Site Activity Details: California Waste Services (CWS) (19-AR-1225)*, <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/5727?siteID=4392>, accessed February 10, 2023c.

CalRecycle, *SWIS Facility/Site Activity Details: CleanStreet (19-AA-1150)*, <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/5459?siteID=5608>, accessed February 10, 2023d.

California Office of the State Fire Marshal (CALFIRE). *Fire Hazard Severity Zones Map*, <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and->



mitigation/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/, accessed January, 2023.

City of Compton, *Draft Compton General Plan 2030*, January 2011.

City of Gardena, *Gardena Emergency Operations Plan*, 2016.

City of Los Angeles, Long Angeles International Airport LAX Plan, December 14, 2004.

City of Torrance, *Torrance Municipal Airport- Zamperini Field*,
<https://www.torranceca.gov/government/city-departments/general-services/torrance-airport>, accessed January 16, 2023.

Coffman Associates Airport Consultants, and CommuniQuest (Coffman Associates), *14 CFR Part 150 Noise Compatibility Planning Study, Hawthorne Municipal Airport*, June 2021.

Department of Toxic Substances Control (DTSC), EnviroStor, *Hazardous Waste and Substances Site List*,
https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29, accessed January 16, 2023.

Los Angeles County Fire Department (LACoFD), *CUPA*, <https://fire.lacounty.gov/cupa-programs/>, accessed February 10, 2023a.

Los Angeles County Fire Department (LACoFD), *Health Hazardous Materials Division*,
<https://fire.lacounty.gov/health-hazardous-materials-division/>, accessed February 10, 2023b.

National Transportation Safety Board (NTSB), NTSB Aviation Accident Final Report, Gardena, 1986.

National Transportation Safety Board (NTSB), NTSB Aviation Accident Final Report, Gardena, 2000.

National Transportation Safety Board (NTSB), NTSB Aviation Accident Final Report, Gardena, 2003.

Risk Management Professionals (RMP), *City of Gardena, City of Hawthorne Draft Hazard Mitigation Plan*, August 2012.

State Water Resources Control Board (SWRCB), *GeoTracker*,
https://geotracker.waterboards.ca.gov/search?CMD=search&case_number=&business_name=&main_street_name=&city=&zip=&county=&SITE_TYPE=LUFT&oilfield=&STATUS=&BRANCH=&MASTER_BASE=&Search=Search, accessed January 16, 2023.



5.9 HYDROLOGY AND WATER QUALITY

5.9.1 PURPOSE

The purpose of this section is to describe the existing hydrology, water quality conditions, and regulatory environment, and to identify potential impacts that could result from Project implementation.

5.9.2 ENVIRONMENTAL SETTING

REGIONAL ENVIRONMENTAL SETTING

Watershed

The City of Gardena is located within the Dominguez Channel Watershed, a sub-watershed of the San Gabriel Watershed (SWRCB, 2023). The Dominguez Channel Watershed covers approximately 70,000 acres and discharges into the Los Angeles Harbor (LA Sanitation and Environment, 2023). The watershed area is approximately 96 percent developed, largely residential, and artificially bounded by a system of storm drains and flood control channels. The 15.7-mile-long Dominguez Channel, a channelized watercourse that begins just south of 116th Street in Hawthorne and empties into the East Basin of the Port of Los Angeles on the Pacific Ocean, runs through the western and southern portions of the City.

Groundwater

The City overlies the West Coast Subbasin (West Coast Basin) of the Coastal Plain of the Los Angeles Groundwater Basin (DWR, 2023a). The West Coast Basin covers 142 square miles and is bounded on the north by the Ballona Escarpment, an abandoned erosional channel from the Los Angeles River; on the east by the Newport-Inglewood fault zone; and on the south and west by the Pacific Ocean and consolidated rocks of the Palos Verdes Hills (DWR, 2023b). According to the Golden State Water Company (GSWC) Southwest Service Area 2020 Urban Water Management Plan (UWMP), the most productive aquifers within the West Coast Basin are the Gardena and Gage aquifers in the Lakewood Formation and the Silverado, Lynwood, and the unnamed aquifers in the San Pedro Formation (GSWC, 2021). The Gardena and Gage aquifers are comprised primarily of fine to coarse sand and gravel and have a total maximum thickness of 320 feet. Wells completed in the Gage aquifer typically produce water at rates ranging from 100 to 1,300 gallons per minute (gpm). The aquifers within the San Pedro formation are comprised of coarse sand, gravel, and sandy gravel and have a combined maximum thickness of 1,200 to 1,400 feet. The Silverado aquifer, underlying most of the West Coast Basin, is the most productive aquifer in the West Coast Basin, yielding approximately 80 to 90 percent of the groundwater extracted annually.

Natural recharge to the West Coast Basin's groundwater supply is mostly underflow from the Central Basin, through the Newport-Inglewood fault zone (GSWC, 2021). Injection wells in the West Coast Basin create mounds of freshwater that help protect the West Coast Basin from



seawater intrusion. Other minor sources of recharge include percolation of precipitation, irrigation return flow from fields and lawns, and other applied surface waters. The storage capacity of the primary water producing aquifer, the Silverado aquifer, is estimated by the California Department of Water Resources (DWR) to be about 6,500,000 acre-feet. Groundwater levels have risen approximately thirty feet since the West Coast Basin was adjudicated in 1961.

Although the City overlies the West Coast Basin, water delivered to GSWC's Southwest Service Area is a blend of groundwater pumped from the West Coast Basin and Central Basin groundwater systems, as well as imported water. Groundwater supplies constitute a major component of GSWC Southwest's water supply portfolio. GSWC Southwest uses adjudicated groundwater supplies from both basins for use in its service area. According to GSWC's UWMP, both the Central Basin and West Coast Basin groundwater systems have been thoroughly analyzed and both are meticulously monitored through each adjudication's requirements. As noted above, the West Coast Basin was adjudicated in 1961; the Central Basin was adjudicated in 1965. The West Coast Basin Adjudication and Central Basin Adjudication limit the volumes of water that each party may extract from the respective basin. This limit is referred to as the Allowed Pumping Allocation (APA). The APA is an assigned volume that is less than the historically available volume that was developed to reduce groundwater overdraft and seawater intrusion. The Watermaster is charged with not only developing the APA but also monitoring and reporting the basins' conditions in order to ensure groundwater overdraft and sea water intrusion do not occur.

[Water Quality Objectives and Impaired Water Bodies](#)

Based on the Water Quality Control Plan for the Los Angeles Region (Basin Plan), Table 2-1, the potential beneficial uses of the Dominguez Channel (Estuary to 135th Street) and Dominguez Channel (above 135th Street) are municipal and domestic water supply, warm freshwater habitat, and wildlife habitat, and existing beneficial uses are rare, threatened, or endangered species (LARWQCB, 2019).

[CWA 303\(d\) List of Water Quality Limited Segments](#)

Under Section 303(d) of the Clean Water Act (CWA), states are required to identify water bodies that do not meet their water quality standards. Biennially, the Los Angeles Regional Water Quality Control Board (LARWQCB) prepares a list of impaired waterbodies in the region, referred to as the 303(d) list. The 303(d) list outlines the impaired waterbody and the specific pollutant(s) for which it is impaired. All waterbodies on the 303(d) list are subject to the development of a total maximum daily load (TMDL).

According to the California State Water Resources Control Board (SWRCB) 303(d) list, the Dominguez Channel (lined portion above Vermont Avenue) is listed as a Category 5 water body, meaning that it is a water segment where standards are not met and a Total Maximum Daily Load (TMDL) is required, but not yet completed, for at least one of the pollutants being listed for the



segment (SWRCB, 2023). Impairments for the portion of the Dominguez Channel above Vermont Avenue include the following: Copper, Indicator Bacteria, Lead, Toxicity, and Zinc.

Total Maximum Daily Loads (TMDLs)

Once a water body has been listed as impaired on the 303(d) list, a TMDL for the constituent of concern (pollutant) must be developed for that water body. A TMDL is an estimate of the daily load of pollutants that a water body may receive from point sources, non-point sources, and natural background conditions (including an appropriate margin of safety), without exceeding its water quality standard. Those facilities and activities that are discharging into the water body, collectively, must not exceed the TMDL. In general terms, municipal, small MS4, and other dischargers within each watershed are collectively responsible for meeting the required reductions and other TMDL requirements by the assigned deadline.

LOCAL DRAINAGE AND HYDROLOGY

Local Storm Drainage Infrastructure

Storm drain infrastructure in the City is jointly owned and operated by the City of Gardena and the County of Los Angeles. The City owns and maintains a number of catch basins, storm drains, and laterals that directly flow into the Los Angeles County Flood Control District (LACFCD) system. LACFCD maintains a network of catch basins, storm drains, laterals, and the Dominguez Channel to convey stormwater out of City limits and eventually discharge to the Pacific Ocean via Los Angeles Harbor.

FLOODPLAIN MAPPING

FEMA Flood Zones

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) and as shown in Figure PS-3 of the Gardena General Plan Safety Element, most of the City is located within an area of minimal flood hazard (i.e., Zone X, which depicts areas determined to be outside the 0.2-percent annual chance floodplain) (FEMA, 2023). A part of the Dominguez Channel that runs through the southern portion of the City is within the 100-year flood zone. A portion of the Gardena Willows Wetland Preserve is within the 500-year flood zone north of West Artesia Boulevard and west of South Vermont Avenue.

Tsunami

A tsunami is a series of waves in a water body caused by the displacement of a large volume of water, generally in an ocean or a large lake due to earthquakes, volcanic eruptions, and other underwater explosions. The City of Gardena is approximately five miles from the Pacific Ocean and is not located with a mapped Tsunami Hazard Area (California Department of Conservation, 2023).



Dam Inundation

Earthquakes centered close to a dam are typically the most likely cause of dam failure. Dam inundation maps have been required in California since 1972, following the 1971 San Fernando Earthquake and near failure of the Lower Van Norman Dam. There are no dams with the potential to inundate portions of the City according to the Division of Safety of Dams Dam Breach Inundation Maps (DWR, 2023c).

5.9.3 REGULATORY SETTING

FEDERAL

Clean Water Act

The CWA, initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The CWA establishes the basic structure for regulating the discharges of pollutants into the waters of the United States and gives the US Environmental Protection Agency (EPA) the authority to implement pollution control programs. The statute's goal is to regulate all discharges into the nation's waters and to restore, maintain, and preserve the integrity of those waters. The CWA sets water quality standards for all contaminants in surface waters and mandates permits for wastewater and stormwater discharges.

The CWA also requires states to establish site-specific water quality standards for navigable bodies of water and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The following CWA sections assist in ensuring water quality for the water of the United States.

CWA Section 208 requires the use of best management practices (BMPs) to control the discharge of pollutants in stormwater during construction. CWA Section 303(d) requires the creation of a list of impaired water bodies by states, territories, and authorized tribes; evaluation of lawful activities that may impact impaired water bodies, and preparation of plans to improve the quality of these water bodies. CWA Section 303(d) also establishes TMDLs, which is the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards. CWA Section 404 authorizes the US Army Corps of Engineers to require permits that will discharge dredge or fill materials into waters in the US, including wetlands.

In California, the EPA has designated the State Water Resources Control Board (SWRCB), and its nine RWQCBs, with the authority to identify beneficial uses and adopt applicable water quality objectives.



The SWRCB is responsible for implementing the CWA and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits).

National Pollutant Discharge Elimination System (NPDES)

NPDES permits are required for discharges to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, oceans, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal CWA, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.).

The RWQCB issues these permits in lieu of direct issuance by the EPA, subject to review and approval by the EPA Regional Administrator (EPA Region 9). The terms of these NPDES permits implement pertinent provisions of the Federal CWA and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti-degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the CWA's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and are therefore to be updated regularly. Individual projects in the City that disturb more than one acre would be required to obtain NPDES coverage under the California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) describing BMPs the discharger would use to prevent and retain storm water runoff. The SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a waterbody listed on the 303(d) list for sediment.

Federal Emergency Management Agency

FEMA operates the National Flood Insurance Program (NFIP). Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the California Department of Water Resources to ensure the proper implementation of FEMA floodplain management regulations.



Flood Disaster Protection Act

The Flood Disaster Protection Act (FDPA) of 1973 was a response to the shortcomings of the NFIP, which were experienced during the flood season of 1972. The FDPA prohibited federal assistance, including acquisition, construction, and financial assistance, within delineated floodplains in non-participating NFIP communities. Furthermore, all federal agencies and/or federally insured and federally regulated lenders must require flood insurance for all acquisitions or developments in designated Special Flood Hazard Areas (SFHAs) in communities that participate in the NFIP.

Improvements, construction, and developments within SFHAs are generally subject to the following standards:

- All new construction and substantial improvements of residential buildings must have the lowest floor (including basement) elevated to or above the base flood elevation (BFE);
- All new construction and substantial improvements of non-residential buildings must either have the lowest floor (including basement) elevated to or above the BFE or dry-floodproofed to the BFE;
- Buildings can be elevated to or above the BFE using fill, or they can be elevated on extended foundation walls or other enclosure walls, on piles, or on columns; and
- Extended foundation or other enclosure walls must be designed and constructed to withstand hydrostatic pressure and be constructed with flood-resistant materials and contain openings that will permit the automatic entry and exit of floodwaters. Any enclosed area below the BFE can only be used for the parking of vehicles, building access, or storage.

National Flood Insurance Program

Per the National Flood Insurance Act of 1968, the NFIP has three fundamental purposes: Better indemnify individuals for flood losses through insurance; Reduce future flood damages through State and community floodplain management regulations; and Reduce Federal expenditures for disaster assistance and flood control. While the Act provided for subsidized flood insurance for existing structures, the provision of flood insurance by FEMA became contingent on the adoption of floodplain regulations at the local level.

STATE

California Code of Regulations

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminants levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.



California Government Code

Relevant sections of the California Government Code are identified below.

California Government Code Section 65584.04

Any land having inadequate flood protection, as determined by FEMA or DWR, must be excluded from land identified as suitable for urban development within the planning area.

California Government Code Section 8589.4

California Government Code section 8589.4, commonly referred to as the Potential Flooding-Dam Inundation Act, requires owners of dams to prepare maps showing potential inundation areas in the event of dam failure. A dam failure inundation zone is different from a flood hazard zone under the NFIP. NFIP flood zones are areas along streams or coasts where storm flooding is possible from a “100-year flood.” In contrast, a dam failure inundation zone is the area downstream from a dam that could be flooded in the event of dam failure due to an earthquake or other catastrophe. Dam failure inundation maps are reviewed and approved by the California Office of Emergency Services (OES). Sellers of real estate within inundation zones are required to disclose this information to prospective buyers.

California Department of Health Services

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund (“SRF”) and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for MTBE and other oxygenates.

California Water Code

California’s primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California’s responsibilities under the Federal CWA. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and



established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

Assembly Bill 70

Assembly Bill (AB) 70 provides that a city or county may be required to contribute its fair and reasonable share of the property damage caused by a flood to the extent that it has increased the State's exposure to liability for property damage by unreasonably approving, as defined, new development in a previously undeveloped area, as defined, that is protected by a State flood control project, unless the city or county meets specified requirements.

State Water Resources Control Board Storm Water Strategy

The Storm Water Strategy is founded on the results of the Storm Water Strategic Initiative, which served to direct the State Water Board's role in storm water resources management and evolve the Storm Water Program by a) developing guiding principles to serve as the foundation of the storm water program, b) identifying issues that support or inhibit the program from aligning with the guiding principles, and c) proposing and prioritizing projects that the Water Boards could implement to address those issues.

The State Water Board staff created a strategy-based document called the Strategy to Optimize Management of Storm Water (STORMS). STORMS includes a program vision, missions, goals, objectives, projects, timelines, and consideration of the most effective integration of project outcomes into the Water Board's Storm Water Program.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) established a framework for sustainable, local groundwater management. SGMA requires groundwater-dependent regions to halt overdraft and bring basins into balanced levels of pumping and recharge. With passage of the SGMA, the DWR launched the Sustainable Groundwater Management Program to implement the law and provide ongoing support to local agencies around the State. The SGMA:

- Establishes a definition of "sustainable groundwater management;"
- Requires that a Groundwater Sustainability Plan be adopted for the most important groundwater basins in California;
- Establishes a timetable for adoption of Groundwater Sustainability Plans;
- Empowers local agencies to manage basins sustainably;
- Establishes basic requirements for Groundwater Sustainability Plans; and
- Provides for a limited State role.

REGIONAL & LOCAL

Municipal Regional Stormwater NPDES Permit

On July 23, 2021, the RWQCB adopted Order R4-2021-0105, NPDES Permit No. CAS004004, *Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES)*



Permit for Municipal Separate Storm Sewer System (MS4) Discharges Within the Coastal Watersheds of Los Angeles and Ventura Counties (MS4 Permit). Order R4-2021-0105 became effective on September 11, 2021 and serves as the NPDES permit for coastal watershed stormwater and non-stormwater discharges originating from the Los Angeles County and Ventura County region. The permit covers the land areas in the Los Angeles County Flood Control jurisdiction, unincorporated areas of Los Angeles County, and 85 incorporated cities in Los Angeles County. The City of Gardena is included in the MS4 Permit as a permittee under Order R4-2021-0105.

The MS4 Permit imposes a number of basic programs (minimum control measures) on all permittees in order to maintain a level of acceptable runoff conditions through the implementation of best management practices (BMPs) that mitigate stormwater quality problems. In coordination with permittees under MS4 Permit, RWQCB staff performs annual performance reviews and evaluations of the City's stormwater management program and NPDES compliance activities.

[Water Quality Control Plan for the Los Angeles Region \(Basin Plan\)](#)

The County of Los Angeles is under the jurisdiction of the Los Angeles RWQCB. The RWQCB provides permits for projects that may affect surface waters and groundwater locally, and is responsible for preparing the Water Quality Control Plan for the Los Angeles Region (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. Water quality objectives, as defined by the CWA Section 13050(h), are the "limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses or the prevention of nuisance within a specific area." The State has developed total maximum daily loads (TMDLs) that are a calculation of the maximum amount of a pollutant that a water body can have and still meet water quality objectives established by the region.

[Los Angeles County Department of Public Works Hydrology Manual](#)

The Los Angeles County Department of Public Works Hydrology Manual (2006) contains the Standard Urban Stormwater Mitigation Plan (SUSMP) that applies to development and redevelopment projects in Los Angeles County. The Hydrology Manual also includes TMDLs for pollutants per Section 303 of the CWA and BMPs for managing stormwater quality during construction. As the holder of the MS4 Permit, the RWQCB is responsible for enforcing these BMPs.

[Los Angeles County Standard Urban Stormwater Mitigation Plan](#)

The Los Angeles County Standard Urban Stormwater Mitigation Plan (SUSMP) is a comprehensive stormwater quality program to manage urban stormwater and minimize pollution of the environment in Los Angeles County. The purpose of the SUSMP is to reduce the discharge of pollutants in stormwater by outlining BMPs that must be incorporated into the design plans of new development and redevelopment. The SUSMP requirements contain a list of minimum BMPs



that must be employed to infiltrate or treat stormwater runoff, control peak flow discharge, and reduce the post-Project discharge of pollutants from stormwater conveyance systems. The SUSMP requirements define, based upon land use type, the types of practices that must be included and issues that must be addressed as appropriate to the development type and size. The SUSMP requirements apply to all development and redevelopment projects that fall into one of the following categories:

- Single-family hillside residences;
- One acre or more of impervious surface area for industrial/commercial developments;
- Automotive service facilities;
- Retail gasoline outlets;
- Restaurants;
- Ten or more residential units;
- Parking lots of 5,000 square feet or greater or with 25 or more spaces; or
- Projects located in or directly discharging to an Ecologically Sensitive Area.

The SUSMP requirements are administered, implemented, and enforced through the Community Development Department Building and Safety Division and final review would be conducted by the Chief Building Official. During the review process, individual development project plans are reviewed for compliance with stormwater requirements.

West Coast Basin Judgment

In 1961, the West Coast Basin was adjudicated in the case *California Water Service Company, et al. vs. City of Compton, et al.* (Superior Court, County of Los Angeles, Case No 506806). The West Coast Basin Judgment (Judgment) limits the amount of groundwater each party can extract annually from the West Coast Basin. Groundwater producers held by the Judgment have the right to annually pump the volume of water as decided in the adjudication. These limits are monitored by a court-appointed Watermaster. The Watermaster administers and enforces the terms of the Judgment and reports annually to the Court on significant groundwater-related events that occur in the Basin. The court also retained jurisdiction to monitor ongoing management of the West Coast Basin, including the conjunctive use of Basin storage space, to assure the Basin will be capable of supplying sufficient water to meet local needs, including future growth and development. In 2014, an Amended Judgment was accepted by the Court. The Amended Judgment modified the structure of the Watermaster from being administered by DWR to a three-panel structure: an administrative body administering Watermaster accounting and reporting; a water rights panel made up of members of the West Coast Basin Water Association; and a storage panel. The amendment allows storage in the basin by the water right holders. The Court also retained jurisdiction to monitor ongoing management of the West Coast Basin, including the conjunctive use of West Coast Basin storage space, to assure the West Coast Basin will be capable of supplying sufficient water to meet local needs, including future growth and development.



The West Coast Basin adjudication limit for groundwater extraction across the entire West Coast Basin is 64,468 acre-feet per year. Three agencies, the Los Angeles County Department of Public Works (LACDPW), Water Replenishment District of Southern California (WRDSC), and West Basin Municipal Water District (WBMWD), collaborate with the groundwater producers, such as GSWC, to ensure that the Allowed Pumping Allocation is available to be pumped from wells in the West Coast Basin. LACDPW operates and maintains the West Coast Barrier Project and Dominguez Gap Barrier Projects, which maintain groundwater levels at the coast line to prevent seawater intrusion. LACDPW injects a combination of equal parts of treated wastewater from the WBMWD's water recycling plant located in El Segundo and imported water from Metropolitan Water District (MWD). WBMWD is expanding the West Coast Basin recycled water plant to allow up to 100 percent recycled water injection into the West Coast Basin Barrier Project. LACDPW injects imported water from MWD into the Dominguez Gap Barrier Project. The project currently is permitted for up to six million gallons per day of recycled water to be injected into the barrier with a 50 percent blend with potable water over a 60-month running average. By statute, WRDSC is required to determine replenishment requirements annually. WRDSC pays WBMWD for imported and recycled water for recharge into the West Coast Basin.

Central Basin Judgment

In 1965, the Central Basin was adjudicated in the case *Central and West Coast Basin Water Replenishment District vs. Charles E. Adams, et al.* (Superior Court, County of Los Angeles, Case No. 786656). The Central Basin Judgment (Judgment) limits the amount of groundwater each party can extract annually from the adjudicated portion of the Central Basin. This limit is referred to as the Allowed Pumping Allocation, and is an assigned volume that is less than the historically available volume that was developed to reduce groundwater overdraft and seawater intrusion. The Central Basin Watermaster is charged with developing the Allowed Pumping Allocation, as well as monitoring and reporting the Central Basin conditions in order to ensure groundwater overdraft and sea water intrusion do not occur. The Watermaster reports annually to the Court on the significant groundwater-related events that occur in the Central Basin. In 2013, the court entered the Third Amended Judgment. The Amended Judgment modified the structure of the Watermaster from being administered by DWR to a three-panel structure: an administrative body administering Watermaster accounting and reporting; a water rights panel made up of seven members of the Central Basin water rights holders; and a storage panel.

City of Gardena General Plan

The City of Gardena General Plan Community Development Element, Land Use Plan; Community Development, Circulation Plan; Community Resources Element, Conservation Plan; and Community Safety Element, Public Safety Plan contains the following goals and policies potentially relevant to the proposed Project:



Community Development Element, Land Use Plan

Policy LU 3.6: New commercial and industrial developments shall meet or exceed local and state requirements pertaining to noise, air, water, seismic safety and any other applicable environmental regulations.

Community Development, Circulation Plan

CI Goal 4 Provide adequate public facilities and infrastructure that support the needs of City residents and businesses.

Policy CI 4.1: The condition of sewer, drainage and water systems, streets, and other support facilities should be inventoried and monitored.

Policy CI 4.2: A comprehensive plan to finance the ongoing maintenance, repair, and rehabilitation of City infrastructure systems.

Policy CI 4.3: Maintain a collaborative relationship with service providers to ensure that infrastructure investments are protected.

Community Resources Element, Conservation Plan

CN Goal IRC 1 Preserve and enhance the Willows Wetland and protect its natural resources.

Policy CN 1.1: Foster the implementation of the recommendations identified in A Plan for the Gardena Willows Wetland, which was adopted by the City in April 1999.

Policy CN 1.2: Foster environmental education, passive recreation, and volunteer programs that are compatible with the protection and enhancement of the wetland.

Policy CN 1.3: Encourage community involvement in preserving the wetland.

Policy CN 1.4: Promote collaboration with regional or State agencies in protecting the biological resources of the Willows Wetland.

CN Goal 2 Conserve and protect groundwater supply and water resources.

Policy CN 2.1: Encourage water conservation through education and water-conserving technology.

Policy CN 2.2: Comply with the water conservation measures set forth by the California Department of Water Resources.

Policy CN 2.3: Promote the use of reclaimed water for irrigation of public lands and for industrial uses, as feasible.

Policy CN 2.4: Increase the quantity and maintain the quality of the City's water table to provide an independent source of water.

Policy CN 2.5: Encourage citizens to report illegal dumping and vigorously prosecute illicit dumping of toxic or hazardous materials into the ground water.



Policy CN 2.6: Encourage and support the proper disposal of hazardous waste and waste oil. Monitor businesses that generate hazardous waste materials to ensure compliance with approved disposal procedures.

[Community Safety Element, Public Safety Plan](#)

PS Goal 5 A community that is protected from flood hazards.

Policy PS 5.1: Regulatory Compliance. Coordinate with local, state, and federal agencies to ensure that the City's regulations related to flood control are in compliance with federal, state, and local standards.

Policy PS 5.2: FEMA Coordination. Coordinate with the Federal Emergency Management Agency (FEMA) to ensure that Federal Insurance Rate Maps correctly depict flood hazards in the City.

Policy PS 5.3: Municipal Code. Implement the standards and requirements defined in the Municipal Code to reduce flood hazards and address flood-prone areas within the City.

Policy PS 5.4: California Building Code. Adhere to the latest building, site, and design codes in the California Building Code and FEMA flood control guidelines to avoid or minimize the risk of flooding hazards for new development in the City.

Policy PS 5.5: Stormwater Runoff. Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development (LID) to reduce stormwater runoff.

Policy PS 5.6: Regional Coordination. Maintain dialogue with the County of Los Angeles regarding regional flood facilities.

Policy PS 5.7: Changing Conditions. Coordinate with the Los Angeles County Flood Control and Water Conservation Districts.

Policy PS 5.8: Adequate Infrastructure. Maintain and regularly assess the status of local storm drainage infrastructure to ensure that the system is functioning property.

Policy PS 6.3: Water Supply. Promote plans and programs and collaborate with local, regional, state and federal jurisdictions to increase sustainable water sources and protect water infrastructure.

[City of Gardena Municipal Code](#)

Gardena Municipal Code Chapter 8.70, *Stormwater and Runoff Pollution Control*, provides standards to protect water quality in the City, including the requirements of the Municipal NPDES Permit. Section 8.70.110, *Pollutant Source Reduction*, establishes pollution reduction and mitigation measures for development projects, including, but not limited to:

- Construction projects that disturb one or more acres of soil by grading, clearing, and/or excavating or other activities are required to obtain a general construction activity stormwater permit (Construction General Permit). Projects that disturb less than one acre of soil are required to comply with minimum BMPs to reduce the discharge of



construction-related pollutants to the municipal separate storm sewer system. Erosion control plans may be required at the discretion of the city. If required, the project applicant must submit an erosion control plan to the city for approval as a condition for grading permit issuance.

- New development and redevelopment projects that are subject to the MS4 Permit are required to comply with post-construction runoff pollution reduction BMPs implemented through the SUSMP, including: low impact development (LID) BMPs to effectively reduce the amount of impervious area of a completed project site and promote the use of infiltration and other controls that reduce runoff; source control BMPs to prevent runoff contact with pollutant materials that would otherwise be discharged to the municipal sewer system; and structural and nonstructural BMPs to address pollutant discharges from certain uses, such as housing developments, retail gasoline outlets, automotive-related facilities, industrial and commercial facilities, parking lots, and new streets.
- An applicant subject to new development or redevelopment requirements must submit a SUSMP for City review and approval, which shall be incorporated into the applicant's project plans.
- Any project subject to CEQA review that is not specified in a redevelopment or development project category may be required to comply with any of the SUSMP requirements at the City's discretion.
- As a condition for issuing a certificate of occupancy for applicable development and redevelopment projects, the City requires a signed certification statement from facility operators and/or owners stating that the site and all structural or treatment control BMPs will be maintained in compliance with the SUSMP and other applicable regulatory requirements.

Gardena Municipal Code Title 15 monitors and regulates Buildings and Construction through the establishment of construction, operation, and maintenance provisions. Chapter 15.04, *General Building Provisions*, contains the adoption of the California Building Standards Code and several Code amendments, including the California Building Code, California Plumbing Code, and California Green Building Standards Code. Chapter 15.50, *Floodplain Management*, contains provisions that restrict or prohibit uses or impose additional standards in flood hazard areas to protect public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. Section 15.60.010, *Adoption of the California Model Water Efficient Landscape Ordinance*, adopts the 2015 version of the Model Water Efficient Landscape Ordinance contained in the California Code of Regulations Title 23, Sections 490 through 495. The Model Water Efficient Landscape Ordinance addresses the integration of stormwater BMPs into landscape design plans to minimize runoff and to increase on-site rainwater retention and infiltration.



5.9.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to hydrology and water quality. A project would result in a significant impact related to hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality (refer to Impact Statement 5.9-1);
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin (refer to Impact Statement 5.9-2);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - Result in substantial erosion or siltation on- or off-site;
 - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff or
 - Impede or redirect flood flows (refer to Impact Statement 5.9-3);
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation (refer to Impact Statement 5.9-4); and/or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan (refer to Impact Statement 5.9-5).

Based on these standards and significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a "significant unavoidable impact."

5.9.5 IMPACTS AND MITIGATION MEASURES

Impact 5.9-1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Impact Analysis:

Construction

The Project does not propose site-specific development projects; however, it does anticipate future development and redevelopment would occur within the Project Area. Future



development may involve grading, excavation, removal of vegetation cover, and activities associated with future construction activities that could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion impacts that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

As stated, to comply with NPDES Permit regulations, the State of California requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. Gardena Municipal Code Section 8.70.110 requires construction dischargers disturbing one acre or more of soil to obtain and comply with the Construction General Permit; construction dischargers disturbing less than one acre of soil to comply with minimum BMPs to reduce the discharge of construction-related pollutants to the municipal separate storm sewer system; and, at the City's discretion, approval of an erosion control plan as a condition for grading permit issuance.

Future site-specific development projects would be required to comply with the existing regulatory framework, including preparation of a SWPPP and identification of project-specific BMPs designed to control drainage and erosion if a project proposes to disturb one acre or more. For projects disturbing less than one acre, Gardena Municipal Code Section 8.70.110 would require compliance with minimum BMPs to reduce the discharge of pollutants. Therefore, the proposed Project would not violate any water quality standards or waste discharge requirements, nor would it otherwise substantially degrade surface water or groundwater quality.

Operation

The Project Area is primarily urbanized with limited pervious areas anticipated for development. The Project does not propose site-specific development. Although future development activities have the potential to result in increased runoff when compared to existing site conditions, redevelopment of the sites pursuant to current and updated standards that address stormwater runoff and water quality conditions, such as Low Impact Development (LID) BMPs, and landscaping requirements associated with residential developments, would likely improve water quality conditions overall. The MS4 Permit (Order R4-2021-0105) and Gardena Municipal Code regulate stormwater discharges within the Project Area, and require the use of BMPs and other control measures to reduce the discharge of pollutants to receiving water bodies.

Future development projects within the Project Area would be required to be consistent with the MS4 Permit and Gardena Municipal Code Section 8.70.110, which requires post-construction runoff pollution reduction BMPs implemented through the SUSMP, including LID BMPs to effectively reduce the amount of impervious area of a completed project site and promote the use of infiltration and other controls that reduce runoff; source control BMPs to prevent runoff



contact with pollutant materials that would otherwise be discharged to the municipal sewer system; and structural and nonstructural BMPs to address pollutant discharges from certain uses. Section 8.70.110 requires applicable development and redevelopment projects to submit a SUSMP for City review and approval, which is required to be incorporated into the applicant's project plans. Section 8.70.110 also requires ongoing maintenance of structural or treatment control BMPs in compliance with the SUSMP and other applicable regulatory requirements. Other existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SWPPPs, and to implement BMPs. Federal, State and local regulations would require individual projects to provide the on-site storm drain infrastructure, including water quality measures, to ensure the stormwater runoff associated with the proposed development would be captured and treated on-site, protecting water quality both on- and off-site. Therefore, implementation of the Project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.9-2: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact Analysis: A Project could decrease groundwater supplies by either causing an increase in water demand from which water supplies come from groundwater or resulting in development of an area that provides for groundwater recharge.

Groundwater Supplies

As indicated in Section 5.16, Utilities and Service Systems, potable water in the Project Area is provided by the GSWC Southwest System. According to the GSWC Southwest 2020 UWMP, water supply sources include local groundwater and imported water purchased from the Metropolitan Water District of Southern California (MWD). Groundwater that serves the Project area is pumped from the Central subbasin (Central Basin) and West Coast subbasin (West Coast Basin) of the Coastal Plain of the Los Angeles Groundwater Basin.

Project implementation would provide opportunities for residential development within the identified parcels. The Project is expected to result in increased population growth in the Project Area, and a corresponding increase in the demand for additional water supplies. Since GSWC's water supplies come from both local groundwater and imported water, the Project has the potential to decrease groundwater supplies due to the increase in water demand that would result from additional residential development.



As previously discussed, groundwater supplies constitute a major component of GSWC Southwest's water supply portfolio. GSWC Southwest uses adjudicated groundwater supplies from the Central Basin and West Coast Basin for use in its service area. However, the West Coast Basin Adjudication and Central Basin Adjudication limit the volumes of water that each party may extract from the respective basin. The APA is an assigned volume that is less than the historically available volume that was developed to reduce groundwater overdraft and seawater intrusion. The Watermaster is charged with monitoring and reporting the basins' conditions in order to ensure groundwater overdraft and sea water intrusion do not occur. Although Project implementation could result in an increased demand for water supplies, which have not been accounted for in the UWMP, the Project would not cause GSWC to pump additional groundwater supplies beyond its allocation or beyond the APA authorized through the adjudication of each basin. Thus, the Project would not substantially decrease groundwater supplies that would impede sustainable groundwater management of the basin. Refer to Section 5.16, Utilities, regarding water supplies.

Groundwater Recharge

The Project Area is underlain by the West Coast Basin. The Project Area is primarily urbanized with limited pervious areas and does not provide for substantial groundwater recharge within the Project Area. The Project does not propose site-specific development; however, the majority of development activities associated with implementation of the Project would consist of infill and redevelopment on currently urbanized sites. Therefore, the proposed Project would not interfere substantially with groundwater recharge. Although future development activities could result in the removal of existing limited pervious surfaces, redevelopment of the sites pursuant to current and updated standards that address stormwater runoff and water quality conditions, such as LID BMPs, and landscaping requirements associated with residential developments, would likely provide for increased pervious areas and improved opportunities for on-site infiltration, potentially allowing for additional groundwater recharge when compared to existing conditions.

As described above, recharge to the West Coast Basin's groundwater supply is mostly underflow from the Central Basin, through the Newport-Inglewood fault zone, and injection into the West Coast Basin; natural sources of groundwater recharge from percolation or precipitation, irrigation return flow from fields and lawns, and other applied surface waters are relatively minor. Given that future development associated with implementation of the Project would not appreciably add to the volume of impervious surfaces in the Project Area, potential impacts to groundwater recharge such that the Project may impede sustainable groundwater management of the basin would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.



Impact 5.9-3: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- **Result in substantial erosion or siltation on- or off-site;**
- **Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**
- **Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or**
- **Impede or redirect flood flows?**

Impact Analysis:

[Erosion and Siltation](#)

Erosion or siltation is known to occur during construction and/or during the post-construction phase if erosion control measures are not used. Erosion or siltation can also occur in the post-construction phase if runoff is not captured and conveyed appropriately. As stated above, future development would be subject to NPDES permit requirements that address the control of erosion and siltation. This includes the Construction General Permit, which requires a SWPPP and the effective implementation of erosion control measures. Gardena Municipal Code Section 8.70.110 establishes pollution reduction measures for development projects. Section 8.70.110 requires construction dischargers disturbing one acre or more of soil to obtain and comply with the Construction General Permit; construction dischargers disturbing less than one acre of soil to comply with minimum BMPs to reduce the discharge of construction-related pollutants to the municipal separate storm sewer system; and, at the City's discretion, approval of an erosion control plan as a condition for grading permit issuance. Section 8.70.110 requires post-construction runoff pollution reduction BMPs implemented through the SUSMP, including low impact development (LID) BMPs to effectively reduce the amount of impervious area of a completed project site and promote the use of infiltration and other controls that reduce runoff; source control BMPs to prevent runoff contact with pollutant materials that would otherwise be discharged to the municipal sewer system; and structural and nonstructural BMPs to address pollutant discharges from certain uses. Section 8.70.110 requires applicable development and redevelopment projects to submit a SUSMP for City review and approval, which is required to be incorporated into the applicant's project plans. Section 8.70.110 also requires ongoing maintenance of structural or treatment control BMPs in compliance with the SUSMP and other applicable regulatory requirements.

Development associated with implementation of the Project would also be subject to the requirements of the MS4 permit. Discharges that are not authorized by a NPDES permit must be permitted by other means by the LARWQCB or SWRCB (e.g., filing a Report of Waste Discharge,



Water Quality Certification). Through compliance with existing federal, State, and local regulations, erosion/siltation impacts resulting from Project implementation would be less than significant and no mitigation is required.

Surface Runoff and Water Quality

As previously described, LACFCD and the City operate and maintain a network of flood control facilities within the Project Area. Flooding can occur from an increase in impervious surfaces, which increases the volume and speed of runoff. When the volume and speed of runoff are increased, drainage facilities may be unable to handle the flows and capacity could be exceeded. As stated, the Project Area is primarily developed, with limited areas of pervious surfaces. Although future development activities have the potential to slightly increase impervious areas within the Project Area, the majority of development activities associated with implementation of the Project would consist of infill and redevelopment on currently urbanized sites. Federal, State, and local regulations would require individual projects to provide the on-site storm drain infrastructure and any off-site infrastructure improvements to ensure stormwater runoff associated with the proposed development would be adequately captured and conveyed into the City's storm drain system and LACFCD facilities. Therefore, implementation of the Project would not substantially increase the rate or amount of surface runoff which would result in flooding on- or offsite or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant in this regard.

As previously discussed, Gardena Municipal Code Section 15.60.010, *Adoption of the California Model Water Efficient Landscape Ordinance*, adopts the 2015 version of the Model Water Efficient Landscape Ordinance, which addresses the integration of stormwater BMPs into landscape design plans to minimize runoff and to increase on-site rainwater retention and infiltration. Existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SUSMPs, SWPPPs, and to implement BMPs. Through implementation of the General Plan policies, and existing federal, State, and local regulations discussed above, future development within the Project Area would not provide substantial additional sources of polluted runoff and impacts would be less than significant.

Flood Flows

The Project Area is highly urbanized and primarily developed with residential and non-residential uses. The Dominguez Channel is a channelized watercourse that runs through the western and southern portions of the City. The Project does not propose any changes to the Dominguez Channel and would not result in the alteration of the course of a river or stream. According to the National Flood Insurance Program FIRM, most of the City is located within an area of minimal flood hazard (FEMA, 2023). A part of the Dominguez Channel that runs through the southern portion of the City is within the 100-year flood zone. A portion of the Gardena Willows Wetland



Preserve is within the 500-year flood zone north of West Artesia Boulevard and west of South Vermont Avenue.

As described above, Gardena Municipal Code Chapter 15.50, *Floodplain Management*, contains provisions that restrict or prohibit uses or impose additional standards in areas of special flood hazards. Future development projects would be reviewed by the City to determine if a project site is located within areas of special flood hazards and thus subject to additional provisions set forth in Chapter 15.50. Additionally, construction of storm drainage improvements would occur as part of an overall development or infrastructure project. Through compliance with existing regulations, the Project would not impede or redirect flood flows; impacts would be less than significant and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.9-4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis: As described above, most of the City is located within an area of minimal flood hazard (FEMA, 2023). Should future development projects become inundated during a future flood event, there is a risk of pollutants being released inadvertently into the environment. As described above, pursuant to the CWA, each subsequent development project or improvement project that disturbs more than one acre would be required to obtain NPDES coverage under the Construction General Permit, which would require an approved SWPPP that includes BMPs for grading and preservation of topsoil. SWPPPs are designed to control storm water quality degradation to the extent practicable using BMPs during and after construction. Gardena Municipal Code Chapter 15.50, *Floodplain Management*, contains provisions that restrict or prohibit uses or impose additional standards in areas of special flood hazards. Further, the General Plan Community Safety Element, Public Safety Plan includes policies to reduce the risk of flooding and ensure compliance with regulatory requirements.

Tsunamis are sea waves that are generated in response to large-magnitude earthquakes, volcanic eruptions, or other underwater explosions, which can result in coastal flooding. Seiches are the oscillation of large bodies of standing water, such as lakes, that can occur in response to ground shaking. The Project Area is approximately five miles inland of the Pacific Ocean and is not located within a mapped tsunami hazard area. Regional dams do not have the potential to inundate the Project Area according to DWR Division of Safety of Dams Dam Breach Inundation Maps. As a result, tsunamis and seiches do not pose hazards due to the Project Area's inland location and lack of nearby bodies of standing water.

With implementation of General Plan policies and compliance with existing regulations, the Project would result in less than significant impacts associated with the release of pollutants due to project inundation.



Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.9-5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis: As described above, the local water quality control plan (Basin Plan) is maintained by the LARWQCB. The Basin Plan specifies the State’s water quality standards (i.e., beneficial uses, water quality objectives, and antidegradation policy) and serves as the basis for the RWQCB’s regulatory programs. When permittees and projects comply with the provisions of applicable NPDES permits and water quality permitting, they are consistent with the Basin Plan. Through compliance and implementation of existing regulations, implementation of the Project would not conflict with or obstruct a water quality control plan. Therefore, impacts in this regard would be less than significant.

As described above, the Project Area receives water from the GSWC Southwest System, which receives groundwater from the Central Basin and West Coast Basin. In compliance with the Central Judgment and West Coast Judgment, the Watermasters submit an annual report to the Los Angeles County Superior Court, which has jurisdiction to monitor ongoing management of the basins. The Central Basin and West Coast Basin were designated as very low priority basins in DWR’s 2019 SGMA Basin Prioritization report (California Department of Water Resources, 2020). SGMA exempts adjudicated groundwater basins from the requirements of designating a Groundwater Sustainability Agency and developing a Groundwater Sustainability Plan. The Central Judgment and West Coast Judgment provide for the legal and practical means of ensuring that the waters of each Basin are sustainably managed and put to maximum beneficial use. The Project does not propose site-specific development. Future development and redevelopment activities associated with implementation of the proposed Project would be subject to the Central Basin Judgment and West Coast Basin Judgment. Therefore, the Project would not conflict with implementation of a sustainable groundwater management plan and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.9.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the related projects in the City determined as having the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to hydrology and water quality may occur. The cumulative projects are within the same watershed as the Project Area and stormwater would be conveyed by the LACFCD and the City, similar to the Project.



Would the project, combined with other related cumulative projects, violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact Analysis: Future Project development and cumulative development within the City and surrounding areas may involve future construction activities that could temporarily increase runoff, erosion, and sedimentation. Future residential development and cumulative development would be required to comply with NPDES Permit regulations, which requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. Gardena Municipal Code Section 8.70.110 requires construction dischargers disturbing less than one acre of soil to comply with minimum BMPs to reduce the discharge of construction-related pollutants to the municipal separate storm sewer system and, at the City's discretion, approval of an erosion control plan as a condition for grading permit issuance.

Additionally, future Project development and cumulative development could increase impervious areas resulting in increased stormwater runoff when compared to existing site conditions. Future residential development and cumulative development would be required to be consistent with the MS4 Permit and Gardena Municipal Code Section 8.70.110, which requires post-construction runoff pollution reduction BMPs implemented through the SUSMP, including LID BMPs. Section 8.70.110 also requires ongoing maintenance of structural or treatment control BMPs in compliance with the SUSMP and other applicable regulatory requirements. Other existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SWPPPs, and to implement BMPs.

Thus, the proposed Project's incremental effects involving a violation of water quality standards or waste discharge requirements, or a substantial degradation of surface water or groundwater quality, would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact Analysis: The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For a majority of



the parcels the proposed amendments allow for new residential development or increased residential development when compared to existing conditions, potentially resulting in an increased demand on water supplies. The Basins are managed by an adjudication and subject to the Judgment managed by the applicable Watermasters, which ensure ongoing management of the Basins and assures the Basins will be capable of supplying sufficient water to meet local needs, including future growth and development.

The Project Area is primarily urbanized with limited pervious areas and does not provide for substantial groundwater recharge within the Project Area. Although future residential development and cumulative development could result in the removal of existing limited pervious surfaces, the areas served by the groundwater basins are highly urbanized. Future infill and redevelopment activities pursuant to current and updated standards that address stormwater runoff and water quality conditions, such as LID BMPs, would likely provide for increased pervious areas and improved opportunities for groundwater recharge when compared to existing conditions. Therefore, the proposed Project's incremental effects involving a substantial decrease in groundwater supplies or substantial interference with groundwater recharge is not cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- **Result in substantial erosion or siltation on- or off-site;**
- **Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**
- **Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or**
- **Impede or redirect flood flows?**

Impact Analysis:

[Erosion and Siltation](#)

Future Project development and cumulative development within the City and surrounding areas may involve future construction activities that could temporarily increase runoff, erosion, and sedimentation. Future residential development and cumulative development would be required to comply with NPDES Permit regulations, which requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The permit requires



development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. Gardena Municipal Code Section 8.70.110 requires construction dischargers disturbing less than one acre of soil to comply with minimum BMPs to reduce the discharge of construction-related pollutants to the municipal separate storm sewer system and, at the City's discretion, approval of an erosion control plan as a condition for grading permit issuance.

Additionally, future development could increase impervious areas resulting in increased stormwater runoff when compared to existing site conditions. Future residential development and cumulative development would be required to be consistent with the MS4 Permit and Gardena Municipal Code Section 8.70.110, which requires post-construction runoff pollution reduction BMPs implemented through the SUSMP, including LID BMPs. Section 8.70.110 also requires ongoing maintenance of structural or treatment control BMPs in compliance with the SUSMP and other applicable regulatory requirements. Other existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SWPPPs, and to implement BMPs. Therefore, the proposed Project's incremental effects involving erosion and siltation is not cumulatively considerable.

Surface Runoff and Water Quality

The Project Area is primarily urbanized with limited pervious areas anticipated for development. Although future residential development and cumulative development have the potential to increase impervious areas, federal, State, and local regulations would require individual projects to provide the on-site storm drain infrastructure and any off-site infrastructure improvements to ensure stormwater runoff associated with future and cumulative development would be adequately captured and conveyed into the City's storm drain system and LACFCD facilities. Therefore, implementation of the Project would not substantially increase the rate or amount of surface runoff which would result in flooding on- or offsite or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant in this regard. Therefore, the proposed Project's incremental effects involving or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems is less than cumulatively considerable.

Future Project development and cumulative development within the City and surrounding areas may involve future construction activities that could temporarily increase runoff, erosion, and sedimentation. As previously discussed, Gardena Municipal Code Section 15.60.010 addresses the integration of stormwater BMPs into landscape design plans to minimize runoff and to increase on-site rainwater retention and infiltration. Existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SUSMPs, SWPPPs, and to implement BMPs. Therefore, the



proposed Project's incremental effects involving substantial additional sources of polluted runoff would be less than cumulatively considerable.

Flood Flows

The Project Area is highly urbanized and primarily developed with residential and non-residential uses. The Project does not propose any changes to the Dominguez Channel and would not result in the alteration of the course of a river or stream. Flood impacts are site specific and generally do not combine to result in cumulative impact. Pursuant to the CWA, each subsequent development project or improvement project that disturbs more than one acre would be required to obtain NPDES coverage under the Construction General Permit, which would require an approved SWPPP that includes BMPs for grading and preservation of topsoil. Future development projects would be reviewed by the City to determine if a project site is located within areas of special flood hazards and thus subject to additional provisions set forth in Municipal Code Chapter 15.50. Additionally, construction of storm drainage improvements would occur as part of an overall development or infrastructure project. Therefore, the proposed Project's incremental effects involving impeding or redirecting flood flows would be less than cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis: Flood impacts are site specific and generally do not combine to result in cumulative impact. Tsunamis and seiches do not pose hazards due to the Project Area's inland location and lack of nearby bodies of standing water. Future development projects would be reviewed by the City to determine if a project site is located within areas of special flood hazards and thus subject to additional provisions set forth in Municipal Code Chapter 15.50. Additionally, construction of storm drainage improvements would occur as part of an overall development or infrastructure project. Therefore, the proposed Project's incremental effects involving the risk of release of pollutants due to project inundation would be less than cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis: As described above, the local water quality control plan (Basin Plan) is maintained by the LARWQCB. The Basin Plan specifies the State's water quality standards (i.e., beneficial uses, water quality objectives, and antidegradation policy) and serves as the basis for the RWQCB's regulatory programs. Future development and cumulative development projects



would be required to comply with the provisions of applicable NPDES permits and water quality permitting, consistent with the Basin Plan. Therefore, the proposed Project's incremental effects involving implementation of a water quality control plan is less than cumulatively considerable.

As described above, the Project Area receives water from the GSWC Southwest System, which receives groundwater from the Central Basin and West Coast Basin. The Central Judgment and West Coast Judgment provide for the legal and practical means of ensuring that the waters of each Basin are sustainably managed and put to maximum beneficial use. The Project does not propose site-specific development. Future development and cumulative development projects would be subject to the Central Basin Judgment and West Coast Judgment. Therefore, the proposed Project's incremental effects involving obstruction of implementation of a sustainable groundwater management plan is less than cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.9.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with hydrology and water quality would occur with the proposed Project.

5.9.8 REFERENCES

California Department of Conservation, *California Tsunami Maps and Data*, <https://www.conservation.ca.gov/cgs/tsunami/maps>, accessed February 24, 2023.

California Department of Water Resources (DWR), *Water Management Planning Tool*, <https://gis.water.ca.gov/app/boundaries/>, accessed February 23, 2023a.

California Department of Water Resources (DWR), *California's Groundwater Basin Boundary Descriptions: 4-011.03 Coastal Plain of Los Angeles – West Coast*, https://og-production-open-data-cnra-892364687672.s3.amazonaws.com/resources/e5fa6deb-baaf-4869-91b6-bbbbd8528d04/4-011.03_coastal-plain-of-los-angeles_west-coast_basinboundarydescription.pdf?Signature=6mvm47R27p3VHE9hUzneyjib%2FSc%3D&Expires=1677181621&AWSAccessKeyId=AKIAJJIENTAPKHZMIPXQ, accessed February 23, 2023b.

California Department of Water Resources (DWR), *Dam Breach Inundation Map Web Publisher*, https://fmnds.water.ca.gov/webgis/?appid=dam_prototype_v2, accessed February 23, 2023c.

California Department of Water Resources (DWR), *Sustainable Groundwater Management Act 2019 Basin Prioritization*, May 2020.



California State Water Quality Resources Control Board (SWRCB), *HUC Watersheds*, <https://gispublic.waterboards.ca.gov/portal/home/webmap/viewer.html?layers=b6c1bab9acc148e7ac726e33c43402ee>, accessed February 23, 2023.

California State Water Resources Control Board (SWRCB), *Category 5: 2020 California 303(d) List of Water Quality Limited Segments (CWA Section 303(d) List / 305(b) Report)*, https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category5_report.shtml, accessed February 23, 2023.

Federal Emergency Management Agency (FEMA), *FEMA Flood Map Service Center: Search By Address*, <https://msc.fema.gov/portal/search?AddressQuery=gardena#searchresultsanchor>, accessed February 23, 2023.

Golden State Water Company (GSWC), *Southwest Service Area 2020 Urban Water Management Plan*, July 2021.

LA Sanitation, *Dominguez Channel*, https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-wp/s-lsh-wwd-wp-ewmp/s-lsh-wwd-wp-ewmp-dc?_adf.ctrl-state=ekz7a7fxr_5&_afLoop=554928513672347#!, accessed February 23, 2023.

Los Angeles Regional Water Quality Control Board (LARWQCB), *Water Quality Control Plan: Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties – Chapter 2, Beneficial Uses*, May 2019.



5.10 LAND USE AND PLANNING

5.10.1 PURPOSE

This section identifies existing land use conditions within the Project Area and provides an analysis of potential impacts associated with implementation of the Project.

One comment was received during the NOP comment period in regard to land use and planning. The comment was received from the Southern California Association of Governments (SCAG). SCAG provides informational resources and recommendations to ensure consistency of the proposed Project with Connect SoCal (the adopted 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy).

5.10.2 ENVIRONMENTAL SETTING

EXISTING LAND USES

As described in Chapter 3.0, Project Description, the Project Area consists of parcels located throughout the City. As indicated in [Table 3-1, Existing On-Site Development](#), the Project Area contains a mix of existing on-site development, including: single- and multi-family residential uses; commercial, office, and industrial uses; education, hospital, and religious uses; government and utilities facilities; and transportation, communications, and utilities land. The Project Area is currently developed with 7,544,381 square feet of non-residential uses, 154 single-family dwelling units, and 961 multi-family dwelling units.

GENERAL PLAN AND ZONING

[General Plan Land Uses](#)

The following land use designations exist with the Project Area¹:

[Low Density Residential](#)

The single-family areas within Gardena are recognized as the backbone of the community and serve as one of its most important assets. The Low Density Residential designation is implemented by the Single-Family Residential (R-1) zone which provides for the development of conventional single-family detached houses at densities of up to 9 dwelling units per acre (du/ac).

¹ As discussed in Section 3.2, Project Background and 3.4.6, Approach to the Analysis, for purposes of this Draft EIR, the land use and zoning changes, including text amendments, previously made in connection with the Housing Element implementation are described as if they are new with the exception of the Zoning Text Amendments that establish requirements that provide for environmental protections associated with future development within the City, which are part of the City's established regulatory framework.



Medium Density Residential

The Medium Density Residential designation is intended to provide a quality multiple-family living environment. This category is implemented by the Low Density Multiple-Family Residential (R-2) and Medium Density Multiple-Family Residential (R-3) zones. It typically includes lower density multi-unit residential development and higher density single-family residential development such as those in the specific plan areas. Densities are permitted up to 17 du/ac.

High Density Residential

The High Density Residential designation provides for a high quality, compact, multiple-family living environment. This category is implemented by the High Density Multiple-Family Residential (R-4) zone and consists of two to three story multi-unit buildings. The High Density Residential designation provides for stepped densities of: 25 units per acre for lots less than 0.5 acre; 27 units per acre for lots between 0.5 acre and 1.0 acre; and 30 units per acre for lots greater than 1.0 acre.

Mixed-Use

The Mixed-Use designation is intended to provide for the co-existence of residential and commercial, office or industrial uses in the same zone, and even within the same building or on the same lot. It is implemented by the Commercial Residential (C-R) zone which allows 34 du/ac and the Home Business (H-B) zone which allows 9 du/ac.

Neighborhood Commercial

The Neighborhood Commercial designation is intended to serve the surrounding residential neighborhood or cluster surrounding residential neighborhoods with uses such as smaller scale food markets, drug stores, restaurants, childcare centers, health clubs, and other neighborhood-oriented retail and professional uses. It is implemented by the Commercial (C-2) and Parking (P) zones. The maximum permitted floor area ratio (FAR) is 0.5.

General Commercial

The General Commercial land use designation provides for a wide range of larger scale commercial uses to serve both the needs of the City and the region. It is intended for commercial uses such as regional retail, automobile dealerships, supermarkets, junior department stores, financial centers, professional offices, restaurants, and other commercial uses oriented to the traveling public. Its corresponding zoning are Business and Professional Office (C-P), General Commercial (C-3), Heavy Commercial (C-4) and Parking (P). The maximum permitted FAR is 0.5 in general; higher FARs of up to 2.75 may be allowed for specific uses or zones.

Industrial

The Industrial land use designation allows for a wide variety of clean and environmental friendly industries, technology-related uses and supporting facilities, and business parks. Most of the Industrial land use designation is located in the northern portion of the City, and is implemented



by the Industrial (M-1) and General Industrial (M-2) zones. The maximum permitted FAR is 1.0 in general; higher FARs of up to 2.0 may be allowed for specific uses or zones.

Mixed-Use Overlay

The Mixed-Use Overlay permits residential development on selected areas designated for Commercial and Industrial land uses. The purpose of this land use designation is to allow greater flexibility of development alternatives, especially attractive higher density residential development in appropriate areas that are experiencing both physical and economic blight. To prevent a patchwork of incompatible land uses, residential development in the Mixed-Use Overlay would be allowable on a project site with a minimum of 1.0 acre, unless circumstances prevent the consolidation of parcels to meet this requirement. The Mixed-Use Overlay provides for a FAR of 0.5 and stepped densities of: 20 units per acre for lots less than 0.5 acre; 25 units per acre for lots between 0.5 acre and 1.0 acre; and 30 units per acre for lots greater than 1.0 acre.

Public/Institutional

The Public/Institutional land use designation provides for a wide range of public and quasi-public uses, including government offices, transportation facilities, parks, schools, public utilities, public libraries, non-profit senior housing and other public uses. It is implemented by the Official (O) zoning designation.

Specific Plans

A Specific Plan covers a smaller area and establishes what land uses can occur in the area. Each plan is designed to implement the goals and policies of the General Plan, while containing detailed development standards, distribution of land uses, infrastructure requirements and implementation measures for the development of a specific geographic area. There are currently 12 Specific Plans in Gardena: the Normandie Place Specific Plan, Platinum Row Specific Plan, Emerald Square Specific Plan, Artesia Corridor Specific Plan, Cottage Place Specific Plan, Normandie Estates Specific Plan, Redondo Village Specific Plan, Ascot Village Specific Plan, Gardena Village Specific Plan, Carnelian Specific Plan, Western Avenue Specific Plan, and Gardena TOD Specific Plan.

Zoning Districts

As indicated in the Zoning Map and shown in Figure 3-5, Existing Zoning, the following zoning districts exist with the Project Area:

R-1 Single-Family Residential Zone

The R-1 single-family residential zone is intended as a low density residential district of single-family homes with one dwelling per lot and customary accessory buildings considered harmonious with low density residential development.



R-2 Low-Density Multiple-Family Residential Zone

The R-2 low-density multiple-family residential zone is intended as a low-density residential district of single-family detached dwellings and duplexes.

R-3 Medium Density Multiple-Family Residential Zone

The R-3 medium density multiple-family residential zone is intended as a medium density residential district of multiple-family dwellings, such as apartments and condominiums.

R-4 High Density Multiple-Family Residential Zone

The R-4 High Density Multiple-Family Residential Zone is identical to the R-3 Medium Density Multiple-Family Residential Zone, except for the development standards provided in Section 18.18.020 of the Municipal Code.

M-U Mixed Use Overlay

The mixed use overlay zone is intended to allow greater flexibility of development alternatives, especially attractive higher density residential development and live-work buildings, in appropriate areas of the City. More specifically, the intent of the mixed use overlay zone is to accomplish the following objectives: to encourage mixed use projects that combine residential with nonresidential uses in the same building or building site area as a means to create an active street life, enhance the vitality of businesses, and reduce the need for automobile travel; to provide a meaningful blend of residential and nonresidential uses that enhances and builds upon the City's commercial base; to provide additional housing options for people, including but not limited to, young professionals and older people, who want to live near their workplace and/or near retail and other non-residential uses; to encourage consolidation of small parcels into viable, block-size mixed use development in designated areas; to ensure on-site compatibility of residential and non-residential uses; and to ensure compatibility of mixed use projects with surrounding uses and development patterns.

C-R Commercial Residential Zone

The C-R zone is intended to permit multifamily residential uses to be located on lots in this zone either as the sole use or in conjunction with commercial and office uses.

P Parking Zone

The P parking zone is intended for the off-street parking of automobiles and other vehicles.

O Official Zone

The O official zone is intended solely for public, quasi-public and official uses and any other public or community functions, facilities and needs.



C-P Business And Professional Office Zone

The C-P business and professional office zone is intended to provide for the integrated development of office and professional uses along with related uses and facilities.

H-B Home Business Zone

The H-B zone is intended to permit business and industrial uses of limited size and intensity to be located on lots occupied by single-family residential structures. It is further intended that where there are existing residential structures on a lot, the character of H-B zoned areas be maintained by restricting nonresidential uses to a separate building or area located to the rear of such residential structures.

C-2 Commercial Zone

The C-2 commercial zone is intended for retail commercial uses.

C-3 General Commercial Zone

The C-3 general commercial zone is intended for general commercial uses.

C-4 Heavy Commercial Zone

The C-4 zone is intended to provide for highway related uses.

M-1 Industrial Zone

The M-1 zone permits commercial, manufacturing, and industrial uses.

M-2 General Industrial Zone

The M-2 zone is identical to the regulations of the M-1 zone, found in Chapter 18.36 of the Municipal Code.

SP Specific Plan

The SP zone is intended to provide for the classification and development of a parcel or parcels of land as a coordinated, comprehensive project that will result in a more desirable development or physical environment than would be possible through the strict application of conventional zoning regulations and standards.

5.10.3 REGULATORY SETTING

STATE

California General Plan and Zoning Law

Government Code Section 65300 requires that each county and city adopt a General Plan “for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning.”



The General Plan is a comprehensive long-term plan for the physical development of the county or city and is considered a "blueprint" for development. For all jurisdictions, the General Plan must contain seven state-mandated elements: Land Use, Open Space, Conservation, Housing, Circulation, Noise, and Safety. Cities and counties in the San Joaquin Air Pollution Control District must also address air quality in their general plans. Cities and counties that have identified disadvantaged communities must also address environmental justice in their general plans, including air quality. It may also contain any other elements that the county or city wishes to include. The land use element designates the general location and intensity of designated land uses to accommodate housing, business, industry, open space, education, public buildings and grounds, recreation areas, and other land uses.

The General Plan elements must be internally consistent. Additionally, a jurisdiction's zoning must be consistent with the General Plan.

The 2017 General Plan Guidelines, established by the Governor's Office of Planning and Research (OPR) to assist local agencies in the preparation of their general plans, further describe the mandatory land use element as a guide to planners, the general public, and decision makers prescribing the ultimate pattern of development for the county or city.

[California Housing Element Law](#)

The Housing Element is one of the General Plan Elements that are mandated by the State of California (California Government Code §§ 65580 to 65589.8). California State law requires that the Housing Element consists of, "an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing" (Government Code § 65580).

State law requires that each city and county identify and analyze existing and projected housing needs within its jurisdiction and prepare goals, policies, and programs to further the development, improvement, and preservation of housing for all economic segments of the community, commensurate with local housing needs.

[Subdivision Map Act](#)

A subdivision is any division of land for the purpose of sale, lease or finance. The State of California Subdivision Map Act (Government Code Section 66410 et seq.) regulates subdivisions throughout the State. The goals of the Subdivision Map Act are as follows:

- To encourage orderly community development by providing for the regulation and control of the design and improvement of a subdivision with proper consideration of its relationship to adjoining areas.
- To ensure that areas within the subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community.



- To protect the public and individual transferees from fraud and exploitation.

The Map Act allows cities flexibility in the processing of subdivisions. The City controls this process through the subdivision regulations in Title 17 of the Municipal Code. Regulations ensure that minimum requirements are adopted for the protection of the public health, safety and welfare; and that the subdivision includes adequate community improvements, municipal services, and other public facilities.

REGIONAL & LOCAL

[Southern California Association of Governments](#)

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 Gardena.

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 more than 38,000 square miles. As the designated MPO, the federal government mandates SCAG research and develop plans for transportation, growth management, hazardous waste management, and air quality. As a result, SCAG prepares comprehensive regional plans to address concerns.

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 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.

[Regional Transportation Plan/Sustainable Communities Strategy \(RTP/SCS\)](#)

The passage of California Senate Bill (SB) 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 (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 investments. The SCS is intended to provide a regional land use policy framework that local governments may consider and build upon.

On September 3, 2020, SCAG's Regional Council approved and fully adopted Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy). Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal outlines more than \$638 billion in transportation



system investments through 2045. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

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 2020 RTP/SCS Growth Forecasts provide population, household, and employment data for 2045. The socio-economic estimates and projections are used by federal and State mandated long-range planning efforts such as the RTP, Air Quality Management Plan, Regional Transportation Improvement Program, and the Regional Housing Needs Assessment (RHNA). SCAG's Adopted 2020 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 Proposed Project.

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 Project is considered regionally significant; as such, Project consistency with SCAG's 2020 RTP/SCS policies is analyzed below.

City of Gardena General Plan

The Gardena General Plan is currently presented as a collection of "elements" or subject categories, including the Community Development Element, Housing Element, Environmental Justice Element, Community Resources Element, and Community Safety Element. The Community Development Element is comprised of the Land Use Plan; Economic Development Plan; Community Design Plan; and Circulation Plan.

The City adopted the comprehensive Gardena General Plan 2006 (General Plan) in 2006. Subsequently, the Community Development Element's Land Use Plan was updated in June 2012, March 2013, and March-April 2021, and 2023²; and the Circulation Plan was updated in July 2020. The 2021-2029 Housing Element was adopted in January 2022, and readopted in February 2023. In February 2022, the Public Safety Plan was updated and a new Environmental Justice Element was adopted.

The General Plan Land Use Plan defines the policy framework for the physical development of the City. The Land Use Plan describes land use designations, including maximum densities and intensities, acreage, and development capacities by land use designation. The General Plan Land

² The 2023 updates are the subject of this Draft EIR.



Use Policy map identifies a land use designation, with overlays if applicable, for each parcel of land in the City and illustrates the general distribution of land uses throughout the City. The General Plan Land Use designations are applied to each parcel in the City, as shown in Figure 3-4, Existing General Plan Land Uses.

The City of Gardena has updated and adopted their Housing Element for the Sixth Cycle RHNA: 2021-2029 Housing Element and HCD has determined the Housing Element to be in substantial compliance with state law. The Gardena 2021-2029 Housing Element identifies strategies and programs that focus on: 1) conserving and improving existing affordable housing; 2) providing adequate sites for residential development; 3) assisting in the provision of affordable housing; 4) removing governmental and other constraints on housing development; and 5) affirmatively furthering fair housing.

The Gardena General Plan Community Development Element, Land Use Plan and 2021-2029 Housing Element contain the following goals and policies potentially relevant to the proposed project:

[Community Development, Land Use Plan](#)

LU Goal 1: Preserve and protect existing single-family and low/medium-density residential neighborhoods while promoting the development of additional high quality housing types in the City.

Policy LU 1.1: Promote sound housing and attractive and safe residential neighborhoods.

Policy LU 1.2: Protect existing sound residential neighborhoods from incompatible uses and development.

Policy LU 1.3: Protect the character of lower density residential neighborhoods.

Policy LU 1.4: Locate new medium- and high-density residential developments near neighborhood and community shopping centers with commensurate high levels of community services and facilities.

Policy LU 1.5: Provide adequate residential amenities such as open space, recreation, off-street parking and pedestrian features in multi-family residential developments.

Policy LU 1.6: Ensure residential densities are compatible with available public service and infrastructure systems.

Policy LU 1.7: Preserve the City's residential buildings of historic and cultural significance.

Policy LU 1.8: Minimize through-traffic on residential streets.

Policy LU 1.9: Allow well designed and attractive residential mixed-use development to occur on existing underutilized commercial/industrial blocks designated as Mixed-Use Overlay.



Policy LU 1.10: Provide adequate off-street parking, open space and landscaping for both residential and business use in all mixed-use developments.

Policy LU 1.11: Design infill development to be compatible and consistent with the existing low-density character of residential neighborhoods.

Policy LU 1.12: Require infill development to provide adequate amenities to minimize the impact of such development on the immediate neighborhood and on City services generally, including off-street parking to meet the additional demand placed on street parking.

LU Goal 4: Provide the highest quality of public facilities possible to meet the needs of the City's residents and businesses and promote the City's image and cultural heritage.

Policy LU 4.7: Provide adequate public facilities and services for the convenience and safety of each neighborhood.

Housing Element

HE Goal 2.0: Provide opportunity for increasing the supply of affordable housing within the City with special emphasis on housing for special needs groups.

HE Policy 2.2: Provide incentives for new housing construction, to encourage the production of affordable units. Encourage provision of units of various sizes to accommodate the diverse needs of the community, including seniors, students and young workers, and large households.

HE Policy 2.3: Pursue strategies that expand homeownership opportunities for lower income and moderate-income households.

HE Goal 3.0: Minimize the impact of governmental constraints on housing construction and cost.

HE Policy 3.3: Encourage the use of specific plans, overlays, and other mechanisms to allow flexibility in housing developments.

HE Goal 4.0: Provide adequate residential sites through appropriate land use and zoning to accommodate the City's share of regional housing needs.

HE Policy 4.1: Implement land use policies that allow for a range of residential densities.

HE Policy 4.2: Maintain an inventory of sites and assist residential developers in identifying land suitable for housing development.

HE Policy 4.3: Encourage residential development within the new Housing Overlay.

HE Policy 4.4: Encourage development at maximum attainable densities and encourage use of density bonuses for inclusion of affordable units.



HE Policy 4.5: Ensure the production of affordable units throughout the community to avoid over concentration in specific neighborhoods.

HE Goal 5.0: Promote equal opportunity for all residents to reside in the housing of their choice.

HE Policy 5.2: Provide a range of housing options, locational choices, and price points to accommodate the diverse needs in Gardena and to allow for housing mobility.

[City of Gardena Municipal Code](#)

Title 18, Zoning, of the Municipal Code is the “zoning law of the City of Gardena”; it specifies the types of allowable uses, as well as development standards such as minimum lot size, building heights and setbacks, parking standards, and others. Title 18 encourages and regulates development standards to encourage the most appropriate use of land and to promote the public health, safety and general welfare.

Chapter 18.44, *Site plan review*, establishes the procedure for site plan review, prior to issuance of a Building Permit. This Chapter specifies that Site Plans are required to be submitted for:

- Any development project for which a general plan amendment, zone change, conditional use permit, variance, tract map, or other discretionary permit is being sought in which case the site plan shall be processed concurrently with the other discretionary approvals;
- Any development project on property, public or private, fronting on the westerly or easterly side of Western Avenue from 182nd Street on the south to El Segundo Boulevard on the north;
- Any development project on property, public or private, fronting on the northerly or southerly side of Redondo Beach Boulevard from Crenshaw Boulevard on the west to Vermont Avenue on the east;
- Any development project on property, public or private, fronting on the northerly or southerly side of Rosecrans Avenue from Crenshaw Boulevard on the west to Vermont Avenue on the east;
- All new multifamily development of four units or more;
- Those uses identified in the C-R zone as needing site plan review approval;
- Any use allowed by right or by conditional use permit pursuant to the mixed use overlay zone, but not including any use allowed by itself in the underlying zone;
- Any development in the R-1 or R-2 zone where the proposed development is out of character with the surrounding residential properties as determined by the community development director, based on floor area ratio;
- Accessory uses in commercial parking lots; and
- Any other development for which a site plan review is required by this code.

The reviewing body reviews the physical location, size, massing, setbacks, pedestrian orientation, and placement of proposed structures on the site and the location of proposed uses within the



project; compatibility with surrounding sites and neighborhoods; and other factors, including but not limited to, location, amount, and nature of landscaping; placement, height, and direction of illumination of light standards; the location, number, size and height of signs; location, height and materials of walls, fences, or hedges; and the location and method of screening of refuse and storage areas and building equipment.

5.10.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to land use and planning. A project may create a significant environmental impact if it would:

- Physically divide an established community (refer to Impact Statement 5.10-1); and
- 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 (refer to Impact Statement 5.10-2).

Based on these standards and significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a "significant unavoidable impact."

5.10.5 IMPACTS AND MITIGATION MEASURES

Impact 5.10-1: Would the project physically divide an established community?

Impact Analysis: The objectives of the proposed Project are to implement programs identified in the Housing Element; create consistency between general plan and zoning; preserve multi-family lots for higher density; provide opportunities for a mix of housing at varying densities; and provide opportunities to align housing production with State and local sustainability goals. The Project would accomplish these objectives by amending the Land Use Plan of the Community Development Element of the General Plan with the addition of new land use designations and other technical updates to reflect changes that have occurred since 2006 and amending the General Plan Land Use Policy Map to apply the new land use designations, including rescinding the Artesia Corridor Specific Plan (ACSP) and applying the proposed Housing Overlay designations to numerous sites designated for non-residential uses. Additionally, new zones and development standards would be created to provide consistency with the Land Use Plan update. Several other changes to the Zoning Code would also occur including providing new objective Residential Design Standards and adding a new chapter of Design Review for residential development.

Overall, the proposed Project would provide new residential development opportunities to support the vision for development consistent with the General Plan and the State's Housing Element Law, including accommodating the City's RHNA. This is primarily accommodated through the implementation of Housing Overlays on sites currently identified for non-residential



development. The parcels identified for proposed land use and zone changes are primarily located along major corridors and their proximity to each other provide for opportunities to consolidate lots and provide for consistent and compatible residential development in areas served by commercial and retail uses. The proposed parcels are not located within established residential communities and do not extend into areas with the potential to physically divide an established community. The proposed land use and zoning changes would further support integration of mixed-use development, infill housing, and infrastructure improvements to further connect uses within the Project Area. The Project does not introduce new roadways or new or significantly expanded infrastructure that would divide an established community. Thus, the proposed Project would not physically divide an established community and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.1-2: Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis:

[SCAG Regional Transportation Plan/Sustainable Communities Strategy](#)

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted 2020 RTP/SCS. SCAG refers to CEQA Guidelines Section 15206, Projects of Statewide, Regional or Areawide Significance, in determining whether a project meets the criteria to be deemed regionally significant.

SCAG's 2020 RTP/SCS provides a framework for regional land use and transportation policy within the SCAG region through the horizon year of 2045. SCAG's 2020 RTP/SCS goals and policies were adopted to help focus future investments on the best-performing projects and strategies to preserve, maintain and optimize the performance of the existing transportation system. The goals of Connect SoCal fall into four core categories: economy, mobility, environment and healthy/complete communities. An analysis of the proposed Project's consistency with the relevant SCAG 2020 RTP/SCS goals adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 5.7, Greenhouse Gas Emissions, [Table 5.7-4, Project Consistency with the 2020-2045 RTP/SCS](#). As demonstrated in [Table 5.7-4](#), the Project would be consistent with SCAG's regional planning efforts and a less than significant impact would occur in this regard.

[General Plan Consistency](#)

The Project proposes to amend the Land Use Plan of the Community Development Element of the General Plan with the addition of new land use designations as well as other technical updates to reflect changes that have occurred since 2006. The proposed Housing Overlay



designations will be applied to numerous sites designated for non-residential uses. The General Plan Land Use Policy Map will also be amended to re-designate several sites in conjunction with the Zoning Map amendment to eliminate split-zoned properties and re-designate other properties to match the existing uses, densities, or intensities that already occur on the property; refer to Chapter 3.0 for a detailed project description. Implementation of the proposed land use designations would allow for increased residential development potential to encourage a variety of housing development at varying income levels within the Project Area. Project implementation would further the goals and policies of the General Plan, including the Housing Element by providing improved opportunities for residential development. Approval of the proposed amendments to the General Plan would provide consistency with the General Plan.

An analysis of the proposed Project’s consistency with the relevant General Plan policies and actions adopted for the purpose of avoiding or mitigating an environmental effect is provided in Table 5.10-1, General Plan Consistency.

**Table 5.10-1
General Plan Consistency**

General Plan Policies and Actions	Project Consistency
Community Development Element, Land Use Plan	
LU Goal 1: Preserve and protect existing single-family and low/medium-density residential neighborhoods while promoting the development of additional high quality housing types in the City.	
Policy LU 1.2: Protect existing sound residential neighborhoods from incompatible uses and development.	<u>Consistent</u> . The Project proposes to change the General Plan land use and zones for several parcels. For a majority of the parcels, the proposed amendments allow for new residential development or increased residential development when compared to existing conditions in order to accommodate the City’s RHNA and to allow for additional residential development opportunities should they arise. The Project does not provide for the development of industrial or other incompatible uses to existing residential neighborhoods. Therefore, the Project would be consistent with this policy.



**Table 5.10-1
General Plan Consistency (continued)**

General Plan Policies and Actions	Project Consistency
Policy LU 1.7: Preserve the City’s residential buildings of historic and cultural significance.	<u>Consistent</u> . As discussed in Section 5.4, Cultural Resources, the Project does not involve site-specific development and does not directly propose any changes to any historic resource. Future development projects would be required to comply with Mitigation Measure CUL-1, which would ensure evaluation of a project site for historical resources and, if necessary, implement mitigation measures to reduce impacts to a level that is less than significant. Therefore, the Project would be consistent with this policy.
Policy LU 1.12: Require infill development to provide adequate amenities to minimize the impact of such development on the immediate neighborhood and on City services generally, including off-street parking to meet the additional demand placed on street parking.	<u>Consistent</u> . As discussed in Section 5.13, Public Services, although the Project does not specifically propose any development projects, development accommodated through implementation of the Project would allow for new residential development or increased residential development when compared to existing conditions. Future development is assumed to occur over time, and the City would continue to regularly monitor resources to ensure that adequate facilities, staffing, and/or equipment are available to serve existing and future development and population increases. Consistent with the specific zoning for the site, individual residential development projects would be required to provide amenities consistent with the Gardena Municipal Code, such as bicycle parking and useable open space. Additionally, Gardena Municipal Code Chapter 15.48, Construction and Development Fees, requires new multi-family residential development (with certain exceptions specific to senior housing developed and operated by nonprofit corporations and affordable units for lower incomes facilities when the units are guaranteed to remain affordable for a period of 30 years) are required to pay on a per dwelling unit basis a fee to be applied to the



	<p>costs incurred by the City associated with the burden increased by the multi-unit residential facilities, open space, drainage and other public facilities and services related thereto. Further, the Gardena Municipal Code contains development standards to ensure new development provides off-street parking. Therefore, the Project would be consistent with this policy.</p>
<p>LU Goal 3: Provide high quality, attractive and well-maintained commercial, industrial, and public environments that enhance the image and vitality of the City.</p>	
<p>Policy LU 3.7: Require the mitigation or remediation of potential hazardous conditions in the City.</p>	<p><u>Consistent.</u> As discussed in Section 5.8, Hazards and Hazardous Materials, Project implementation would allow for the future development of residential uses on sites historically and/or currently developed with industrial and commercial uses. Future development associated with the Project would be reviewed at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities that may occur on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the regulatory agencies, such as DTSC and the Los Angeles Regional Water Quality Control Board (RWQCB). Additionally, future development would be required to comply with Municipal Code Section 18.42.200 (G), which requires preparation and compliance with recommendations included within a Phase I Environmental Site Assessment for all new residential construction and all construction involving grading or other ground disturbance below a depth of twelve inches. Compliance with established regulatory requirements and regulations would ensure the mitigation or remediation of potentially hazardous conditions in the City.</p>



Table 5.10-1 (continued)
General Plan Consistency

General Plan Policies and Actions	Project Consistency
<p>Policy LU 3.10: Ensure new development provides adequate improvements, dedications, and fees to the City to fully cover the cost of the City services and facilities.</p>	<p><u>Consistent</u>. As discussed in Section 5.13, Public Services, although the Project does not specifically propose any development projects, development accommodated through implementation of the proposed Project would allow for new residential development or increased residential development when compared to existing conditions. As discussed in response to Policy LU 1.12, the Gardena Municipal Code requires new multi-family residential development (with specific exceptions) to pay on a per dwelling unit basis a fee to be applied to the costs incurred by the City associated with the burden increased by the multi-unit residential facilities, open space, drainage and other public facilities and services related thereto. Therefore, the Project would be consistent with this policy.</p>
<p>LU Goal 4: Provide the highest quality of public facilities possible to meet the needs of the City’s residents and businesses and promote the City’s image and cultural heritage.</p>	
<p>Policy LU 4.5: Encourage the preservation of historical and cultural locations and monuments that highlight the heritage of the City.</p>	<p><u>Consistent</u>. As discussed in Section 5.4, Cultural Resources, the Project does not involve site-specific development and does not directly propose any changes to any historic resource. Future development projects would be required to comply with Mitigation Measure CUL-1, which would ensure evaluation of a project site for historical resources and, if necessary, implement mitigation measures to reduce impacts to a level that is less than significant. Therefore, the Project would be consistent with this policy.</p>
<p>Policy LU 4.6: Preserve and maintain as open space those areas in the City that serve as significant natural habitats.</p>	<p><u>Consistent</u>. As discussed in Section 5.3, Biological Resources, the Project would not result in any changes to land designated as Open Space, including the Willows Wetland Preserve. Therefore, the Project would be consistent with this policy.</p>



Table 5.10-1 (continued)
General Plan Consistency

General Plan Policies and Actions	Project Consistency
Community Development Element, Circulation Plan	
CI Goal 1: Promote a safe and efficient circulation system that benefits residents and businesses, and integrates with the greater Los Angeles/South Bay transportation system.	
<p>Policy CI 1.1: Prioritize long-term sustainability for the City of Gardena, in alignment with regional and state goals, by promoting infill development, reduced reliance on single-occupancy vehicle trips, and improved multi-modal transportation networks, with the goal of reducing air pollution and greenhouse gas emissions, thereby improving the health and quality of life for residents.</p>	<p><u>Consistent</u>. The Project proposes to change the General Plan land use and zones for numerous parcels. For a majority of the parcels, the proposed amendments allow for infill residential development and/or increased residential development when compared to existing conditions, resulting in a reduction in GHG emissions. Additionally, operational air quality emissions would not exceed established significance thresholds. Overall vehicle miles traveled (VMT) per capita under cumulative buildout conditions would be reduced under the cumulative with Project conditions.</p>
Community Resources Element, Open Space Plan	
OS Goal 1: Maintain and upgrade the existing parks and recreation facilities to meet the needs of all residents.	
<p>Policy OS 1.3: Encourage adequate funding and capital improvement program to promote the ongoing maintenance and rehabilitation of City facilities.</p>	<p><u>Consistent</u>. Refer to response to General Plan Community Development Element, Land Use Plan, Policy LU 3.10.</p>
Community Safety Element, Public Safety Plan	
N Goal 1: Use noise control measures to reduce the impact from transportation noise sources.	
<p>Policy N 1.1: Minimize noise conflicts between land uses and the circulation network, and mitigate sound levels where necessary or feasible to ensure the peace and quiet of the community.</p>	<p><u>Consistent</u>. As discussed in Section 5.11, Noise, traffic noise associated with the proposed Project would not result in substantial increases in ambient noise along the analyzed roadways with the potential to exceed the land use compatibility criteria and therefore would result in less than significant impacts.</p>
<p>Source: City of Gardena, <i>City of Gardena General Plan 2006</i>, April 2006.</p>	



GARDENA MUNICIPAL CODE

The Project creates new zones to provide consistency with the Land Use Plan update. In addition to the new zones to be added to the Zoning Code, the Project makes additional changes to the Zoning Code as described below. The underlined changes are ones that were not previously added.

- Add new zoning designations with development standards for the following zones: Very High Density Residential (R-6); Medium Density Overlay (HO-3); High Density Overlay 30 (HO-4); High Density Overlay 50 (HO-5); Very High Density Overlay 70 (HO-6); and Artesia Mixed Use (AMU).
- Add new objective Residential Design Standards.
- Add a new chapter on Design Review for residential development.
- Eliminate the possibility of single-family homes in the R-3 zone and set a minimum density of 12 du/acre.
- Eliminate the mid-range density in the R-4 and MUO zones so that all properties in these zones with a minimum size of 0.5 acre will be allowed to develop at up to 30 units per acre in order that sites of 0.5 acre to 1.0 acre can be counted towards sites suitable for affordable housing.
- Reduce the minimum lot size to develop an MUO designated property with residential to 0.5 acre rather than 1 acre.
- Eliminate the minimum dwelling unit size in the MUO zone, as called for in the Housing Element.
- Amend landscape regulations for all properties in the City to comply with water efficiency regulations and add requirements for allowed planting types and sizes.
- Add language regarding drainage and paving requirements for all types of development.
- Add requirements for submittal of technical reports needed for residential development projects.
- Add standard requirements for residential development projects, including requirements for security and lighting plans for residential development projects, and providing pet relief areas in multifamily residential developments.
- Amend required findings for Site Plan Reviews.
- Add standard regulations regarding tribal cultural resources treatment agreements for those developments where cultural resources are found on site.
- Amend section on satellite antennas to be compliant with law.
- Update the uses allowed in the Home Business zone.
- Adding new definitions.

The Project would amend the Gardena Zoning Map to apply the new zones to specific parcels within the City and to eliminate split-zoned properties and rezone other properties to match the existing uses, densities, or intensities that already occur on those properties, including rescinding



the ACSP and applying the proposed Housing Overlays to numerous sites designated for non-residential uses.

Subsequent development and infrastructure projects would be required to be consistent with the proposed zone changes applicable to the specific development site, including permitted land uses, and densities and development standards specific to each zone. Future development projects would be reviewed to determine consistency with the City's Zoning Code. Thus, the proposed Project would not result in conflicts with the City's Municipal Code and impacts would be less than significant.

Therefore, implementation of the proposed Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.10.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the methodology used to determine the potential for cumulative growth and development to interact with the proposed Project to the extent that a significant cumulative effect relative to land use and planning may occur. The geographic setting for land use and planning considers the SCAG region and the City.

Would the project, combined with other related cumulative projects, physically divide an established community

Impact Analysis: Although the proposed Project does not involve site-specific development, the intent is to provide adequate sites for residential development to accommodate the City's RHNA and to allow for additional residential development opportunities should they arise. This is primarily accommodated through the implementation of Housing Overlays on sites currently identified for non-residential development. The parcels identified for proposed land use and zone changes are primarily located along major corridors and their proximity to each other provide for opportunities to consolidate lots and provide for consistent and compatible residential development. The proposed parcels are not located within established residential communities and do not extend into areas with the potential to physically divide an established community.

The cumulative development projects include sites that would require a land use and/or zone change to allow for the development being proposed. Each individual development project would be reviewed to determine its consistency and compatibility with the surrounding area and its potential to physically divide an established community. As the Project would not physically divide an established community, the Project's incremental effects would not be cumulatively considerable.



Would the project, combined with other related cumulative projects, 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: As discussed above, the Project proposes to amend the Land Use Plan of the Community Development Element of the General Plan with the addition of new land use designations and implement other technical updates to reflect changes that have occurred since 2006. The General Plan Land Use Policy Map would be amended to apply the new land use designations, including rescinding the ACSP and applying the proposed Housing Overlay designations to numerous sites designated for non-residential uses. Additionally, new zones and development standards would be created to provide consistency with the Land Use Plan update. Several other changes to the Zoning Code would also occur including providing new objective Residential Design Standards and adding a new chapter of Design Review for residential development. As demonstrated above, the proposed Project would not cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect. The proposed Project would continue to implement the goals and policies of the General Plan and proposed changes to the Zoning Code would contribute to avoiding or mitigating an environmental effect.

Similar to future development associated with the proposed Project, cumulative development projects would be evaluated for consistency with the project site's General Plan land use designation and zoning; General Plan goals, policies, and actions; and other applicable plans for the purpose of avoiding or mitigating an environmental effect. As analyzed above, the proposed Project would not 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. Thus, the proposed Project's incremental effects would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.10.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with land use and planning would occur with the proposed Project.

5.10.8 REFERENCES

Southern California Association of Governments, *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*, September 3, 2020.



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5.11 NOISE

5.11.1 PURPOSE

This section identifies existing noise conditions within the Project Area and provides an analysis of potential impacts associated with implementation of the Project. This section is primarily based upon the *Land Use Plan and Zoning Amendments Project Noise – Impact Study*, prepared by MD Acoustics, LLC and dated May 17, 2023; refer to Appendix G, Noise Impact Study.

One comment was received during the NOP comment period regarding noise. The comment was received from Vera Povetina, who expressed concern about noise resulting from additional dwelling units within the City.

5.11.2 ENVIRONMENTAL SETTING

FUNDAMENTALS OF NOISE

Sound, Noise, and Acoustics

Sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. Sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic or stationary noise, the medium of concern is air. Noise is defined as sound that is loud, unpleasant, unexpected, or unwanted.

Frequency and Hertz

A continuous sound is described by its *frequency* (pitch) and its *amplitude* (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch starting at 20 Hz to the high pitch of 20,000 Hz.

Sound Pressure Levels and Decibels

The amplitude of a sound determines its loudness. The loudness of sound increases or decreases as the amplitude increases or decreases. Sound pressure amplitude is measured in units of micro-Newton per square meter ($\mu\text{N}/\text{m}^2$), also called micro-Pascal (μPa). One μPa is approximately one hundred billionths (0.0000000001) of normal atmospheric pressure. Sound pressure level (SPL or L_p) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels abbreviated dB.

Addition of Decibels

Because decibels are on a logarithmic scale, sound pressure levels (SPL) cannot be added or subtracted by simple plus or minus addition. When two sounds of equal SPL are combined, they will produce an SPL 3 dB greater than the single SPL. In other words, sound energy that is doubled



produces a 3 dB increase. If two sounds differ by approximately 10 dB, the higher sound level is the predominant sound. When combining sound levels, estimates shown in Table 5.11-1, Decibel Addition may be utilized.

**Table 5.11-1
Decibel Addition**

When Two Decibel Values Differ by:	Add This Amount to Higher Value	Example
0 or 1 dB	3 dB	70+69 =73 dB
2 or 3 dB	2 dB	74+71 =76 dB
4 to 9 dB	1 dB	66+60 =67 dB
10 dB or more	0 dB	65+55 =65 dB

Source: Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol. Caltrans, 2013

Human Response to Changes in Noise Levels

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of this report as well as with most environmental documents, A-scale weighting is typically used and is reported in terms of the A-weighted decibel (dBA). The A-scale was designed to account for the frequency-dependent sensitivity of the human ear. Typical A-weighted noise levels are shown in Table 5.11-2, Typical Noise Levels.

In general, the human ear can barely perceive a change in the noise level of 3 dB. As shown in Table 5.11-3, Perceived Changes in Noise Levels, a change in 5 dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a highway) would result in a barely perceptible change in sound level.



**Table 5.11-2
Typical Noise Levels**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor
Jet flyover at 1,000 feet	110	Rock Band
Gas lawnmower at 3 feet	100	
Diesel truck at 50 feet at 50 mph	90	Food blender at 3 feet
Noisy urban area, daytime	80	Garbage disposal at 3 feet
Gas lawnmower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
Quiet urban daytime	50	Large Business Office Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
Quiet rural nighttime	30	Library Bedroom at night, concert hall (background)
	20	
		Broadcasting/recording studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol. Caltrans, 2013.



Table 5.11-3
Perceived Changes in Noise Levels

Changes in Intensity Level, dBA	Changes in Apparent Loudness
1	Not perceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud

Source: Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol. Caltrans, 2013.

Noise Descriptors

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, and others are random. Some noise levels are constant, while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels.

A-Weighted Sound Level. The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient Noise. The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.

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

Decibel (dB). A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for sound in air is 20 micro-pascals.

dBA. A-weighted sound level (see definition above).

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

Habitable Room. Any room meeting the requirements of the California Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking, or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.



L(n). The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly, L50, L90, L99, etc.

Noise. Any unwanted sound or sound which is undesirable because it interferes with speech and hearing, is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

Outdoor Living Area. Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

Percent Noise Levels. See L(n).

Sound Level (Noise Level). The weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum.

Sound Level Meter. An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Single Event Noise Exposure Level (SENEL). The dBA level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

Tonal Sounds

A pure tone sound is a sound produced at or near a single frequency. Laboratory tests have shown that humans are more perceptible to changes in sound levels of a pure tone. For a noise source to contain a "pure tone," there must be a significantly higher A-weighted sound energy in a given frequency band than in the neighboring bands, thereby causing the noise source to "stand out" against other noise sources. A pure tone occurs if the sound pressure level in the one-third octave band with the tone exceeds the average of the sound pressure levels of the two contiguous one-third octave bands by 5 dB for center frequencies of 500 Hertz (Hz) and above; by 8 dB for center frequencies between 160 and 400 Hz; and by 15 dB for center frequencies of 125 Hz or less.



Sound Propagation

As sound propagates from a source it spreads geometrically. Sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates at a rate of 6 dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of 3 dB per doubling of distance.

Research has demonstrated that atmospheric conditions can have a significant effect on noise levels when noise receivers are located 200 feet or more from a noise source. Wind, temperature, air humidity, and turbulence can further impact how far sound can travel.

Ground Absorption

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft site conditions such as grass, soft dirt, or landscaping attenuate noise at a rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall noise attenuation of 4.5 dB per doubling of distance for a line source and 7.5 dB per doubling of distance for a point source.

Sound Attenuation

Noise-related land use issues are typically composed of three basic elements: (1) the noise source, (2) a transmission path, and (3) a receiver.

The appropriate acoustical treatment for a given project should consider the nature of the noise source and the sensitivity of the receiver. When the potential for a noise-related problem is present, either avoidance of the noise-related problem or noise control techniques should be selected to provide an acceptable noise environment for the receiver while remaining consistent with local aesthetic standards and practical structural and economic limits. Fundamental noise control options are described below.

Noise Barriers

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of construction or traffic noise in half. To achieve that reduction, the barrier must be high enough and long enough to block the line-of-sight of the construction activities or vehicles on the road. A noise barrier can still achieve a 5 dBA noise level reduction when it is tall enough to barely allow a line-of-sight of the construction activities or vehicles. A noise barrier is most effective when placed close to the noise source or receiver. When the noise barrier is an earthen berm instead of a wall, the noise attenuation can be increased by another 3 dBA.



Setbacks

Noise exposure may be reduced by increasing the setback distance between the noise source and the receiving use. Setback areas can take the form of open space, frontage roads, recreational areas, and storage yards. The available noise attenuation from this technique is limited by the characteristics of the noise source but generally ranges between 4 and 6 dBA.

Site Design

Buildings can be placed on a property to shield other structures or areas affected by noise and to prevent an increase in noise levels caused by reflections. The use of one building to shield another can significantly reduce overall noise control costs, particularly if the shielding structure is insensitive to noise. An example would be placing a detached garage nearest the noise source to shield the house or backyard. Site design should guard against creating reflecting surfaces that may increase onsite noise levels. For example, two buildings placed at an angle facing a noise source may cause noise levels within that angle to increase by up to 3 dBA. The open end of U-shaped buildings should point away from noise sources for the same reason. Landscaping walls or noise barriers located within a development may inadvertently reflect noise to a noise-sensitive area unless carefully located.

Building Facades

When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through the acoustical design of building facades. Standard construction practices provide a noise reduction of 10 to 15 dBA for building facades with open windows and a noise reduction of approximately 25 dBA when windows are closed. An exterior-to-interior noise reduction of 25 dBA can be obtained by requiring that building design include adequate ventilation systems, which would allow windows facing a noise source to remain closed, even during periods of excessively warm weather.

Where greater noise reduction is required, acoustical treatment of the building facade may be necessary. Reducing relative window area is the most effective control technique, followed by providing acoustical glazing (e.g., thicker glass or increased air space between panes) within frames with low air infiltration rates, using fixed (i.e., non-movable) acoustical glazing, or eliminating windows. Noise transmitted through walls can be reduced by increasing wall mass (e.g., using stucco or brick in lieu of wood siding), or isolating wall members by using double or staggered stud walls, while noise transmitted through doorways can be lessened by reducing door area, using solid-core doors, or sealing door perimeters with suitable gaskets. Noise-reducing roof treatments include using plywood sheathing under roofing materials.

Landscaping

While the use of trees and other vegetation is often thought to provide significant noise attenuation, approximately 100 feet of dense foliage – with no visual path extending through the foliage – is required to achieve a 5 dBA attenuation of traffic noise. Thus, the use of vegetation



as a noise barrier is not considered a practical method of noise control unless large tracts of dense foliage are part of the existing landscape.

Vegetation can be used, however, to acoustically "soften" intervening ground between a noise source and a receiver, increasing ground absorption of sound, and thus, increasing the attenuation of sound with distance. Planting trees and shrubs also offers aesthetic and psychological value, and it may reduce adverse public reaction to a noise source by removing the source from view, even though noise levels would be largely unaffected.

GROUND-BORNE VIBRATION FUNDAMENTALS

Vibration Descriptors

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and mainly exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves. Several different methods are used to quantify vibration amplitude. Typical human reaction and effect on buildings due to ground-borne vibration is shown in Table 5.11-4, Typical Human Reaction and Effect on Buildings Due to Ground-Borne Vibration.

Peak Particle Velocity (PPV). Known as the peak particle velocity (PPV) which is the maximum instantaneous peak in vibration velocity, typically given in inches per second.

Root Mean Squared (RMS). Known as root mean squared (RMS) can be used to denote vibration amplitude

Vibration Level (VdB). A commonly used abbreviation to describe the vibration level (VdB) for a vibration source.



Table 5.11-4
Typical Human Reaction and Effect on Buildings Due to Ground-Borne Vibration

Vibration Level Peak Particle Velocity (PPV)	Human Reaction	Effect on Buildings
0.006–0.019 in/sec	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08 in/sec	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10 in/sec	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e., not structural) damage to normal buildings
0.20 in/sec	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling – houses with plastered walls and ceilings
0.40–0.60 in/sec	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage
Source: Caltrans Transportation and Construction Vibration Guidance Manual, 2020.		

Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration.

The California Department of Transportation has published one of the seminal works for the analysis of ground-borne noise and vibration relating to transportation- and construction-induced vibrations and although the Project is not subject to these regulations, it serves as useful tools to evaluate vibration impacts. (California Department of Transportation, 2020).



Vibration Propagation

There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation. As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. This drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

EXISTING NOISE ENVIRONMENT

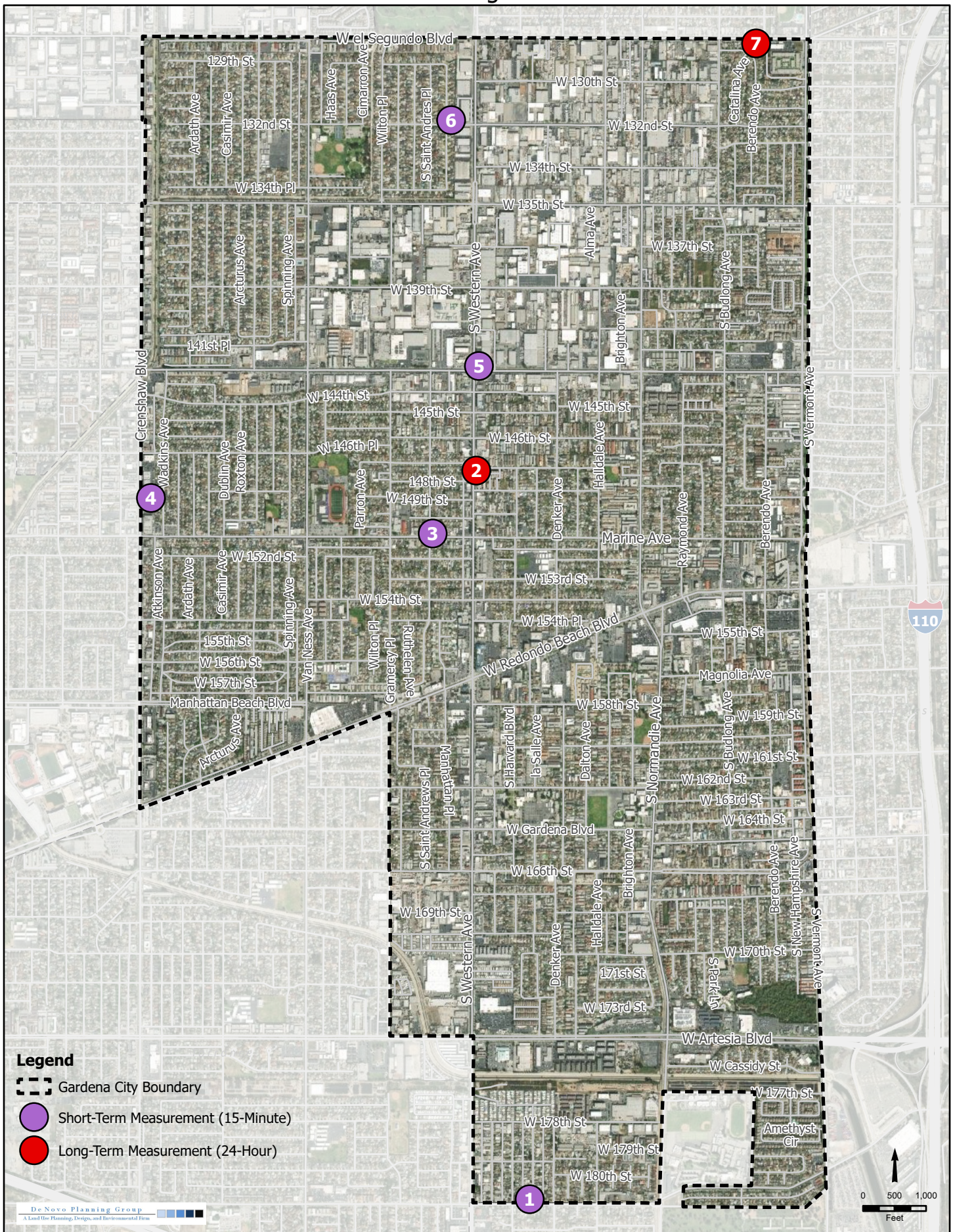
General Land Use Noise

Existing land uses within the Project Area include single and multiple-family residential development, commercial, industrial, recreational, and institutional land uses. Noise sources associated with existing land uses include residential maintenance, parking lot noise, heating, and cooling system (HVAC) noise, property maintenance noise, trash truck noise, loading and unloading noise, and recreational noise.

Noise Measurements

Two (2) long-term 24-hour noise measurements and five (5) short-term 15-minute noise measurements were conducted throughout the Project Area to document the existing noise environment. Noise measurement locations are shown in Figure 5.11-1, Noise Measurement Location Map.

Figure 5.11-1. Noise Measurement Locations





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Short-Term Noise Measurements

Five (5) short-term noise measurements (15-minute) were taken on April 11, 2023, in order to document the daytime Leq level at different locations throughout the Project Area. Measured noise levels ranged between 56.2 and 76.4 dBA Leq. Vehicle noise associated with Western Avenue, 182nd Street, Marine Avenue, and Crenshaw Boulevard, and Rosecrans Avenue were the primary sources of ambient noise. Noise measurement results are presented in Table 5.11-5, Short-Term Noise Measurement Summary. Field notes and meter output are provided in Appendix G.

**Table 5.11-5
Short-Term Noise Measurement Summary**

Noise Measurement Location	Approximate Location	A-Weighted Sound Level (dBA)						
		Leq	Lmax	Lmin	L2	L8	L25	L50
ST1	1651 W 182nd Street	69.0	81.0	43.6	76.3	73.1	70.4	66.6
ST3	1857 Marine Avenue	68.2	77.1	44.5	73.9	72.1	70.1	66.9
ST4	14906 Wadshan Alley	58.7	70.9	45.8	65.2	61.6	59.4	57.4
ST5	14308 S Western Avenue	76.4	95.5	59.1	83.7	76.5	73.7	70.1
ST6	13204 Manhattan Place	56.2	76.0	43.1	64.7	58.9	54.5	50.6

Notes: dBA = A-weighted decibels; Leq = equivalent noise level; Lmax = maximum noise level; Lmin = minimum noise level; Ln = noise level exceeded n percent of the measurement period, 15-minute duration

Long-Term Noise Measurements

Two (2) long-term noise measurements (24 consecutive hours) were taken on April 11 and 12, 2023 in order to document the Community Noise Equivalent Level (CNEL) at different locations throughout the Project Area. As shown in Table 5.11-6, Long-Term Noise Measurement Summary, the measured CNEL was 72.3 at 55 feet from the centerline of Western Avenue and 62.1 dBA at 120 feet from El Segundo Boulevard. The primary noise source was vehicle traffic. Table 5.11-6 also outlines the daytime (7:00 a.m. to 7:00 p.m.), evening (7:00 p.m. to 10:00 p.m.), and nighttime (10:00 p.m. to 7:00 a.m.) Leq levels at each location. These represent the average level over each time period (day/evening/night). Field notes and meter output are provided in Appendix G.



**Table 5.11-6
Long-Term Noise Measurement Summary**

Noise Measurement Location	Approximate Location	A-Weighted Sound Level (dBA)			
		Daytime Leq	Evening Leq	Nighttime Leq	CNEL
LT2	14700 South Western Avenue	70.7	68.1	63.5	72.3
LT7	End of South Catalina Avenue	58.2	55.9	54.9	62.1

Notes: dBA = A-weighted decibels; Leq = equivalent noise level; Lmax = maximum noise level; Lmin = minimum noise level; Ln = noise level exceeded n percent of the measurement period 24-hour duration

Existing Noise Modeling

The primary sources of noise in Gardena are transportation-related noises. Major roadways create ambient noise levels that affect the overall quality of life in the community. Modeled existing noise levels provided in Table 5.11-7, Existing Exterior Noise Levels Along Roadways, and on Figure 5.11-2, Existing Roadway Noise Level Contours, confirm that there are currently sensitive land uses in the Project Area that are exposed to noise levels above 65 dBA CNEL.

The modeled noise contours do not take into account factors such as existing buildings, walls, landscaping, etc. that may reduce or in some cases, amplify noise sources. Measured noise levels provided in Table 5.11-5 and Table 5.11-6, do take into account existing structures as well as other noise sources.

Those areas in the City that currently experience sound levels greater than 65 dBA CNEL are typically near major vehicular traffic corridors. Traffic noise levels typically depend on three factors: (1) the volume of traffic, (2) the average speed of traffic, and (3) the vehicle mix (i.e., the percentage of trucks versus automobiles in the traffic flow). Vehicle noise includes noises produced by the engine, exhaust, tires, and wind generated by taller vehicles. Other factors that affect the perception of traffic noise include the distance from the highway, terrain, heavy vegetation, and natural and structural obstacles. While tire noise from automobiles is generally located at ground level, some truck noise sources may emanate from 12 feet or more above the ground.



**Table 5.11-7
Existing Exterior Noise Levels Along Roadways**

Roadway	Segment Limits	CNEL, dBA @50 ft	Distance to Contour (feet)			
			70 dBA	65 dBA	60 dBA	55 dBA
El Segundo Blvd.	Western Ave. to Normandie Ave.	75.9	196	619	1,956	6,186
135th St.	Western Ave. to Normandie Ave.	72.5	89	281	889	2,812
Rosecrans Ave.	Van Ness Ave. to Western Ave.	76.1	202	638	2,019	6,383
Rosecrans Ave.	Western Ave. to Normandie Ave.	77.2	264	836	2,643	8,359
Marine Ave.	Crenshaw Blvd. to Van Ness Ave.	71.4	70	221	698	2,207
Marine Ave.	Western Ave. to Normandie Ave.	70.6	57	181	572	1,810
Redondo Beach Blvd.	Western Ave. to Normandie Ave.	74.3	134	425	1,344	4,251
Crenshaw Blvd.	El Segundo Blvd. to 135th St.	74.4	138	438	1,384	4,376
Crenshaw Blvd.	135th St. to Rosecrans Ave.	74.8	150	475	1,503	4,753
Crenshaw Blvd.	Rosecrans Ave. to Marine Ave.	74.7	149	470	1,488	4,705
Crenshaw Blvd.	Marine Ave. to Manhattan Beach Blvd.	74.3	134	422	1,335	4,223
Western Ave.	El Segundo Blvd. to 135th St.	73.7	117	371	1,174	3,711
Western Ave.	135th St. to Rosecrans Ave.	74.1	127	403	1,275	4,031
Western Ave.	Rosecrans Ave. to Marine Ave.	74.7	147	465	1,471	4,653
Western Ave.	158th St. to 162nd St.	75.3	171	541	1,712	5,413
Western Ave.	166th St. to Artesia Blvd.	75.4	174	551	1,742	5,508
Western Ave.	Artesia Blvd. to 182nd St.	74.9	155	489	1,546	4,890
Normandie Ave.	135th St. to Rosecrans Ave.	72.1	81	257	814	2,573



Table 5.11-7 (continued)
Existing Exterior Noise Levels Along Roadways

Roadway	Segment Limits	CNEL, dBA @50 ft	Distance to Contour (feet)			
			70 dBA	65 dBA	60 dBA	55 dBA
Normandie Ave.	170th St. to Artesia Blvd.	73.4	110	348	1,099	3,475
Vermont Ave.	135th St. to Rosecrans Ave.	73.8	120	380	1,201	3,797

Notes:

1. Exterior noise levels calculated at 5-feet above ground.
2. Noise levels calculated from centerline of subject roadway.
3. Contour distances do not take into account potential noise reduction from existing barriers such as buildings, walls or berms as a worst-case scenario for planning screening purposes. Overall levels are likely lower at sensitive receptors.

[Existing Airport/Aircraft Noise](#)

There are no airports located within the Project Area and the Project Area is not located within any airport noise contours. The closest airport to the Project Area is the Hawthorne Municipal Airport located approximately half a mile northwest of the Project Area. The noise contours associated with this airport do not encroach into the Project Area.

[Existing Vibration Sources in the Project Area](#)

The main sources of vibration in the Project Area are related to vehicles and construction. Typical roadway traffic, including heavy trucks, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. However, there have been cases in which heavy trucks traveling over potholes or other discontinuities in the pavement have caused vibration high enough to result in complaints from nearby residents. These types of issues typically can be resolved by smoothing the roadway surface (Caltrans 2020).

Construction activities that produce vibration that can be felt by adjacent land uses include the use of vibratory equipment, large bulldozers, and pile drivers. The primary source of vibration during construction is usually from a bulldozer. A large bulldozer has a peak particle velocity of 0.089 inches per second at 25 feet.



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5.11.3 REGULATORY SETTING

FEDERAL

Federal Noise Control Act of 1972

The Federal Office of Noise Abatement and Control (ONAC) originally was tasked with implementing the Noise Control Act. However, it was eventually eliminated leaving other federal agencies and committees to develop noise policies and programs. Some examples of these agencies are as follows:

- The Department of Transportation (DOT) assumed a significant role in noise control through its various agencies.
- The Federal Aviation Agency (FAA) regulates noise from aircraft and airports.
- The Federal Highway Administration (FHWA) regulates noise from the interstate highway system.
- The Occupational Safety and Health Administration (OSHA) is responsible for the prohibition of excessive noise exposure to workers.

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

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

The intent of a General Plan Noise Element is to set goals to limit and reduce the effects of noise intrusion and to set acceptable noise levels for varying types of land uses. To this end, the City has the authority to set land use noise standards and restrict private activities that generate excessive or intrusive noise. However, it should be recognized that the City does not have the authority to regulate all sources of noise within the City and various other agencies may supersede City authority.

Federal Highway Administration

Federal Highway Administration State routes and freeways that run through the City are subject to Federal funding and, as such, are under the purview of the Federal Highway Administration (FHWA). The FHWA has developed noise standards that are typically used for Federally funded roadway projects or projects that require either Federal or Caltrans review. These noise standards are based on Leq and L10 values and are included in Table 5.11-8, FHWA Design Noise Levels.



**Table 5.11-8
 FHWA Design Noise Levels**

Activity Category	Description of Category	Design Noise Levels ¹	
		Leq (dBA)	L10 (dBA)
A	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Examples include natural parks or wildlife habitats.	57 (exterior)	60 (exterior)
B	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.	67 (exterior)	70 (exterior)
C	Developed lands, properties, or activities not included in Categories A or B, above.	72 (exterior)	75 (exterior)
D	Undeveloped lands.	--	--
E	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.	52 (interior)	55 (interior)

Source: FHWA Noise Standard. 23 Code of Federal Regulations 772.
 Notes: Either Leq or L10 (but not both) design noise levels may be used on a project.

[U.S. Department of Housing and Urban Development](#)

The Department of Housing and Urban Development (HUD) issues formal requirements related specifically to standards for exterior noise levels along with policies for approving HUD-supported or assisted housing projects in high noise areas. In general, these requirements established three zones. These include:

- 65 dBA Ldn or less - an acceptable zone where all projects could be approved,
- Exceeding 65 dBA Ldn but not exceeding 75 dBA Ldn - a normally unacceptable zone where mitigation measures would be required, and each Project would have to be individually evaluated for approval or denial. These measures must provide 5 dBA of attenuation above the attenuation provided by standard construction required in a 65 to 70 dBA Ldn area and 10 dBA of attenuation in a 70 to 75 dBA Ldn area, and
- Exceeding 75 dBA Ldn - an unacceptable zone in which projects would not, as a rule, be approved.



Federal Interagency Committee on Noise

The Federal Interagency Committee on Noise (FICON) developed guidance for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies of the percentage of persons highly annoyed by aircraft noise. These recommendations are often used for different types of environmental noise such as traffic noise. A readily perceptible 5 dBA or greater project-related noise level increase is considered a significant impact when the noise criteria for a given land use is exceeded. In areas where the existing noise levels range from 60 to 65 dBA Ldn, a 3 dBA barely perceptible noise level increase is considered significant. When the existing noise levels already exceed 65 dBA Ldn, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact since it likely contributes to an existing noise exposure exceedance.

STATE

California Department of Health Services

The California Department of Health Services (DHS) Office of Noise Control studied the correlation between noise levels and their effects on various land uses. As a result, the DHS established four categories for judging the severity of noise intrusion on specified land uses. These categories are presented in the State Land Use Compatibility for Community Noise Exposure table (California Office of Noise Control, 2017).

Title 24 of the California Building Code

Section 1206.4 of the 2022 California Building Code (Cal. Code Regs., Title 24, Part 2), Chapter 12 (Interior Environment), establishes an interior noise criterion of 45 dBA CNEL in any habitable room. Per California Building Code, Chapter 2 (Definitions), a habitable space is “A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.” This section applies to dwelling and sleeping units.

California Green Building Standards Code

California Green Building Standards Code (2022), Chapter 5 (Nonresidential Mandatory Measures) Section 5.507.4 (Acoustical Control), applies to all proposed buildings that people may occupy but are not residential dwelling units, with the exception of factories, stadiums, storage, enclosed parking structures, and utility buildings.

Buildings must comply with Section 5.507.4.1 or Section 5.507.4.2. Section 5.507.4.1 requires wall and roof-ceiling assemblies exposed to the noise source making up the building, or addition envelope or altered envelope, shall meet a composite Sound Transmission Class (STC) rating of at least 50 or a composite Outdoor to Indoor Transmission Class (OITC) rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when within the 65 CNEL noise contour of an airport, freeway, expressway, railroad, industrial source, or fixed-guideway source. If contours are not available, buildings exposed to 65 dB Leq(h) must meet a composite STC rating



of at least 45 or OITC of 35 with exterior windows of at least STC 40 or OITC 30. Section 5.507.4.2 requires that the interior noise attributable to exterior sources must not exceed 50 dBA Leq(h) during any hour of operation. Section 5.507.4.3 requires that assemblies separating tenant spaces from tenant spaces or public places must have an STC of at least 40.

LOCAL

[City of Gardena General Plan](#)

The City of Gardena Community Safety Element, Noise Plan contains the following goals and policies, intended to avoid or reduce noise impacts related to transportation, stationary, and construction related noise sources, potentially relevant to the proposed Project:

N Goal 1: Use noise control measures to reduce the impact from transportation noise sources.

Policy N 1.1: Minimize noise conflicts between land uses and the circulation network, and mitigate sound levels where necessary or feasible to ensure the peace and quiet of the community.

Policy N 1.2: Reduce unnecessary traffic volumes in residential neighborhoods by limiting throughways and by facilitating the use of alternative routes around, rather than through, neighborhoods.

Policy N 1.3: Promote the use of new technologies to minimize traffic noise, such as use of rubberized asphalt in road surface materials.

Policy N 1.4: Promote the use of traffic calming measures where appropriate, such as narrow roadways and on street parking, in commercial and mixed-use districts.

Policy N 1.5: Reduce noise impacts from vehicles, particularly in residential area through enforcement of speed limits on arterials and local roads.

Policy N 1.6: Require compliance with State's Vehicle Code noise standards within the City.

Policy N 1.7: Ensure the effective enforcement of City, State and Federal noise standards by all City Divisions.

Policy N 1.8: Encourage walking, biking, carpooling, use of public transit and other alternative modes of transportation to minimize vehicular use and associated traffic noise.

Policy N 1.9: Encourage, where feasible and reasonable, noise mitigation measures, such as noise barriers and realignments, in the design and construction of new roadway projects in Gardena.

Policy N 1.10: Consider noise impacts to residential neighborhoods when designating truck routes and major circulation corridors.



Policy N 1.11: Maintain bus routes that meet public transportation needs and minimize noise impacts in residential areas.

Policy N 1.12: Encourage the Public Utilities Commission and Union Pacific to minimize the level of noise produced by train movements and horns within Gardena by reducing speeds, improving vehicle system technology and developing improved procedures for train engineer horn sounding.

Policy N 1.13: Encourage Gardena citizen participation and City involvement on committees that would influence future aircraft and railroad operations in Los Angeles County.

Policy N 1.14: Participate in the planning and impact assessment activities of the County Airport Land Use Commission and other regional or State agencies relative to any proposed expansion or change in flight patterns at the Hawthorne Municipal Airport or the Compton Airport.

N Goal 2: Incorporate noise considerations into land use planning decisions.

Policy N 2.1: Promote noise regulations that establish acceptable noise standards for various land uses throughout Gardena.

Policy N 2.2: Require noise/land use compatibility standards to guide future planning and development.

Policy N 2.3: Promote compliance with the State's noise insulation standards in the conversion of existing apartments into condominiums wherever feasible.

Policy N 2.4: Require mitigation of all significant noise impacts as a condition of project approval.

Policy N 2.5: Require proposed projects to be reviewed for compatibility with nearby noise sensitive land uses with the intent of reducing noise impacts.

Policy N 2.6: Require new residential developments located in proximity to existing commercial/ industrial operations to control residential interior noise levels as a condition of approval and minimize exposure of residents in the site design.

Policy N 2.7: Require new commercial/industrial operations located in proximity to existing or proposed residential areas to incorporate noise mitigation into the project design.

Policy N 2.8: Require that mixed-use structures and areas be designed to prevent transfer of noise and vibration from commercial areas to residential areas.

Policy N 2.9: Encourage the creative use of site and building design techniques as a means to minimize noise impacts.



Policy N 2.10: Promote replacement of significant noise sources with non-noise-generating land uses when plans for future use of areas are developed.

Policy N 2.11: Require the County of Los Angeles, the City of Hawthorne, the City of Los Angeles, and the City of Torrance to minimize or avoid land use/noise conflicts prior to project approvals.

N Goal 3: Develop measures to control non-transportation noise impacts.

Policy N 3.1: Require compliance with a quantitative noise ordinance based on the Model Noise Ordinance developed by the (now-defunct) State of California Office of Noise Control.

Policy N 3.2: Require compliance with noise regulations. Review and update Gardena's policies and regulations affecting noise.

Policy N 3.3: Require compliance with construction hours to minimize the impacts of construction noise on adjacent land.

Policy N 3.4: Require new equipment and vehicles purchased by the City to comply with noise performance standards consistent with available noise reduction technology. N 3.5: Require City departments to observe State and Federal occupational safety and health noise standards.

[Noise/Land Use Compatibility](#)

Figure N-1 of the General Plan presents a land use compatibility chart for community noise derived from a similar table originally prepared by the California Office of Noise Control.¹ The table identifies "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable" exterior noise levels for various land uses. A "conditionally acceptable" designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. By comparison, a "normally acceptable" designation indicates that standard construction can occur with no special noise reduction requirements. This land use compatibility chart is based on the 24-hour descriptor CNEL.

[City of Gardena Municipal Code](#)

The Noise Ordinance of the Municipal Code is designed to protect people from non-transportation noise sources such as construction activity; commercial, industrial, and agricultural operations; machinery and pumps; and air conditioners. Enforcement of the ordinance ensures that adjacent properties are not exposed to excessive noise from stationary sources. Enforcing the ordinance includes requiring proposed development projects to show compliance with the ordinance, including operating in accordance with noise levels and hours of

¹ The California Office of Planning and Research has updated the Land Use Compatibility table with the most recent update occurring in 2017.



operations limits placed on the project site. The City also requires construction activity to comply with established work schedule limits.

The City of Gardena’s Noise Ordinance consists of Chapter 8.36 of the Gardena Municipal Code. These sections include noise-related definitions, presents exterior and interior noise standards, outlines the City’s noise measurement procedure, lists specifically prohibited noises and exemptions, and discusses consequences for violation of the code. Section 8.36.030 states that it is unlawful to make noise which disturbs the peace and quiet of any neighborhood or person of normal sensitivity. Section 8.36.040 outlines the exterior noise standards as presented in Table 5.11-9, Gardena Exterior Noise Standards.

**Table 5.11-9
Gardena Exterior Noise Standards**

Type of Land Use	Allowable Exterior Noise Level			
	15-Minute Average Noise Level (Leq)		Maximum Noise Level (Lmax)	
	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.
Residential	55 dB(A)	50 dB(A)	75 dB(A)	70 dB(A)
Residential portions of mixed-use	60 dB(A)	50 dB(A)	80 dB(A)	70 dB(A)
Commercial	65 dB(A)	60 dB(A)	85 dB(A)	80 dB(A)
Industrial or manufacturing	70 dB(A)	70 dB(A)	90 dB(A)	90 dB(A)
Source: Gardena Municipal Code Section 8.36.040.				

This section clarifies that if the noise contains a pure tone such as a whine, screech, or hum, or contains repetitive, impulsive or impact noise such as hammering or riveting, or contains music or speech conveying informational content, each of the above noise standards shall be reduced by 5 dB. If the ambient exceeds these standards, the ambient noise level becomes the standard.

Section 8.36.050 outlines the interior noise standards as presented in Table 5.11-10, Gardena Interior Noise Standards.



**Table 5.11-10
Gardena Interior Noise Standards**

Type of Land Use	Allowable Exterior Noise Level			
	15-Minute Average Noise Level (Leq)		Maximum Noise Level (Lmax)	
	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.
Residential	45 dB(A)	40 dB(A)	65 dB(A)	60 dB(A)
Residential portions of mixed-use	45 dB(A)	40 dB(A)	70 dB(A)	60 dB(A)
Source: Gardena Municipal Code Section 8.36.050.				

This section also clarifies that if the noise contains a pure tone such as a whine, screech, or hum, or contains repetitive, impulsive or impact noise such as hammering or riveting, or contains music or speech conveying informational content, each of the above noise standards shall be reduced by 5 dB. If the ambient exceeds these standards, the ambient noise level becomes the standard.

Section 8.36.060 outlines the noise measurement procedure required by the City or its agent when a complaint is made.

Section 8.36.070 lists specific prohibited acts on specific devices and activities including:

1. Radios, Television Sets, Musical Instruments and Similar Devices.
2. Loudspeakers (Amplified Sound).
3. Street Sales.
4. Yelling, Shouting, Whistling and Singing.
5. Animals and Birds.
6. Loading and Unloading.
7. Perceptible Vibration (0.01 in/sec).
8. Powered Model Vehicles.
9. Stationary Non-Emergency Signaling Devices.
10. Emergency Signaling Devices.
11. Domestic Power Tools, Machinery.
12. Places of Public Entertainment.
13. Tampering.
14. Motor Vehicle Noise Limits.
15. Motor Vehicle Horns.
16. Motorized Recreational Vehicles Operating Off Public Right-of-Way.
17. Vehicle, Motorboat, or Aircraft Repair and Testing.
18. Standing Motor Vehicles.



Section 8.36.080 lists specific exemptions from this chapter which includes:

- A. Emergency sound for the purpose of alerting persons to the existence of an emergency, or
- B. Mechanical devices, apparatus or equipment used, related to or connected with emergency machinery, vehicle or work.
- C. Warning Devices necessary for the protection of public safety, as for example police, fire, and ambulance sirens, and train horns shall be exempted from the provisions of this ordinance.
- D. Noise from occasional outdoor events/activities, outdoor gatherings, public dances, shows, and sporting and entertainment events, provided said events are conducted pursuant to a permit or license issued by the City relative to the staging of said event.
- E. School Activities, provided said activities are conducted on the grounds of a public or private nursery, elementary, intermediate or secondary school or college.
- F. Gatherings or festival activities conducted on a publicly owned and operated park or playground, pursuant to a city permit.
- G. Noise associated with construction, repair, remodeling, grading or demolition of any real property, provided said activities do not take place between the hours of 6:00 p.m. and 7:00 a.m. on weekdays between the hours of 6:00 p.m. and 9:00 a.m. on Saturday or any time on Sunday or a Federal holiday.
- H. Operation of refuse and recyclable collection vehicles, provided:
 - 1. Collection of residential refuse/recyclables does not occur between the hours of 6:00 p.m. and 7:00 a.m. on Weekdays, or at any time on a weekend or holiday, except as provided below.
 - 2. Collection from commercial premises, audible in residential areas, and which does not occur between the hours of 6:00 p.m. and 7:00 a.m. on weekdays, or at any time on a weekend or holiday, except as provided below.
 - 3. When a collection day occurs on a holiday, alternative collections may be made on the following Saturday, between the hours of 7 a.m. and 6 p.m.
- I. Federal or State Preempted Activities to the extent regulation thereof has been preempted by State or Federal law.
- J. Street cleaning, parking lot sweeping and sidewalk steam cleaning activities provided the activities do not occur between the hours of 10:00 p.m. and 7:00 a.m. on weekdays or at any time on a weekend or holiday.
 - 1. When a cleaning/sweeping day occurs on a holiday, alternative scheduling may be made on the following Saturday, between the hours of 7 a.m. and 6 p.m.
- K. Pre-existing Noise Sources. Commercial and/or industrial operations in existence prior to the date of adoption of this amendment, if in compliance with local zoning statutes, shall be granted a six-month period from the effective date of this ordinance to comply with the provisions of this chapter. If prior to the end of the six-month period, it can be shown that compliance with the provisions herein constitutes a hardship in terms of



technical and economic feasibility, an extension of time may be granted by the City Manager.

Section 8.36.090 outlines the enforcement of this chapter.

Chapter 18.46 contains the following noise restrictions for conditional use permits:

- Large collection facilities and processing facilities in the M-1 and M-2 zones cannot exceed 55 dBA at a residential property line and 60 dBA at all other property lines.
- Motor vehicle dealerships, including accessory repair facilities, in C-3 and C-4 zones cannot have outdoor amplified sound or interior loudspeakers above 45 dBA at residential property lines. All noise generating equipment exposed to the exterior must be muffled and cannot operation between 6PM and 8AM if disturbing.

Section 18.42.200 outlines that projects must demonstrate that HVAC units comply to Chapter 8.36 prior to building permit issuance. It also outlines specific construction noise requirements.

Section 8.20.100(G) states that compaction vehicles shall not exceed 75 dBA at 25 feet from the vehicle.

Section 8.40.070(B) requires mufflers on all internal combustion engines during drilling operations.

Gardena Municipal Code Section 18.42.200, *Pre-Permit Requirements*, require that prior to approval of grading plans or prior to issuance of grading and building permits, the following noise reduction techniques shall be included in the construction plans or specifications:

1. Construction contracts specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state-required noise attenuation devices.
2. The project applicant shall demonstrate to the satisfaction of the city's building official that construction noise reduction methods shall be used where feasible, including shutting off idling equipment.
3. During construction, equipment staging areas shall be located such that the greatest distance is between the staging area noise sources and noise-sensitive receptors.
4. Per Section 8.36.080, construction activities shall not occur during the hours of 6:00 p.m. and 7:00 a.m. on weekdays; between the hours of 6:00 p.m. and 9:00 a.m. on Saturday; or any time on Sunday or a federal holiday.

5.11.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to noise and groundborne vibrations. A project may create a significant environmental impact if it would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or



noise ordinance, or applicable standards of other agencies (refer to Impact Statement 5.11-1);

- Generation of excessive groundborne vibration or groundborne noise levels (refer to Impact Statement 5.11-2); and/or
- For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise (refer to Section 8.0, Effects Found Not to be Significant).

Based on these standards and significance thresholds and criteria, the Project’s effects have been categorized as either “no impact,” a “less than significant impact,” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a “significant unavoidable impact.”

5.11.5 IMPACTS AND MITIGATION MEASURES

Impact 5.11-1: Would the project generate 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:

Transportation Noise Impacts

Transportation noise includes noise from aircraft, railways, and roadways. The Project Area is outside of any airport 65 dBA CNEL contours and therefore there is no aircraft impact. There are no rail lines within the Project Area and there is therefore no impacts associated with railways.

The primary noise source in the Project Area will continue to be vehicle traffic. Table 5.11-11, 2040 No Project Traffic Noise Levels (dBA, CNEL) and Table 5.11-12, 2040 Plus Project Traffic Noise Levels (dBA, CNEL) show the future noise levels at a distance of 50 feet from the centerline of studied roadways by the year 2040 for No Project and With Project conditions. The distances to the 55, 60, 65, and 70 dBA CNEL noise contours are also provided. Future traffic noise level contours are presented in Figure 5.11-3, 2040 No Project Noise Contours and Figure 5.11-4, 2040 With Project Noise Contours.



**Table 5.11-11
2040 No Project Traffic Noise Levels (dBA, CNEL)**

Roadway	Segment Limits	CNEL, dBA @50 ft	Distance to Contour (feet)			
			70 dBA	65 dBA	60 dBA	55 dBA
El Segundo Blvd.	Western Ave. to Normandie Ave.	75.9	196	619	1,958	6,191
135th St.	Western Ave. to Normandie Ave.	73.2	105	332	1,050	3,320
Rosecrans Ave.	Van Ness Ave. to Western Ave.	76.1	202	639	2,021	6,392
Rosecrans Ave.	Western Ave. to Normandie Ave.	77.2	264	836	2,644	8,361
Marine Ave.	Crenshaw Blvd. to Van Ness Ave.	71.9	78	246	777	2,456
Marine Ave.	Western Ave. to Normandie Ave.	71.0	62	197	623	1,969
Redondo Beach Blvd.	Western Ave. to Normandie Ave.	74.3	134	425	1,343	4,246
Crenshaw Blvd.	El Segundo Blvd. to 135th St.	74.4	139	440	1,393	4,404
Crenshaw Blvd.	135th St. to Rosecrans Ave.	75.0	158	500	1,581	4,998
Crenshaw Blvd.	Rosecrans Ave. to Marine Ave.	74.7	149	471	1,489	4,707
Crenshaw Blvd.	Marine Ave. to Manhattan Beach Blvd.	74.3	134	423	1,337	4,228
Western Ave.	El Segundo Blvd. to 135th St.	73.8	121	381	1,206	3,812
Western Ave.	135th St. to Rosecrans Ave.	74.5	140	443	1,401	4,430
Western Ave.	Rosecrans Ave. to Marine Ave.	74.8	150	475	1,501	4,748
Western Ave.	158th St. to 162nd St.	75.6	183	577	1,825	5,771
Western Ave.	166th St. to Artesia Blvd.	75.7	186	588	1,859	5,877
Western Ave.	Artesia Blvd. to 182nd St.	75.4	172	545	1,725	5,454
Normandie Ave.	135th St. to Rosecrans Ave.	72.3	85	268	846	2,675
Normandie Ave.	170th St. to Artesia Blvd.	73.7	116	367	1,160	3,669
Vermont Ave.	135th St. to Rosecrans Ave.	74.3	136	430	1,359	4,297

Notes:

1. Exterior noise levels calculated at 5-feet above ground.
2. Noise levels calculated from centerline of subject roadway.
3. Contour distances do not take into account potential noise reduction from existing barriers such as buildings, walls or berms as a worst-case scenario for planning screening purposes. Overall levels are likely lower at sensitive receptors.



Table 5.11-12
2040 Plus Project Traffic Noise Levels (dBA, CNEL)

Roadway	Segment Limits	CNEL, dBA @50 ft	Distance to Contour (feet)			
			70 dBA	65 dBA	60 dBA	55 dBA
El Segundo Blvd.	Western Ave. to Normandie Ave.	75.9	196	619	1,958	6,191
135th St.	Western Ave. to Normandie Ave.	73.6	115	364	1,150	3,636
Rosecrans Ave.	Van Ness Ave. to Western Ave.	76.3	211	667	2,110	6,673
Rosecrans Ave.	Western Ave. to Normandie Ave.	77.2	265	838	2,650	8,381
Marine Ave.	Crenshaw Blvd. to Van Ness Ave.	72.2	83	261	825	2,609
Marine Ave.	Western Ave. to Normandie Ave.	70.9	61	194	613	1,939
Redondo Beach Blvd.	Western Ave. to Normandie Ave.	74.3	135	427	1,352	4,274
Crenshaw Blvd.	El Segundo Blvd. to 135th St.	74.5	142	449	1,418	4,485
Crenshaw Blvd.	135th St. to Rosecrans Ave.	75.1	160	507	1,602	5,067
Crenshaw Blvd.	Rosecrans Ave. to Marine Ave.	74.9	154	486	1,537	4,861
Crenshaw Blvd.	Marine Ave. to Manhattan Beach Blvd.	74.3	136	430	1,359	4,297
Western Ave.	El Segundo Blvd. to 135th St.	74.3	134	424	1,339	4,236
Western Ave.	135th St. to Rosecrans Ave.	74.5	141	445	1,406	4,448
Western Ave.	Rosecrans Ave. to Marine Ave.	75.0	159	501	1,585	5,012
Western Ave.	158th St. to 162nd St.	75.8	192	607	1,920	6,071
Western Ave.	166th St. to Artesia Blvd.	75.8	191	604	1,909	6,036
Western Ave.	Artesia Blvd. to 182nd St.	75.5	176	556	1,758	5,559
Normandie Ave.	135th St. to Rosecrans Ave.	72.3	85	270	854	2,702
Normandie Ave.	170th St. to Artesia Blvd.	73.7	118	374	1,181	3,735
Vermont Ave.	135th St. to Rosecrans Ave.	74.5	140	441	1,395	4,412

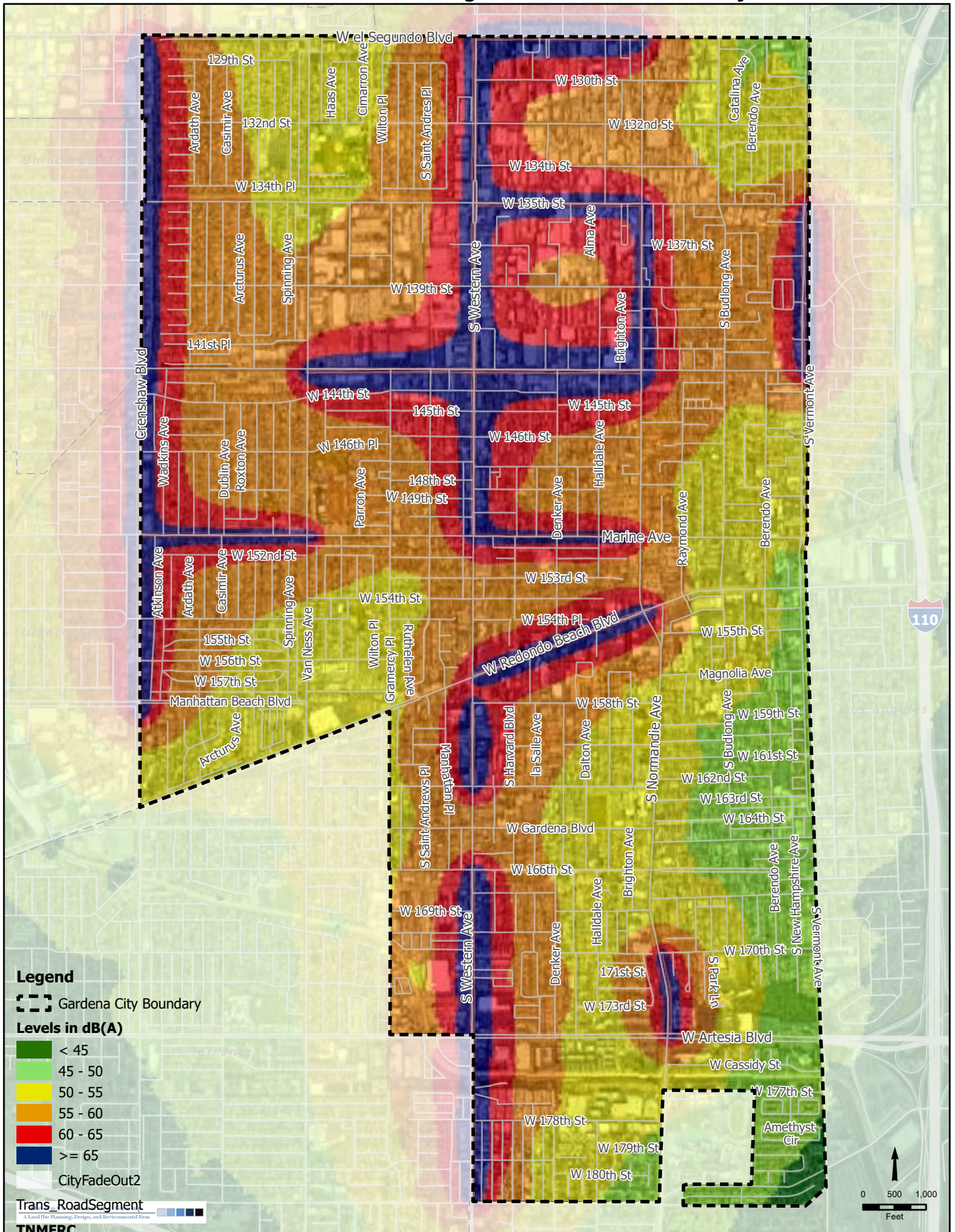
Notes:

1. Exterior noise levels calculated at 5-feet above ground.
2. Noise levels calculated from centerline of subject roadway.
3. Contour distances do not take into account potential noise reduction from existing barriers such as buildings, walls or berms as a worst-case scenario for planning screening purposes. Overall levels are likely lower at sensitive receptors.



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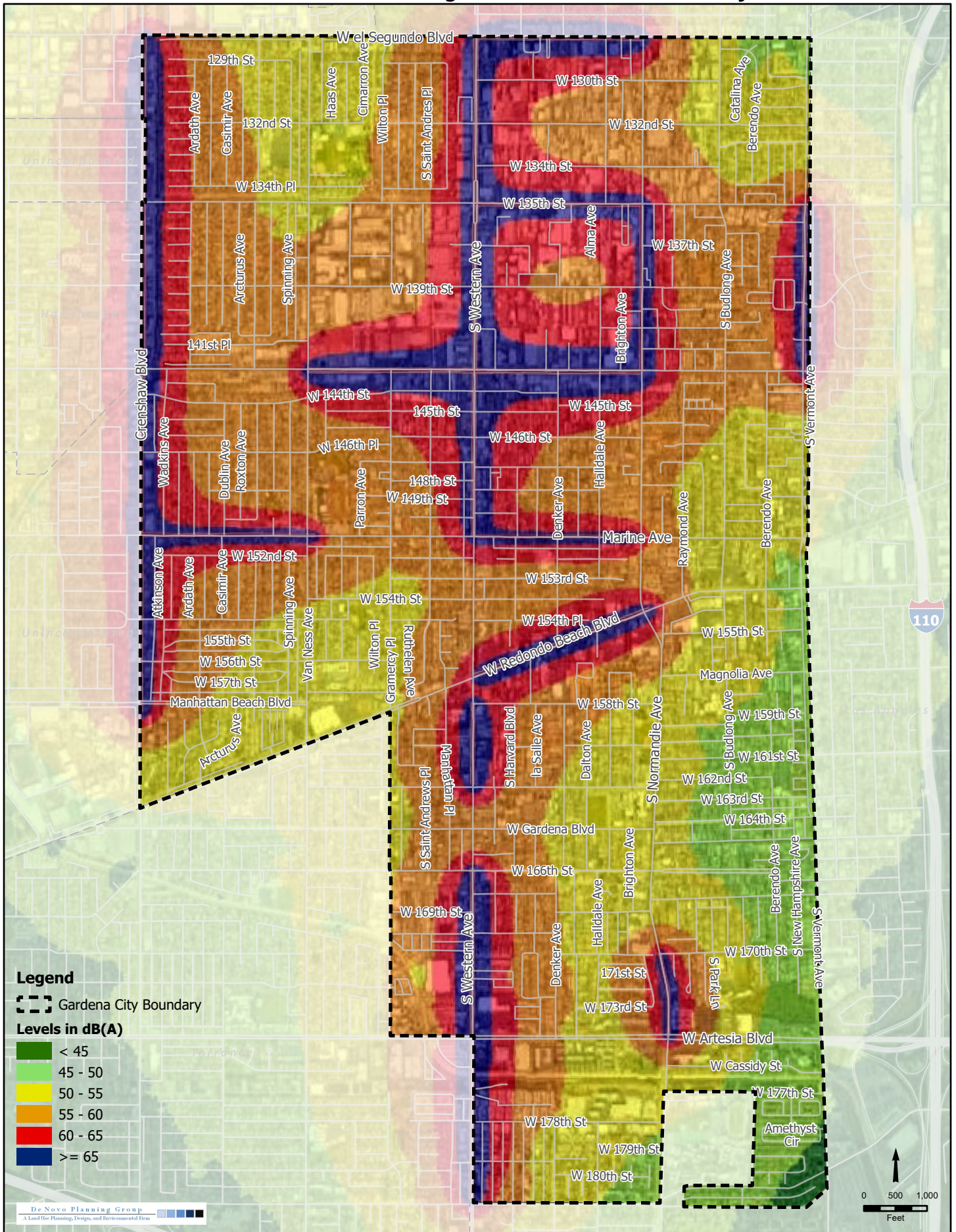
Figure 5.11-3. 2040 No Project Noise Contours





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Figure 5.11-4. 2040 With Project Noise Contours





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As shown in Table 5.11-11 and Table 5.11-12 and Figure 5.11-2, Figure 5.11-3 and Figure 5.11-4, by the year 2040, existing land uses adjacent to the studied roadways would be exposed to noise levels that exceed the City's exterior standards of 65 dBA CNEL for sensitive uses. A significant impact would occur if the project resulted in levels higher than 65 dBA CNEL and increased the overall roadway noise level by 3 dBA CNEL, which is a noticeable change in noise level.

Compared to existing traffic noise levels, 2040 without Project traffic volumes are expected to be up to 0.7 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise along the analyzed roadways; refer to Table 5.11-13, *Change in Noise Along Roadways (dBA, CNEL @ 50')*.

Compared to existing traffic noise levels, 2040 with Project traffic volumes are expected to be up to 1.1 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise. Implementation of the Project would therefore result in a less than significant impact to roadway noise levels.



Table 5.11-13
Change in Noise Along Roadways (dBA, CNEL @ 50')

Roadway	Segment	Existing	2040 No Project		2040 With Project	
		CNEL @ 50' dBA	CNEL @ 50' dBA	Change in Noise Level	CNEL @ 50' dBA	Change in Noise Level
El Segundo Blvd.	Western Ave. to Normandie Ave.	75.9	75.9	0.0	75.9	0.0
135th St.	Western Ave. to Normandie Ave.	72.5	73.2	0.7	73.6	1.1
Rosecrans Ave.	Van Ness Ave. to Western Ave.	76.1	76.1	0.0	76.3	0.2
Rosecrans Ave.	Western Ave. to Normandie Ave.	77.2	77.2	0.0	77.2	0.0
Marine Ave.	Crenshaw Blvd. to Van Ness Ave.	71.4	71.9	0.5	72.2	0.7
Marine Ave.	Western Ave. to Normandie Ave.	70.6	71.0	0.4	70.9	0.3
Redondo Beach Blvd.	Western Ave. to Normandie Ave.	74.3	74.3	0.0	74.3	0.0
Crenshaw Blvd.	El Segundo Blvd. to 135th St.	74.4	74.4	0.0	74.5	0.1
Crenshaw Blvd.	135th St. to Rosecrans Ave.	74.8	75.0	0.2	75.1	0.3
Crenshaw Blvd.	Rosecrans Ave. to Marine Ave.	74.7	74.7	0.0	74.9	0.1
Crenshaw Blvd.	Marine Ave. to Manhattan Beach Blvd.	74.3	74.3	0.0	74.3	0.1
Western Ave.	El Segundo Blvd. to 135th St.	73.7	73.8	0.1	74.3	0.6
Western Ave.	135th St. to Rosecrans Ave.	74.1	74.5	0.4	74.5	0.4
Western Ave.	Rosecrans Ave. to Marine Ave.	74.7	74.8	0.1	75.0	0.3
Western Ave.	158th St. to 162nd St.	75.3	75.6	0.3	75.8	0.5
Western Ave.	166th St. to Artesia Blvd.	75.4	75.7	0.3	75.8	0.4
Western Ave.	Artesia Blvd. to 182nd St.	74.9	75.4	0.5	75.5	0.6
Normandie Ave.	135th St. to Rosecrans Ave.	72.1	72.3	0.2	72.3	0.2
Normandie Ave.	170th St. to Artesia Blvd.	73.4	73.7	0.2	73.7	0.3
Vermont Ave.	135th St. to Rosecrans Ave.	73.8	74.3	0.5	74.5	0.7

Notes:

1. Existing and Future traffic volumes compiled by Kittelson & Associates, Inc. Apr 2023.
2. An impact would occur if the Project increased the roadway segment level by 3 dB or more (an audible difference) and resulting in a future level above 65 dBA CNEL.



Where proposed land uses are expected to be exposed to noise levels that exceed the land use compatibility criteria, impacts can be mitigated to a level that is less than significant with implementation of noise control measures, such as relocating residential outdoor recreational areas away from 65 dBA CNEL or greater areas or shielding outdoor areas using noise barriers. Per the General Plan, future development associated with implementation of the proposed Project requires a noise study prior to issuance of a grading permit and mitigation implemented if noise levels exceed normally acceptable levels as outlined in the Noise Plan. For residential developments, the study must ensure that interior levels in livable areas do not exceed 45 dBA CNEL.

Traffic noise would be significant if levels are increased by more than 3 dBA to levels above 65 dBA CNEL in areas with sensitive uses. Compared to existing traffic noise levels, 2040 plus Project traffic volumes are expected to be up to 1.1 dBA CNEL louder than existing ambient noise levels at existing land uses and would not result in substantial increases in ambient noise along the analyzed roadways (see [Table 5.11-13](#)). Implementation of the proposed Project would result in less than significant impacts related to exceedances of the land use compatibility criteria.

Stationary Noise

Implementation of the Project could result in the future development of land uses that generate noise levels in excess of applicable City noise standards for non-transportation noise sources as outlined in Section 5.11.3. While the Project does not explicitly propose any new noise-generating uses, Project implementation would allow for the development of increased residential development at higher densities, which may result in new noise sources. Specific development projects and the details of future noise-generating land uses that may be located in the Project Area in the future are not known at this time. Additionally, noise from existing stationary sources, as identified in the Existing Settings Section, would continue to impact noise-sensitive land uses in the vicinity of the noise sources.

While no specific development projects are proposed under the Project, changes in land use may allow for more intensive noise-generating uses in closer proximity to noise-sensitive uses. Where this occurs, detailed noise studies would be required to ensure that noise control measures are implemented into the project design. Such measures could include the redesign of stationary noise sources away from sensitive uses, construction of sound walls or berms between noise generating uses and sensitive uses, using buildings to create additional buffer distance and screening, or other site design measures to ensure that non-transportation (stationary) noise sources do not cause exterior and interior noise levels to exceed allowable standards at sensitive receptors.

Stationary noise would be significant if it exceeds the noise standard levels outlined in the Gardena Municipal Code. Future development would be required to comply with Gardena General Plan policies, including Policy N-2.5 which requires new commercial/industrial operations located in proximity to existing or proposed residential areas to incorporate noise mitigation into the project design, and Policy N-3.2, which requires compliance with noise



regulations, and compliance with Gardena Municipal Code Section 8.36.040 exterior and interior noise standards. Applicants of future development projects would be required to demonstrate compliance with the City's noise ordinance. Additionally, discretionary projects would be required to comply with Policy N-2.4 which requires mitigation of all significant noise impacts as a condition of project approval. Following conformance with the existing regulatory framework, impacts would be less than significant in this regard.

Construction Noise and Vibration

The degree of construction noise may vary for different development projects that would occur with implementation of the Project and also vary depending on the construction activities. Noise levels associated with the construction would also vary with the different phases of construction.

The Environmental Protection Agency (EPA) has compiled data regarding the noise-generated characteristics of typical construction activities. The data is presented in Table 5.11-14, Typical Construction Noise Levels. These noise levels would diminish rapidly with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, a noise level of 86 dBA measured 50 feet from the noise source would reduce to 80 dBA at 100 feet. At 200 feet from the noise source, the noise level would reduce to 74 dBA. At 400 feet, the noise source would reduce by another 6 dBA to 68 dBA. Contractors are required to comply with the City of Gardena's construction noise reduction techniques described in the Gardena Municipal Code Section 18.42.200(E).

Implementation of the proposed Project would result in short-term noise impacts associated with construction activities. Two types of short-term noise impacts could occur during construction activities, on-site and off-site.

Truck traffic associated with project construction would be limited to within the permitted construction hours, as listed in the City's Municipal Code Section 8.36.080(G). Although there would be a relatively high single-event noise exposure potential at a maximum of 87 dBA L_{max} at 50 feet from passing trucks, causing possible short-term intermittent annoyances, the effect on ambient noise levels would be less than 1 dBA when averaged over one hour or 24 hours. In other words, the changes in noise levels over 1 hour or 24 hours attributable to passing trucks would not be perceptible to the normal human ear. Therefore, short-term construction-related impacts associated with worker commute and equipment transport on local streets leading to a specific development site would result in a less than significant impact on noise-sensitive receptors along the access routes. No mitigation is required.



**Table 5.11-14
Typical Construction Noise Levels**

Equipment Powered by Internal Combustion Engines	
Type	Noise Levels (dBA) at 50 Feet
Earth Moving	
Compactors (Rollers)	73 - 76
Front Loaders	73 - 84
Backhoes	73 - 92
Tractors	75 - 95
Scrapers, Graders	78 - 92
Pavers	85 - 87
Trucks	81 - 94
Materials Handling	
Concrete Mixers	72 - 87
Concrete Pumps	81 - 83
Cranes (Movable)	72 - 86
Cranes (Derrick)	85 - 87
Stationary	
Pumps	68 - 71
Generators	71 - 83
Compressors	75 - 86
Impact Equipment	
Saws	71 - 82
Vibrators	68 - 82
Source: Reference Noise Levels from the Environmental Protection Agency (EPA)	

The site preparation phase, which includes grading and paving, tends to generate the highest noise levels since the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backhoes, bulldozers, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings. Site-specific construction activities associated with future development is expected to require the use of scrapers, bulldozers, motor graders, and water and pickup trucks. The maximum noise level generated by each scraper is assumed to be approximately 87 dBA L_{max} at 50 feet from the scraper in operation. Each bulldozer would also generate approximately 85 dBA L_{max} at 50 feet. The maximum noise level generated by the sound sources with equal strength increases the noise level by 3 dBA. Noise reduction potential would be project and site-specific. Potential impacts would be site-specific, depending on the equipment used and distances to sensitive receptors.



These impacts can be reduced with the implementation the following noise reduction techniques from Section 18.42.200(E) of the Municipal Code which must be included in all construction plans or specifications:

1. Construction contracts specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state-required noise attenuation devices.
2. The project applicant shall demonstrate to the satisfaction of the city's building official that construction noise reduction methods shall be used where feasible, including shutting off idling equipment.
3. During construction, equipment staging areas shall be located such that the greatest distance is between the staging area noise sources and noise-sensitive receptors.
4. Per Section 8.36.080, construction activities shall not occur during the hours of 6:00 p.m. and 7:00 a.m. on weekdays; between the hours of 6:00 p.m. and 9:00 a.m. on Saturday; or any time on Sunday or a federal holiday.

Future construction activities associated with implementation of the proposed Project would also be required to implement Mitigation Measure NOI-1. Mitigation Measure NOI-1 requires applicants of future development projects within 500 feet of a sensitive use prepare a noise study that addresses the potential impacts upon off-site sensitive uses due to construction. Compliance with Mitigation Measures NOI-1 and NOI-2 and implementation of Section 18.42.200 of the Municipal Code during site-specific projects would result in less than significant construction noise impacts.

Mitigation Measures:

NOI-1: Prior to issuance of a grading permit, a project applicant shall contract for a site-specific noise study for a parcel within 500 feet of a sensitive use. The noise study shall be performed by an acoustic consultant experienced in such studies, and the consultant's qualifications and methodology to be used in the study must be presented to City staff for consideration. The site-specific acoustic study shall specifically identify potential project impacts upon off-site sensitive uses due to construction. Mitigation shall be required if noise levels exceed 65 dBA.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Impact 5.11-2: Would the project generate excessive groundborne vibration or groundborne noise levels?

Impact Analysis: The main sources of vibration in the Project Area are related to vehicles and construction. Typical roadway traffic, including heavy trucks, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage.



Construction activities that produce vibration that can be felt by adjacent land uses include the use of vibratory equipment, large bulldozers, and pile drivers. The primary sources of vibration during construction are usually vibratory rollers and large bulldozers. As shown in Table 5.11-15, *Vibration Source Levels for Construction Equipment*, a vibratory roller has a peak particle velocity (inches/second) of 0.21 and a large bulldozer has a peak particle velocity of 0.089 (inches per second) at 25 feet. The use of pile driving equipment can generate a peak particle velocity of 1.5 (inches per second) depending on the size and model.

Table 5.11-15
Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity	Approximate Vibration Level
	(inches/second) at 25 feet	LV (VdB) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58
Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006.		

The California Department of Transportation has published one of the seminal works for the analysis of ground-borne noise and vibration relating to transportation- and construction-induced vibrations and, although the Project is not subject to these regulations, it serves as a useful tool to evaluate vibration impacts (California Department of Transportation, 2013). Table 5.11-16, *Guideline Vibration Damage Potential Threshold Criteria*, provides maximum PPV levels (inches/second) to be used to determine if groundborne vibration may result in damage, depending on the type of structure. When evaluated in light of the estimated groundborne vibration levels presented in Table 5.11-15, it can be determined that construction activities in the Project Area have the potential to result in significant impacts related to groundborne vibration. In order to reduce potentially significant impacts related to groundborne vibration



associated with construction activities of future site-specific development, project applicants would be required to implement Mitigation Measure NOI-2, which would require vibration impact studies when construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. The vibration impact studies would be required to include a detailed mitigation plan to avoid any potential significant impacts to existing structures due to groundborne vibrations.

Table 5.11-16
Guidelines Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (inches/second)	
	Transient Sources	Continuous/Frequent Intermittent Source
Extremely fragile historic buildings, ruins, ancient monuments	0.1	0.1
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.3
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5
Source: California Department of Transportation and Construction Vibration Guidance Manual. April 2020.		
Note: transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.		

With implementation of Mitigation Measure NOI-2, potential impacts related to construction vibration within the Project Area would be reduced to less than significant.

Mitigation Measures:

NOI-2: Applicants for future proposed projects whose construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings shall be required to prepare a vibration impact study which would be required to include a detailed mitigation plan to avoid any potential significant impacts to existing structures due to groundborne vibrations, based on the California Department of Transportation’s Construction Vibration Guidance Manual.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.



5.11.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the methodology used to determine the potential for cumulative growth and development to interact with the proposed Project to the extent that a significant cumulative effect relative to noise may occur. The geographic setting for noise is typically localized and considers development within the City.

Would the project, combined with other related cumulative projects, generate 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:

Transportation Noise Impacts

Table 5.11-12 shows the cumulative noise levels associated with traffic on the local roadway network, including projects within the Project Area. As shown in Table 5.11-11 and Table 5.11-12, by the year 2040, existing land uses adjacent to the studied roadways would be exposed to noise levels that exceed the City's exterior standards of 65 dBA CNEL for sensitive uses. A significant impact would occur if the Project resulted in levels higher than 65 dBA CNEL and increased the overall roadway noise level by 3 dBA CNEL, which is a noticeable change in noise level.

Compared to existing traffic noise levels, 2040 without Project traffic volumes are expected to be up to 0.7 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise along the analyzed roadways; refer to Table 5.11-13.

Compared to existing traffic noise levels, 2040 with Project traffic volumes are expected to be up to 1.1 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise. Implementation of the Project would therefore not result in a cumulatively considerable impact relative to traffic noise.

Stationary Noise

Implementation of land use planning and policies and actions can minimize cumulative noise impacts related to stationary sources by avoiding the placement of noise generating equipment near noise-sensitive land uses and where unavoidable, include design measures to the degree practicable to avoid violating the noise criteria presented in Figure N-1 of the General Plan and the Gardena Municipal Code Section 8.36.040. Future development would be required to comply with Gardena General Plan policies, including Policy N-2.4 which requires mitigation of all significant noise impacts as a condition of project approval, Policy N-2.5 which requires new commercial/industrial operations located in proximity to existing or proposed residential areas to incorporate noise mitigation into the project design, and Policy N-3.2, which requires compliance with noise regulations, and compliance with Gardena Municipal Code Section



8.36.040 exterior and interior noise standards. Applicants of future development projects would be required to demonstrate compliance with the City’s noise ordinance. Following conformance with the existing regulatory framework would reduce cumulative noise impacts from stationary noise sources to a less than significant level. Therefore, the proposed Project’s incremental contribution to cumulative impacts associated with stationary noise would not be cumulatively considerable.

Construction Noise

Short-term construction noise and vibration is a localized activity and would affect only land uses that are immediately adjacent to a specific project site. Contractors are required to comply with the City of Gardena’s construction noise reduction techniques described in the Gardena Municipal Code Section 18.42.200(E). Additionally, projects within 500 feet of sensitive receptors would be required to comply with Mitigation Measure NOI-1, resulting in preparation of an acoustic study specific to construction noise and implementation of mitigation measures, if necessary. It is noted that it is unlikely that all construction projects would occur simultaneously within the City. Therefore, the proposed Project’s incremental contribution to cumulative impacts associated with construction noise would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure NOI-1.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Would the project, combined with other related cumulative projects, generate excessive groundborne vibration or groundborne noise levels?

Impact Analysis: Short-term construction noise and vibration is a localized activity and would affect only land uses that are immediately adjacent to a specific project site. In order to reduce potentially significant impacts related to groundborne vibration associated with construction activities of future site-specific development, project applicants would be required to implement Mitigation Measure NOI-2, which would require vibration impact studies when construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. The vibration impact studies would be required to include a detailed mitigation plan to avoid any potential significant impacts to existing structures due to groundborne vibrations. With implementation of Mitigation Measure NOI-2, potential significant impacts associated with the proposed Project related to construction vibration would be reduced to less than significant. Cumulative development projects within the City would also be reviewed to ensure project-specific construction activities would not generate excessive groundborne vibration or noise levels. If it is determined that site-specific development associated with the cumulative projects would result in groundborne vibration or noise impacts, mitigation measures would be required to reduce the impact. As the Project’s potential for vibration impacts would be reduced to a less than significant level, the proposed Project’s incremental contribution to cumulative impacts associated with construction vibration would not be cumulatively considerable.



Mitigation Measures: Refer to Mitigation Measure NOI-2.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

5.11.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with noise would occur with the proposed Project.

5.11.8 REFERENCES

American National Standards Institute (ANSI), *Specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA)*.

California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, 2013.

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

California Department of Transportation (Caltrans), *Caltrans Traffic Counts*, <https://dot.ca.gov/programs/traffic-operations/census>, 2021.

California Office of Noise Control, *Guidelines for the Preparation and Content of Noise Elements of the General Plan*. February 2017.

City of Gardena, *City of Gardena General Plan 2006*, April 2006.

Environmental Protection Agency (EPA), *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. Prepared by the EPA, Office of Noise Abatement and Control, 1974.

Federal Interagency Committee on Noise, *Federal Agency Review of Selected Airport Noise Analysis Issues*, August 1992.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment. Typical Construction Equipment Vibration Emissions: FTAVA-90-1003-06*, 2006.

State of California Building Standards Commission, *California Uniform Building Code (UBC), Title 24*, 2019.

State of California Building Standards Commission, *Green Code Section 5.507.4.3*, 2019.

State of California Office of Planning and Research, *Office of Planning and Research, General Plan Guidelines*, 2017.



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5.12 POPULATION AND HOUSING

5.12.1 PURPOSE

This section describes the existing conditions and regulatory environment related to population and housing conditions and identifies potential impacts that could result from Project implementation.

5.12.2 ENVIRONMENTAL SETTING

POPULATION

Table 5.12-1, *Population Projections (2022-2045)*, shows the current County of Los Angeles and City of Gardena populations as reported by the Department of Finance (DOF). The DOF population estimates are derived by multiplying the number of occupied housing units by persons per household. The 2022 persons per household estimates are based on 2020 Census benchmark data.

The 2045 population projections are forecasted by the Southern California Association of Governments (SCAG) as part of the Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS) and the companion technical report, the Demographics and Growth Forecast Report. SCAG's 2020-2045 RTP/SCS, referred to as Connect SoCal, provides population, household, and employment data and projections for the counties in the SCAG region, including Los Angeles County. SCAG's forecasts are based in part on jurisdictions' existing land uses and General Plan land use designations. Population projections are calculated based on household growth and household size. Connect SoCal forecasts that the County and City populations would increase by approximately 18 and nine percent, respectively, between 2022 and 2045. Connect SoCal forecasts that populations in the South Bay Region, which includes the cities of Carson, El Segundo, Gardena, Hawthorne, Hermosa Beach, Inglewood, Lawndale, Lomita, Manhattan Beach, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance, would increase by approximately 10 percent.



**Table 5.12-1
Population Projections (2022-2045)**

Region	Existing Conditions (2022) ¹	Projected Future Conditions (2045) ²	Percent Change
Los Angeles County	9,861,224	11,674,000	18.38%
South Bay Region	746,548	823,400	10.29%
Gardena	59,947	65,700	9.60%
Source:			
1. DOF, Report E-5 Population and Housing Estimates for Cities, and Counties, and the State. January 1, 2022.			
2. SCAG, 2020-2045 RTP/SCS, Demographics and Growth Forecast. September 3, 2020b.			

HOUSING

Table 5.12-2, *Housing Projections (2022-2045)*, shows the current County, South Bay Region, and City housing unit stock as reported by the DOF, as well as the projected housing unit stock estimates for 2045 by Connect SoCal (2020-2045 RTP/SCS).

**Table 5.12-2
Housing Projections (2022-2045)**

Region	Existing Conditions (2022) ¹	Projected Future Conditions (2045) ²	Percent Change
Los Angeles County	3,635,136	4,119,000	13.30%
South Bay Region	288,770	297,000	2.85%
Gardena	22,486	23,700	5.40%
Source:			
1. DOF, Report E-5 Population and Housing Estimates for Cities, and Counties, and the State. January 1, 2022.			
2. SCAG, 2020-2045 RTP/SCS, Demographics and Growth Forecast. September 3, 2020b.			

The DOF estimates housing units by adding new construction and land annexations; subtracting housing that is removed (e.g., demolition); and, adjusting for units lost or gained by conversions. Annual housing unit change data is supplied to the DOF by local jurisdictions and the U.S. Census Bureau. As identified in *Table 5.12-3, Gardena Housing Units (2022)*, the DOF estimates that the County’s housing stock totals 3,635,136 housing units with an average of 2.80 persons per household and, the City’s housing stock totals 22,486 housing units with an average of 2.74 persons per household.



**Table 5.12-3
Gardena Housing Units (2022)**

Housing Type	Los Angeles County	South Bay Region	Gardena
Single Detached	1,745,886	145,077	9,981
Single Attached	235,208	22,583	1,815
Two to Four	304,205	28,862	2,628
Five Plus	1,290,801	85,451	6,794
Mobile Home	59,035	6,799	1,268
Total	3,635,136	275,602	22,486
Vacancy Rate	5.3%	4.6%	4.2%
Persons per Household	2.80	2.68	2.74

Source: DOF, Report E-5 Population and Housing Estimates for Cities, and Counties, and the State. January 1, 2022.

Vacancy rates are a measure of general availability of housing. They also indicate how well the types of available units meet the housing market demand. The availability of vacant housing units provides households with choices of type and price to accommodate their specific needs. A vacancy rate between 4.0 and 6.0 is considered “healthy.” Lower vacancy rates can result in higher prices, limited choices, and settling with inadequate housing. A low vacancy rate suggests households may have difficulty finding housing within their price range and may also contribute to overcrowding. As of 2022, the County’s, South Bay Region’s, and City’s vacancy rates are estimated at approximately 5.3 percent, 4.6 percent, and 4.2 percent, respectively.

SCAG forecasts total housing need for each community in southern California based on three general factors:

- (1) the number of housing units needed to accommodate future population and employment growth;
- (2) the number of additional units needed to allow for housing vacancies; and
- (3) the number of very low, low, moderate, and above moderate-income units needed in the community.

Additional factors used to determine the Regional Housing Needs Assessment (RHNA) include tenure, the average rate of units needed to replace housing units demolished, proximity to high quality transit areas, and other factors.

The City’s RHNA allocation for the October 2021 through October 2029 period, also known as the 6th cycle, is shown in Table 5.12-4, Gardena 6th Cycle Regional Housing Needs Allocation. The City is required to ensure that sufficient sites that are planned and zoned for housing are available to



accommodate its need and to implement proactive programs that facilitate and encourage the production of housing commensurate with its housing needs. In the 6th RHNA cycle, SCAG identified housing needs for the City of Gardena, the County of Los Angeles, and the SCAG region as follows: 5,735 new housing units (Gardena), 812,060 new housing units (County of Los Angeles), and 1,341,827 new housing units (SCAG region) (SCAG 2021). The updated Housing Element, adopted in January 2023 and readopted in February 2023, establishes programs that could adequately accommodate the potential shortfall in the need for affordable units in the City, including a buffer of 30 percent as recommended by HCD.

Table 5.12-4
Gardena 6th Cycle Regional Housing Needs Allocation

Income Level	Target Units	Percent
Very Low	1,485	25.9%
Low	761	13.3%
Moderate	894	15.6%
Above Moderate	2,595	45.2%
Total	5,735	100%

Source: Southern California Association of Governments, *SCAG 6th Cycle Final RHNA Allocation Plan*, July 1, 2021.

EMPLOYMENT

As shown in [Table 5.12-5, *Employment Growth Projections*](#), the County's current employment totals 4,767,204 jobs and is forecast to increase by approximately 12.9 percent to 5,382,000 jobs between 2022 and 2045. Within the South Bay Region, employment numbers are forecasted to increase from approximately 418,617 jobs to 461,900 jobs in 2045. Employment numbers are forecasted to increase from approximately 29,405 jobs to 32,100 jobs in 2045 within the City. As the Project proposes an overall reduction in non-residential square footage, the Project does not anticipate generating a substantial amount of employment opportunities.



**Table 5.12-5
Employment Growth Projections**

Category	Existing Jobs (Employment) 2022	Future Jobs (Employment) 2045 ²	2045 SCAG: Existing Conditions % Difference
Los Angeles County	4,767,204 ¹	5,382,000	12.89%
South Bay Region	418,617 ¹	461,900	10.34%
City of Gardena	29,405 ¹	32,100	9.17%
Source: 1. SCAG, <i>SCAG Local Profiles Data 2019</i> , April 2021. 2. SCAG, 2020-2045 RTP/SCS, <i>Demographics and Growth Forecast</i> , September 3, 2020b.			

JOBS TO HOUSING RATIO

SCAG states that “a balance between jobs and housing in a metropolitan region can be defined as a provision of an adequate supply of housing to house workers employed in a defined area (i.e., community or subregion). Alternatively, a jobs/housing balance can be defined as an adequate provision of employment in a defined area that generates enough local workers to fill the housing supply.” Jobs and housing are considered in balance when a subregion has enough employment opportunities for most people who live there and enough housing opportunities for most of the people who work there. The jobs/housing balance is one indicator of a project’s effect on growth and quality of life in a project area. SCAG uses the jobs/housing ratio to assess the relationship between housing and employment growth.

More specifically, Connect SoCal states that “an imbalance between employment and housing in a community is a key contributor to local traffic congestion. These types of origin/destination disparities may also be considered an impediment to environmental justice.” According to SCAG, improvements in the jobs to housing balance may result in a reduction of transportation congestion and related air quality problems. Communities with more than 1.5 jobs per dwelling unit (DU) are considered “jobs rich” and those with fewer than 1.5 jobs per DU are considered “housing rich.” As identified in [Table 5.12-6, *Jobs to Housing Ratio*](#), under existing conditions, both the County and City have similar jobs-to-housing ratios; they are considered housing rich. The South Bay Region, while also considered housing rich, has an existing jobs-to-housing ratio that is higher than the City and County. Thus, the City of Gardena is providing housing that may be lacking in other areas of the South Bay Region where the jobs/housing ratio indicates a “jobs rich” community. Future predictions forecast the City gaining a higher proportion of jobs, but still remaining housing-rich, while the South Bay Region is forecast to gain a higher proportion of jobs to cross the threshold to be considered jobs rich. Both the County and the City would need more job growth to provide greater balance. Nevertheless, SCAG provided the City with a RHNA allocation of 5,735 dwelling units.



**Table 5.12-6
Jobs to Housing Ratio**

Municipality	Existing Conditions (2022) ¹	Projected Conditions (2045) ²
Los Angeles County		
Jobs	4,767,204 ³	5,382,000
Housing units	3,635,136	4,119,000
Jobs/house ratio	1.31	1.31
South Bay Region		
Jobs	418,617 ³	461,900
Housing Units	288,770	297,000
Jobs/house ratio	1.45	1.56
Gardena		
Jobs	29,405 ³	32,100
Housing units	22,486	23,700
Jobs/house ratio	1.31	1.35
Source:		
1. DOF, Report E-5 Population and Housing Estimates for Cities, and Counties, and the State, January 1, 2022.		
2. SCAG, 2020-2045 RTP/SCS, Demographics and Growth Forecast, September 3, 2020b.		
3. SCAG, <i>SCAG Local Profiles Data 2019</i> , April 2021.		

DEMOGRAPHICS AND THE US CENSUS

The U.S. Decennial Census is taken and published every 10 years and includes population and housing data for all jurisdictions in the United States. Census data is the baseline from which most demographic projections are calculated. The U.S. Census Bureau holds access to decennial census records beginning in 1950, while the National Archives and Records Administration holds access to decennial records from 1790-1940 (US Census 2023a). In the 2000 U.S. Census, the population of the City was approximately 57,818, a 16 percent increase from its 1990 population of 49,847 persons (DOC; US Census 2023b). In the 2010 U.S. Census, the population of the City was approximately 58,829 people, a 1.7 percent increase from the 2000 U.S. Census (US Census 2023c). The 2020 population for Gardena was 61,027, a 3.7 percent increase from 2010 (US Census 2023d).



5.12.3 REGULATORY SETTING

STATE

California Housing Element Law

The Housing Element is one of the seven General Plan Elements that are mandated by the State of California (California Government Code §§ 65580 to 65589.8). California State law requires that the Housing Element consists of, “an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing” (Government Code § 65580).

State law requires that each city and county identify and analyze existing and projected housing needs within its jurisdiction and prepare goals, policies, and programs to further the development, improvement, and preservation of housing for all economic segments of the community, commensurate with local housing needs.

Regional Housing Needs Assessment

State law requires that jurisdictions provide their fair share of regional housing needs. The State of California Department of Housing and Community Development (HCD) is mandated to determine the State-wide housing need. In cooperation with HCD, local governments and Councils of Governments (COGs) are charged with making a determination of the existing and projected housing needs as a share of the State-wide housing need of their city or region.

The Regional Housing Needs Assessment (RHNA) quantifies the housing need by income group within each jurisdiction during specific planning periods. The RHNA is incorporated into local General Plans. The RHNA allows communities to anticipate growth, so that collectively the region can grow in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs. The 6th Cycle Final RHNA Allocation Plan was adopted by the SCAG Regional Council on March 4, 2021 and covers the planning period from October 15, 2021 to October 15, 2029; refer to Table 5.12-4.

REGIONAL AND LOCAL

Southern California Association of Governments

Regional planning agencies such as 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 Gardena.

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 more than 38,000 square miles. As the designated MPO, the federal government mandates SCAG 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.

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 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.

[Regional Transportation Plan/Sustainable Communities Strategy \(RTP/SCS\)](#)

The passage of California Senate Bill (SB) 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 (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 investments. The SCS is intended to provide a regional land use policy framework that local governments may consider and build upon.

On September 3, 2020, SCAG's Regional Council approved and fully adopted Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy). Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal outlines more than \$638 billion in transportation system investments through 2045. It was prepared with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

The 2020 RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2020 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving a 19 percent reduction by 2035 compared to the 2005 level. Although the focus of the 2020 RTP/SCS is on GHG emission-reduction, compliance with and implementation of 2020 RTP/SCS policies and strategies would also have co-benefits of reducing per capita criteria air pollutant and TAC emissions associated with reduced per capita vehicle miles traveled (VMT). Improved air quality with implementation of the 2020 RTP/SCS policies would decrease reactive organic gases (ROG) (i.e., VOCs), CO, NO_x, and PM_{2.5}.

SCAG's 2020 RTP/SCS builds on the land use policies that were incorporated into the 2016 RTP/SCS, and provides specific strategies for successful implementation. These strategies include implementing the Sustainable Communities Program (SCP) – Housing and Sustainable



Development (HSD) which will both accelerate housing production as well as enable implementation of the Sustainable Communities Strategy of Connect SoCal; encouraging use of active transportation, or human powered transportation such as bicycles, tricycles, wheelchairs, electric wheelchairs/scooters, skates, and skateboards; and supporting alternative fueled vehicles. The 2020 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in infill areas well served by transit.

In addition, the 2020 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). The 2020 RTP/SCS strategies support local planning and projects that serve short trips, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. The 2020 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and State funding, and to expand the potential for all people to use active transportation.

[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 2020 RTP/SCS Growth Forecasts provide population, household, and employment data for 2045. The socio-economic estimates and projections are used by federal and State mandated long-range planning efforts such as the RTP, Air Quality Management Plan, Regional Transportation Improvement Program, and the Regional Housing Needs Assessment. SCAG's Adopted 2020 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 6.2, Growth Inducing Impacts of the Proposed Project.

[City of Gardena General Plan](#)

The City adopted the comprehensive Gardena General Plan 2006 (General Plan) in 2006. Subsequently, the Community Development Element's Land Use Plan was updated in June 2012, March 2013, March-April 2021, and February 2023 (as described in Section 3.2, Project Background of the Project Description); and the Circulation Plan was updated in July 2020. The 2021-2029 Housing Element was adopted in January 2022, and readopted in February 2023. In February 2022, the Public Safety Plan was updated and a new Environmental Justice Element was adopted.

The General Plan Land Use Plan (as revised April 2021) estimates the residential and non-residential capacities based on future dwelling unit densities and commercial/industrial building intensities. Based on a total of 23,617 dwelling units, the General Plan estimates a population of 64,492. Non-residential development capacity is estimated at 16,879,240 square feet. New



growth and development is anticipated to occur through limited infill development or recycling of existing developed land.

The City of Gardena has updated and adopted their Housing Element for the 6th Cycle RHNA: 2021-2029 Housing Element. The Gardena General Plan 2021-2029 Housing Element identifies strategies and programs that focus on: 1) conserving and improving existing affordable housing; 2) providing adequate sites for residential development; 3) assisting in the provision of affordable housing; 4) removing governmental and other constraints on housing development; and 5) affirmatively furthering fair housing.

As discussed in Section 3.2, Project Background of the Project Description, the proposed Project is a result of the City's recent adoption of the 2021-2029 Housing Element. The Housing Element included a program requirement from HCD that the City amend the Land Use Plan and adopt an urgency ordinance by February 15, 2023, implementing the housing overlay zones, rezoning for the Inventory Sites, and provide that any project with a minimum of 20 percent affordable housing be ministerially approved. On February 15, 2023, the City Council adopted Resolution No. 6620 updating the Land Use Plan, including changes to the Land Use Map, Urgency Ordinance No. 1847¹ amending the Zoning Code and revising the Zoning Map, and Resolution No. 6621 adopting a color palette for buildings, fences, and walls. The Resolution and Ordinance also rescinded the Artesia Corridor Specific Plan, changed the land use designation for five of the six areas in the Specific Plan, and rezoned all six Specific Plan areas.

As part of the 2023 updates to the Land Use Plan, residential and non-residential development capacities were updated. Based on a total of 19,644 dwelling units, which do not include the overlay designations, the General Plan estimates a population of 56,286. With implementation of the overlay designations, a total of 25,401 dwelling units and population of 72,926 could occur. Non-residential development capacity is estimated at 24,514,394 square feet. New growth and development is anticipated to occur through limited infill development or recycling of existing developed land.

The Gardena General Plan Community Development Element, Land Use Plan and 2021-2029 Housing Element contain following goals and policies potentially relevant to the proposed project:

[Community Development, Land Use Plan](#)

LU GOAL 1: Preserve and protect existing single-family and low/medium-density residential neighborhoods while promoting the development of additional high quality housing types in the City.

¹ In addition to the Urgency Ordinance, the same changes to the Zoning Code and Zoning map were also made by Ordinance No. 1848 which was introduced on February 15, 2023 and adopted on February 28, 2023.



LU Policy 1.4: Locate new medium- and high-density residential developments near neighborhood and community shopping centers with commensurate high levels of community services and facilities.

LU Policy 1.5: Provide adequate residential amenities such as open space, recreation, off-street parking and pedestrian features in multi-family residential developments.

LU Policy 1.6: Ensure residential densities are compatible with available public service and infrastructure systems.

LU Policy 1.9: Allow well designed and attractive residential mixed-use development to occur on existing underutilized commercial/industrial blocks designated as Mixed-Use Overlay.

LU Policy 1.12: Require infill development to provide adequate amenities to minimize the impact of such development on the immediate neighborhood and on City services generally, including off-street parking to meet the additional demand placed on street parking.

LU Policy 3.10: Ensure new development provide adequate improvements, dedications, and fees to the City to fully cover the cost of the City services and facilities.

Housing Element

HE Goal 2.0: Provide opportunity for increasing the supply of affordable housing within the City with special emphasis on housing for special needs groups.

HE Policy 2.2: Provide incentives for new housing construction, to encourage the production of affordable units. Encourage provision of units of various sizes to accommodate the diverse needs of the community, including seniors, students and young workers, and large households.

HE Policy 2.3: Pursue strategies that expand homeownership opportunities for lower income and moderate-income households.

HE Goal 3.0: Minimize the impact of governmental constraints on housing construction and cost.

HE Policy 3.3: Encourage the use of specific plans, overlays, and other mechanisms to allow flexibility in housing developments.

HE Goal 4.0: Provide adequate residential sites through appropriate land use and zoning to accommodate the City's share of regional housing needs.

HE Policy 4.1: Implement land use policies that allow for a range of residential densities.

HE Policy 4.2: Maintain an inventory of sites and assist residential developers in identifying land suitable for housing development.

HE Policy 4.3: Encourage residential development within the new Housing Overlay.



HE Policy 4.4: Encourage development at maximum attainable densities and encourage use of density bonuses for inclusion of affordable units.

HE Policy 4.5: Ensure the production of affordable units throughout the community to avoid over concentration in specific neighborhoods.

HE GOAL 5.0: Promote equal opportunity for all residents to reside in the housing of their choice.

HE Policy 5.2: Provide a range of housing options, locational choices, and price points to accommodate the diverse needs in Gardena and to allow for housing mobility.

[City of Gardena Municipal Code](#)

The City's Municipal Code contains Title 14, *Housing*, which discusses residential rent mediation and hearing procedures, tenant displacement and relocation fees, mobile home park relocation impact reports, and eviction proceedings. Chapter 14.08, *Tenant Displacement and Relocation Fees*, provides relocation assistance to tenants facing eviction due to demolition, condominium conversion, or other land use changes affecting residential rental property, including mobile home and trailer parks. Chapter 14.08 states that in every case involving tenant eviction due to the demolition, or removal of a multiple-family residential rental facility; a condominium conversion; or other land use change affecting residential rental property, including mobile home and trailer parks, no required permits or approvals shall be issued unless and until the landlord submits to the city planner proof of payment of a relocation fee to assist in the relocation of such tenants.

Title 18, Zoning, of the Municipal Code is the "zoning law of the city of Gardena"; it specifies the types of allowable uses, as well as development standards such as minimum lot size, building heights and setbacks, parking standards, and others. Title 18 encourages and regulates development standards to encourage the most appropriate use of land and to promote the public health, safety and general welfare. Title 18 contains: Chapter 18.12, *Single-family residential zone (R-1)*; Chapter 18.13, *Accessory dwelling units and junior accessory dwelling units*; Chapter 18.14, *Low-density multiple-family residential zone (R-2)*; Chapter 18.16, *High density multiple-family residential zone (R-3)*; Chapter 18.18, *high density multifamily residential zone (R-4)*; 18.18A, *very high density multifamily residential zone (R-6)*; Chapter 18.19, *Mixed use overlay zone (MUO)*; Chapter 18.20 *commercial-residential zone (C-R)*, and Chapter 18.21, *Housing Overlays (HO-3, HO-4, HO-5, and HO-6)*, which allow for the development of residential uses.

Municipal Code Section 18.42.200, *Pre-Permit Requirements*, establishes specific requirements related to air quality, waste recycling, noise and potential hazard conditions associated with site-specific development, including the requirement that an applicant provide a sewer capacity study for all project in accordance with the department of public works policy to ensure that adequate sewer capacity is provided to serve the development being proposed.



Municipal Code Chapter 15.48, *Construction and development fees*, imposes a nonrecurring fee upon the development and construction of new multi-unit residential dwelling units to provide revenues with which the City may meet, deal with, and solve serious problems created by the occupancy and construction of such developments within the City. A multi-unit residential development impact fee is imposed upon the occupancy and construction of each new dwelling unit. All proceeds from the fees collected under Chapter 15.48 shall be paid to a special fund to be applied to the costs incurred by the City associated with the burden increased by the multi-unit residential facilities, open space, drainage and other public facilities and services related thereto.

5.12.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

California Environmental Quality Act (CEQA) Guidelines Appendix G contains the Environmental Checklist Form, which includes questions related to population and housing. The questions presented in the Environmental Checklist have been used as thresholds of significance in this section. A significant impact related to population and housing may occur if the project would:

- 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) (refer to Impact Statement 5.12-1).
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere (refer to Impact Statement 5.12-2).

Based on these standards and significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a "significant unavoidable impact."

5.12.5 IMPACTS AND MITIGATION MEASURES

Impact 5.12-1: 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: The City of Gardena currently has 22,486 dwelling units, 59,947 residents, and 29,405 jobs. The City and surrounding area, are highly urbanized and considered to be built-out. New growth and development within the City primarily occurs through infill development or recycling of existing developed land. The proposed Project would accommodate future residential growth in Gardena primarily by amending the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development and densities when compared to existing conditions. Although the proposed Project does not involve site-specific development, the intent is to provide adequate



sites for residential development to accommodate the City's RHNA and to allow for additional residential development opportunities should they arise. As described in Chapter 3.0, Project Description, and summarized in Table 3-4, Proposed Project Net Development Potential, Project implementation could yield a net change over existing conditions of 12,167 additional dwelling units and 7,544,381 fewer square feet of non-residential uses.

Given the historical and current population, housing, and employment trends, growth in the City, as well as the entire state, is inevitable. The primary factors that account for population growth are natural increase and net migration. Other factors that affect growth include the cost of housing, the location of jobs, the economy, the climate, and transportation. Residential growth within the City would continue to occur based primarily on the demand of the housing market. Existing development within the City is served by existing roads, transit, infrastructure, and public services. Further, the area surrounding the Project Area is developed. There is the potential for infrastructure improvements within the Project Area associated with site-specific development and overall development growth; however, the Project would not require the extension of roads or other infrastructure into an area that is not already served.

Potential impacts associated with substantial unplanned population growth in an area are assessed based on a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint. As indicated above, the General Plan Land Use Plan (as revised April 2021) anticipates a total of 23,617 dwelling units and a population of 64,492. Although the General Plan does not indicate a specific number of jobs, it does anticipate a non-residential development capacity of 16,879,240 square feet. As stated, the General Plan anticipates new growth and development would occur through limited infill development or recycling of existing developed land.

Implementation of the proposed Project would allow for the development of up to 12,167 net new housing units with a population increase of approximately 33,338 people. It is noted that residential development associated with implementation of the proposed land use designations would result in a reduction of the non-residential development capacity anticipated by the General Plan, as sites currently anticipated for non-residential development would be developed with residential uses.

Although the proposed Project would provide for substantial unplanned population growth within the Project Area when compared to the current General Plan, the proposed Project is intended to identify and plan for future population growth and housing development within the City. The Project would implement the goals and policies of the General Plan and accommodate the City's fair share of statewide housing needs, which are allocated by SCAG, based on regional numbers provided by the HCD on a regular basis (every five to eight years). As described above, the City of Gardena 2021-2029 Housing Element was adopted in February 2023 and accommodates the City's share of the regional housing need for the 2021-2029 RHNA period of 5,735 units. The City's 2021-2029 Housing Element identifies the implementation of Housing Overlays as the primary opportunity to accommodate the City's RHNA allocation. In addition to



implementation of the housing overlays to the parcels (Inventory Sites) identified in the 2021-2029 Housing Element, the City identified opportunities for the exploration of additional residential development by proposing to apply the housing overlays to additional parcels (Non-inventory Sites) and introducing and applying Very High-Density Residential land use designations and zones. The Project has the potential to yield an additional 12,167 dwelling units and 33,338 residents over existing conditions based on a DOF persons per household of 2.74. This would be an approximately 56 percent increase over existing conditions and an approximately 42 percent increase over SCAG's projected future conditions (2045). Thus, Project implementation would exceed the population projections anticipated by SCAG's growth forecasts and the City's General Plan.

As discussed above, SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts for local Los Angeles County governments, among other counties. SCAG provides household, population, and employment projection estimates in five-year increments through 2045. While Project growth projections are anticipated to exceed SCAG's 2045 population, SCAG's projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. It is likely that through a combination of market changes, catalytic projects, updated land use direction in the General Plan, and other factors, Gardena could capture either more or less of expected regional growth than forecasted by SCAG. Discrepancies between Project and regional forecasts can also be attributed to the RHNA process. The proposed Project is intended to accommodate the City's 2021-2029 RHNA; SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs and revised General Plan growth projections associated with implementation of the Project will be included as part of SCAG's future growth forecasts.

The proposed Project does not include site-specific development and would provide for the planning of the potential unplanned growth associated with the RHNA and additional residential development, which would also be considered as part of future updates to plans and programs, including the next update to SCAG's RTP/SCS. The General Plan includes policies that reduce environmental impacts associated with growth, such as air quality, noise, and traffic; Sections 5.1 through 5.16 and 6.0 of this Draft EIR provide a discussion of environmental effects associated with overall development allowed under the proposed Project. Each of these EIR sections include relevant policies and action items that would reduce potential environmental impacts associated with growth, to the greatest extent feasible.

The General Plan also includes policies that regulate direct population and housing growth to ensure adequate services and infrastructure are provided to serve direct growth associate with site-specific development. Land Use Policy 1.5 provides for adequate residential amenities such as open space, recreation, off-street parking and pedestrian features in multi-family residential developments. Land Use Policy 1.6, ensures residential densities are compatible with available



public service and infrastructure systems. Future residential development would be required to demonstrate sufficient service and infrastructure capacities are available to serve the development being proposed at that time. Land Use Policy 3.10 ensures new development provides adequate improvements, dedications, and fees to the City to fully cover the cost of expanded City services and facilities when required.

Municipal Code Chapter 15.48, *Construction and development fees*, imposes a nonrecurring fee upon the development and construction of new multi-unit residential dwelling units to provide revenues with which the City may meet, deal with, and solve serious problems created by the occupancy and construction of such developments within the City. A multi-unit residential development impact fee is imposed upon the occupancy and construction of each new dwelling unit. All proceeds from the fees collected are paid to a special fund to be applied to the costs incurred by the City associated with the burden increased by the multi-unit residential facilities, open space, drainage and other public facilities and services related thereto. Individual development projects would be reviewed to ensure that adequate levels of public services and facilities are provided and that payment of fees occur to offset expansion of such services and facilities associated with site-specific growth and development.

Future development associated with the Project would provide for employment opportunities, particularly during construction phases. However, temporary construction jobs do not typically provide employment opportunities that involve substantial numbers of people needing to permanently relocate to fill the positions, but rather would provide employment opportunities to people within the local community and surrounding areas.

As Project implementation would involve an overall reduction in non-residential square footage (a potential reduction of 7,544,381 square feet), in order to accommodate new residential development, new long-term employment opportunities are not anticipated. In contrast, future development associated with the Project would reduce the number of employment opportunities since existing commercial/industrial development would be removed to allow for new residential development associated with the Housing Overlays. The jobs associated with these existing uses would no longer be available. Therefore, the Project would not induce substantial unplanned population growth directly by proposing new business.

Although implementation of the Project would induce substantial unplanned population growth associated with the potential for new residential development to the area, with implementation of General Plan policies and Municipal Code requirements intended to guide growth and provide services necessary to accommodate growth, including reducing potential environmental impacts related to growth, impacts associated with the unplanned population growth would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.



Impact 5.12-2: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis: The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development when compared to existing conditions. There is no increased development capacity for those parcels to be redesignated or rezoned only to resolve inconsistencies with existing on-site conditions. Although the proposed Project does not involve site-specific development, the intent is to provide adequate sites for residential development to accommodate the City's RHNA and to allow for additional residential development opportunities should they arise.

The Project does not propose any site-specific development at this time; therefore, no existing residents would be displaced. Development and redevelopment of the identified parcels would occur gradually over time. It is anticipated that implementation of the Project could result in the removal of up to 154 existing residential units to allow for the development of new residential units and higher densities. However, Project implementation is projected to increase the overall number of dwelling units in the Project Area by approximately 12,167 additional units over existing conditions, providing additional housing to serve the diverse needs of the community at various socioeconomic levels. Thus, the proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less than Significant.

5.12.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the methodology used to determine the potential for cumulative growth and development to interact with the proposed Project to the extent that a significant cumulative effect relative to population and housing may occur. The geographic setting for population and housing considers the SCAG region and the City.

Would the project, combined with other related cumulative projects, 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 discussed, although the proposed Project would provide for substantial unplanned population growth within the Project Area when compared to SCAG's growth forecasts and the current General Plan, the proposed Project is intended to implement the goals and policies of the General Plan and accommodate the City's fair share of statewide housing



needs, which are allocated by SCAG, based on regional numbers provided by the HCD on a regular basis (every five to eight years). SCAG's Connect SoCal growth forecasts through 2045 do not currently consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. However, the regional housing needs and associated General Plan growth projections will be included as part of SCAG's future growth forecasts. Additionally, the Gardena General Plan includes policies that reduce environmental impacts associated with growth, such as air quality, noise, and traffic; Sections 5.1 through 5.16 and 6.0 of this Draft EIR provide a discussion of environmental effects associated with overall development allowed under the proposed Project and cumulative conditions. Each of these EIR sections include relevant policies and action items that would reduce potential environmental impacts associated with growth, to the greatest extent feasible. The General Plan also includes policies that regulate direct population and housing growth to ensure adequate services and infrastructure are provided to serve direct growth associated with site-specific development. Future development within the SCAG region and the City would also assess the potential for induced substantial unplanned population growth and the associated environmental impacts.

Although implementation of the Project would induce substantial unplanned growth, the Project is planning and responding to new growth associated with implementation of SCAG's RHNA allocation. Site-specific development would be required to implement General Plan policies and Municipal Code requirements intended to guide growth and provide services necessary to accommodate growth, including reducing potential environmental impacts related to growth. Therefore, the proposed Project's incremental contribution to cumulative impacts associated with the potential to induce substantial unplanned population growth in an area would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the Project combined with other related cumulative projects displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis: As discussed, the Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Overall, Project implementation could result in the removal of up to 154 single-family dwelling units and the net development of 12,167 additional multiple-family dwelling units. Therefore, the proposed Project's incremental contribution to cumulative impacts associated with the displacement of substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.



Level of Significance: Less Than Significant Impact.

5.12.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with population and housing would occur under the proposed Project.

5.12.8 REFERENCES

California Department of Finance (DOF), *Report E-5 Population and Housing Estimates for Cities, and Counties, and the State*. January 1, 2022.

Department of Commerce (DOC), *1990 Census of Population; General Population Characteristics, California, Section 1 of 3*, 1990.

Southern California Association of Governments (SCAG), *SCAG Local Profiles Data 2019*, April 2021.

Southern California Association of Governments (SCAG), *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); Connect SoCal*. September 3, 2020a.

Southern California Association of Governments (SCAG), *2020-2045 RTP/SCS, Demographics and Growth Forecast*. September 3, 2020b.

Southern California Association of Governments (SCAG), *6th Cycle Final RHNA Allocation Plan (approved by HCD on 3/22/21 and modified on 7/1/21)*. 2021.

US Census Bureau, *Decennial Census Records*,
https://www.census.gov/history/www/genealogy/decennial_census_records/ accessed February 22, 2023a.

US Census Bureau, *Table DP1: Profile of General Demographic Characteristics: 2000; 2000: DEC Summary File 4 Demographic Profile, City of Gardena*.
<https://data.census.gov/cedsci/table?q=gardena%20city%20ca%202000&tid=DECENNIALDP1>, accessed February 22, 2023b.

US Census Bureau, *Table P1: Race; 2010: DEC Redistricting Data (PL 94-171)*,
<https://data.census.gov/cedsci/table?q=gardena%20city%20ca%202010>,
accessed February 22, 2023c.

US Census Bureau, *Table P1: Race; 2020 Universe: Total Population*,
<https://data.census.gov/cedsci/table?q=gardena%20city%20ca%202020>,
accessed February 22, 2023d.



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5.13 PUBLIC SERVICES

5.13.1 PURPOSE

This section identifies the existing public services available within the Project Area and provides an analysis of potential impacts associated with Project implementation.

One comment was received during the NOP comment period regarding public services. The comment was received from Vera Povetina, who expressed concern about crime and fire risk, and impacts to parks and schools resulting from additional dwelling units within the City.

5.13.2 ENVIRONMENTAL SETTING

FIRE PROTECTION

The City of Gardena maintains a contractual agreement with the Los Angeles County Fire Department (LACoFD) to provide fire protection and emergency medical services for the City, including the Project Area. Within Gardena, the LACoFD operates Fire Station 158, located at 1650 West 162nd Street, and Fire Station 159, located at 2030 West 135th Street. LACoFD is responsible for emergency medical calls, fire response, and inspection and plan check services. Fire protection services provided to the City, and subsequently the Project Area, include fire, emergency medical, urban search and rescue, hazardous materials prevention and response, air operations, and other emergency response resources.

As established in the General Plan Public Safety Plan, Fire Station 158 is equipped with a fire engine, a paramedic mobile aid van, a squad car, and has a fire engine on reserve. Per shift, Fire Station 158 is staffed with five uniform personnel, one secretary, one Community Service Representative, and one Division Nurse Coordinator. Fire Station 159 is equipped with a Quint¹ and a fire truck; per shift, there are four uniform personnel on duty.

Fire Hazards

According to the California Department of Forestry and Fire Protection's (CALFIRE) Fire Hazard Severity Zone maps and the City's General Plan Safety Element, the City of Gardena is not subject to wildland fires due to its geographic location and topography. Neither the Project Area, nor surrounding communities, are located within a designated Fire Hazard Severity Zone. The Project Area, and surrounding area, are characterized as developed and highly-urbanized. Urbanized land does not typically facilitate the spread of wildfire in the same manner as vegetated, open space areas.

¹ A Quint is a fire-fighting apparatus that combines the equipment capabilities of a ladder truck and the water-pumping ability of a fire engine. "Quintuple" refers to the five functions that a quint provides - pump, water tank, fire hose, aerial device, and ground ladders.



Emergency Access

The City adopted an Emergency Operations Plan (EOP) in 2017 that establishes a single, comprehensive framework for the management of extraordinary incident, disaster, or emergency situations within the City of Gardena. The EOP provides the concepts, processes, and structures necessary when carrying out assigned roles and functional responsibilities to departments and agencies consistent with California's Standardized Emergency Management System (SEMS), the National Incident Management System, and the Incident Command System. The EOP, as well as the General Plan Public Safety Plan, discuss the general evacuation routes and operations for the City, including the Project Area.

Major arterials generally serve as the primary routes for evacuation; however, evacuation routes will depend upon the emergency event and area affected. As part of the Safety Element Update, the City prepared an analysis, referred to as a White Paper, consistent with Senate Bill 99 to identify residential developments in hazard areas that do not have at least two emergency evacuation routes. All residential developments meet City standards, and additionally, the City coordinates with LACoFD and Gardena Police Department to provide ongoing education to residents about how to safely evacuate in the event of an emergency.

Further discussion related to emergency response can be found in Section 5.8, Hazards and Hazardous Materials, and Section 5.14, Transportation, of this EIR.

LAW ENFORCEMENT

As discussed in the General Plan Public Safety Plan, the Gardena Police Department (PD), located within the Civic Center, provides police protection and law enforcement services to the City and Project Area. There are currently 88 police officers, 22 full-time and 10 part-time employees. This includes 27 marked units, two canine units, and 14 unmarked units. Response time for emergency calls throughout the City is four minutes. Gardena law enforcement also helps identify the appropriate evacuation routes during emergency, and assists residents leaving the City in the event an evacuation of all or part of the City is required.

Crime Statistics

Available crime statistics were pulled from the most recent years available. In 2019, approximately 1,526 crimes (324 violent crimes and 1,202 property crimes) were reported in the City (FBI 2023b). As such, the City had approximately 2.5 crimes per capita over the course of the year. While the number of violent crimes slightly decreased between 2019 and 2020, with only 269 reported violent crimes, the number of reported property crimes rose by 122 incidents, to 1,324 (FBI 2023a). As such, the City had approximately 2.6 crimes per capita in 2020.

SCHOOLS

Students generated by the implementation of the Project would attend schools in the South Local District of the Los Angeles Unified School District (LAUSD). In addition to nine public and four private schools, the City has eight preschools, and three Japanese language schools. These private



schools include: Junipero Serra High School (14830 South Van Ness Avenue), Maria Regina Elementary School (13510 South Van Ness Avenue), Pacific Lutheran High School (1473 West 182nd Street) and Saint Anthony of Padua Elementary School (1003 West 163rd Street) (City of Gardena 2023e).

Table 5.13-1, *LAUSD Public Schools Current Enrollment*, indicates the LAUSD school facilities location, grades, and current enrollment (2020-2021) that serve students residing within Gardena.

**Table 5.13-1
LAUSD Public Schools Current Enrollment**

School	Address	Grades ¹	Existing Enrollment (2020/2021) ²
135th Street Elementary	801 West 135th Street	K-5	636
153rd Street Elementary	1605 West 153rd Street	K-5	392
156th Street Elementary	2100 West 156th Street	K-6	374
186th Street Elementary	1581 West 186th Street	K-5	706
Amestoy Elementary	1048 West 149th Street	K-5	754
Chapman Elementary	1947 Marine Avenue	K-5	389
Denker Avenue Elementary	1620 West 162nd Street	K-5	700
Gardena Elementary	647 West Gardena Boulevard	K-5	513
Purche Avenue Elementary	13210 Purche Avenue	K-5	432
Peary Middle School	1415 West Gardena Boulevard	6-8	1,217
Gardena High School	1301 West 182nd Street	9-12	1,490

Source: City of Gardena, Schools, <https://cityofgardena.org/schools/>, 2023e.

- LAUSD, School Directory, <https://schooldirectory.lausd.net/schooldirectory/>, accessed February 24, 2023.
- DOC, School Accountability Report Card; Reported Using Data from the 2020-2021 School Year, <https://www.cde.ca.gov/ta/ac/sa/>, February 24, 2023.

According to the LAUSD Development Fee Justification Study, the schools serving the Project Area are not currently overcrowded, and overcrowding is not expected in the future. As shown in Table 5.13-2, LAUSD Projected Capacity, the schools serving the Project Area have remaining capacity under existing conditions and are expected to continue to have capacity into the future.



Table 5.13-2
LAUSD Projected Capacity

School	Capacity	Existing Enrollment (2018/2019)	Projected Seat Capacity
Elementary Schools (TK-6)	371,125	315,581	+55,544
Middle Schools (7-8)	90,963	86,208	+4,755
High Schools (9-12)	204,876	171,365	+33,511
Source: Schoolworks, Inc., 2020 Developer Fee Justification Study Los Angeles School District. March 2020.			

In addition to lower education facilities, the City of Gardena is located near three accredited colleges and universities: El Camino College, CSU Dominguez Hills, and University of Phoenix (City of Gardena 2023e).

PARKS & RECREATION

City Parks

Similar to many cities in Los Angeles County, Gardena is a developed community and therefore has limited opportunities to expand its parks and recreation resources. Gardena has six parks, one community center, one municipal pool, one parkette and two gymnasiums. The largest of the City parks is Rowley Park and Gymnasium. It occupies approximately 18.7 acres of land and is located at the northeast quadrant of the City. The smallest of the City parks is Harvard Parkette (0.15 acres). City parks, their locations, and amenities are presented in Table 5.13-3, *City of Gardena Parks & Recreational Facilities*.

In addition to man-made parks, there is the natural Willows Wetland in the City that could also serve open space and recreational needs. The Willows Wetland is a protected natural habitat that occupies approximately eight acres of land in the far southeast portion of the City.

The General Plan Open Space Plan describes several regional recreation and park facilities which are in close proximity to the City and are open to Gardena residents. To the east of the City is the Rosecrans Recreation Center, to the northeast is Helen Keller Park, to the west is Alondra Park and Golf Course, and to the north is Chester L. Washington Golf Course. These facilities offer a wide range of park and recreational amenities including basketball courts, baseball/soccer fields, volleyball court, golf course, lake fishing, playgrounds, as well as picnic and barbeque areas.



**Table 5.13-3
City of Gardena Parks & Recreational Facilities**

Park	Address	Amenities
Bell Park	14708 South Halldale Avenue	60 Building Chairs; 45 Building Chairs with Tables; 35 Picnic Shelters
Mas Fukai Park	15800 South Brighton Avenue	75 Building Chairs; 50 Building Chairs with Tables; 100 Picnic Shelters
Rowley Park & Gymnasium	13220 South Van Ness Avenue	150 Building Chairs; 100 Building Chairs with Tables; 60 Picnic Shelters North; 100 Picnic Shelters South; 60 Picnic Shelters West; 300 Picnic Shelters in Gym
Arthur Johnson Park	1200 West 170th Street	60 Building Chairs; 30 Building Chairs with Tables; 50 Picnic Shelters
Freeman Park	2100 West 154th Place	60 Building Chairs; 35 Building Chairs with Tables; 60 Picnic Shelters
Rush Gymnasium	1651 West 162nd Street	350 Building Chairs
Nakaoka Community Center	1670 West 162nd Street	300 auditorium chairs; 100 auditorium chairs with tables; 4 Rooms.
Thornburg Park	2320 West 149th Street	50 Building Chairs; 35 Building Chairs with Tables; 60 Picnic Shelters
Harvard Parkette	160th Street/ Harvard Boulevard	N/A
Primm Memorial Pool	1650 West 162nd Street	N/A
Alondra Park Lake ¹	3535 Redondo Beach Boulevard	Recreational Fishing
Chester Washington Golf Course ²	1930 West 120th Street	Juniors Gold Class
Willows Wetland Preserve	North of Artesia Boulevard and west of Vermont Avenue	Walking paths

Source:

1. City of Gardena, For Parks & Recreation Reservations, <https://cityofgardena.org/gardena-facilities-2/>, February 24, 2023a.
2. City of Gardena, Youth Fishing Event, <https://cityofgardena.org/youth-fishing-event/>, February 24, 2023g.
3. City of Gardena, Sports and Leisure, <https://cityofgardena.org/sports-and-leisure-2/>, February 24, 2023f.



LIBRARIES

The County of Los Angeles Public Library (LA County Library) provides library services to Los Angeles County residents through its 85 library locations, four cultural resources centers, and three bookmobiles. LA County Library services 49 incorporated cities in Los Angeles County, including the City of Gardena (LA County Library 2023a). There are two main LA County Libraries that serve the residents of Gardena: the Gardena Mayme Dear Library and the Masao W. Satow Library.

The Gardena Mayme Dear Library is located at 1731 West Gardena Boulevard in the City of Gardena. This library, approximately 14,122 square feet in size, has a meeting room, separate spaces for children and teens, and the main lobby. The library also has separate help services for children and teens. The library is closed on Saturdays and Sundays; open from 10:00 a.m. to 6:00 p.m. Mondays, Wednesdays, Thursdays, and Fridays; and open from 12:00 p.m. to 8:00 p.m. on Tuesdays (LA County Library 2023b).

The Masao W. Satow Library is located at 14433 South Crenshaw Boulevard, just outside of the City's jurisdictional boundaries on the west side of Crenshaw Boulevard, within an unincorporated area of Los Angeles County. The Satow Library's building size is 6,639 square feet, contains a space for children and provides help services for both children and teens. It is closed Sunday and Monday, and open on Tuesdays from 12:00 p.m. to 8:00 p.m., and Wednesdays through Saturdays it is open from 10 a.m. to 6 p.m. (LA County Library 2023c).

Residents can also utilize the surrounding LA County libraries located in Hawthorne, Lawndale, and Rancho Dominguez, or access digital materials such as eBooks, eNewspapers, and digital magazines through the LA County Library's website.

OTHER PUBLIC FACILITIES

[Nakaoka Community Center/Civic Center](#)

The Nakaoka Community Center is located at 1670 West 162nd Street in the City of Gardena and is part of the Civic Center Complex that includes City Hall, the Gardena Police Department, and Fire Station 158. The facilities serve as the location for the City's Spring Craft Fair, Heritage Festival & Street Fair, Movies in the Park, day camps, senior activities, after school programs, and other community-based events (City of Gardena 2023b). The Nakaoka center is equipped with 300 auditorium chairs, 100 auditorium chairs with tables, and contains five separate rooms available to the public (City of Gardena 2023a).

[Lawndale Senior Center](#)

Lawndale Senior Center is located at 14701 South Burin Avenue. Among other services, the center serves lunch on a regular basis to elderly residents (City of Gardena 2023c).



5.13.3 REGULATORY SETTING

FIRE PROTECTION AND EMERGENCY SERVICES

State

California Building Code & California Fire Code

The California Building Code is a compilation of building standards, including fire safety standards for new buildings, which are provided in the California Fire Code. The California Fire Code is Chapter 9 of Title 24 of the California Code of Regulations. The California Fire Code provides regulations for safeguarding life and property from fire and explosion hazards derived from the storage, handling, and use of hazardous substances, materials, and devices. The provisions of this code apply to construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenance connected or attached to such building structures throughout the state.

California Constitution Article XIII, Section 35

Section 35 of Article XIII of the California Constitution at subdivision (a)(2) provides: “The protection of 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 Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50 percent sales tax to be expended exclusively on local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Section 30056 mandates 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. An agency is required to use Proposition 172 to supplement its local funds used on fire protection services, 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, including fire protection, emergency medical services, and police protection services.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Equipment, the California Occupational Safety and Health Administration 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 size requirements; restrictions on the use of compressed air; requirements for access roads; and guidelines for testing, maintaining, and using all firefighting and emergency medical equipment.



[Mutual Aid Agreements of the California Emergency Services Act](#)

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act, provides Statewide mutual aid between and among local jurisdictions and the State. The Statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed.

[Assembly Bill 1600 Mitigation Fee Act](#)

A development impact mitigation fee is a monetary exaction other than a tax or special assessment that is charged by a local governmental agency to an applicant in connection with an approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project (Government Code Section 66000(b)). The legal requirements for enactment of development impact fee program are set forth in Government Code Sections 66000-66025 (the "Mitigation Fee Act"), the bulk of which were adopted as AB 1600 and thus are commonly referred to as "AB 1600 requirements." A development impact fee is not a tax or special assessment; by its definition, a fee is voluntary and must be reasonably related to the cost of the service provided by the local agency.

AB 1600 mitigation fees imposed by county ordinance are required to be adjusted on an annual basis, with the exception of the Quimby and Fire fees. The mitigation fees are adjusted automatically on July 1st of each fiscal year, by a percentage equal to the appropriate engineering Construction Cost Index as published by Engineering News Record (ENR) for the preceding twelve months.

[Local](#)

[City of Gardena & City of Hawthorne Hazard Mitigation Plan 2012](#)

The 2012 City of Gardena & City of Hawthorne Hazard Mitigation Plan describes the process for identifying hazards, risks and vulnerabilities and identifies and prioritizes mitigation actions, encourages the development of local mitigation and provides technical support for those efforts.

The City of Gardena and the City of Hawthorne are required to have a Federal Emergency Management Agency (FEMA) approved Hazard Mitigation Plan to be eligible for certain disaster assistance and mitigation funding. This plan fulfills FEMA requirements and provides direction and guidance on implementing hazard mitigation action items on a hazard-level, probability, and cost-priority basis. The overall goal of the Hazard Mitigation Plan is to reduce the potential for damage to critical assets from natural hazards. In addition, the plan describes past and current hazard mitigation activities and philosophies, and outlines future mitigation goals and strategies. The City of Hawthorne updated their Hazard Mitigation Plan; the City of Gardena's Hazard Mitigation Plan is currently being updated as is anticipated to be adopted in Spring 2024.



City of Gardena Emergency Operations Plan 2017

This City of Gardena Emergency Operations Plan (EOP) addresses the planned response to an actual or threatened extraordinary incident, disaster, or emergency associated with natural, technological, and human caused hazards, or a national security emergency in or affecting the City of Gardena. The EOP outlines the roles and responsibilities assigned to city employees for response and short-term recovery activities, and is flexible enough for use to address all hazards. It includes the City of Gardena as part of the Los Angeles County Operational Area. The EOP incorporates concepts and principles from the California Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS), and the Incident Command System (ICS) into the City's emergency operations.

Gardena General Plan

The recently updated Public Safety Plan of the City's General Plan provides goals and policies relevant to creating and maintaining healthy, safe residential communities and commercial districts. The City of Gardena General Plan Community Safety Element, Public Safety Plan contains the following goals and policies potentially relevant to the proposed Project:

Community Safety Element, Public Safety Plan

Policy PS 1.5: Sufficient Funding. Provide funding levels necessary for high level of police, fire protection, and building inspections, and code enforcement.

Policy PS 1.6: Adequate Facilities and Personnel. Require that adequate police and fire service facilities and personnel be maintained to provide services at sufficient levels.

Policy PS 1.7: Development Review. Ensure that law enforcement, crime prevention, and fire safety concerns are considered in the review of planning and development proposals in the City.

Policy PS 1.8: Critical Facilities. Coordinate with service providers to ensure the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Policy PS 1.9: Automatic and Mutual Aid. Participate in automatic and mutual aid agreements with adjacent service providers to ensure efficient and adequate resources, facilities, and support services before, during, and after emergencies.

Policy PS 1.11: Emergency Evacuation Routes and Access. Work with LACoFD and the Gardena Police Department to define minimum standards for evacuation of residential areas and to maintain, update, and regularly exercise emergency access, protocols, and evacuation routes to assess their effectiveness under a range of emergency scenarios. If areas with inadequate evacuation routes are identified, develop appropriate mitigation measures, improvement plans, or education programs to ensure safe evacuation.



Policy PS 1.15: Community Training and Volunteer Programs. Promote community participation in crime prevention, fire safety, and other emergency training and volunteer programs as a valuable asset to the community.

Policy PS 1.16: School Safety. Coordinate with local schools related to their programs and practices regarding emergency preparedness.

Policy PS 2.1: Fire Protection Services. Reduce the risk of fire to the community by coordination for emergency preparedness with the LACoFD.

Policy PS 2.2: Building and Fire Codes. Require that all buildings and facilities within Gardena comply with local, state, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards.

Policy PS 2.3: Fire Hazard Identification. Work with LACoFD to maintain an inventory of high-risk fire hazards within the City.

Policy PS 2.4: Urban Fire Risks. Work with LACoFD to maintain an ongoing fire inspection program to reduce fire hazards associated with multifamily development, critical facilities, public assembly facilities, industrial buildings, and nonresidential buildings.

Policy PS 2.5: Water Supply. Coordinate with applicable water providers and LACoFD to ensure that water supply and pressure for new and existing development is adequate for structural fire suppression.

Policy PS 2.6: Regional Coordination. Coordinate with the County of Los Angeles, neighboring cities, and other fire protection agencies to reduce the potential for fire hazards in Gardena.

Policy PS 2.7: New Development.

- a. Require adequate fire protection services, fire protection plans, and emergency vehicle access for new development.
- b. Locate, design, and construct new development to minimize the risk of structural loss from fires.
- c. Install visible home and street addressing and signage.

Policy PS 2.8: Hazard Mitigation Plans. Coordinate with local, state, and federal agencies to update emergency, evacuation, and hazard mitigation plans, as necessary.

The City of Gardena General Plan Environmental Justice Element contains the following goals and policies potentially relevant to the proposed Project:

Environmental Justice

Policy EJ 2.6: Coordinate with partnering agencies that provide public facilities and service within the City to ensure effective, efficient, and equitable service delivery.



Policy EJ 2.18: Maintain a high level of fire and police protection for residents, businesses, and visitors. (See PS Goal 1)

The City of Gardena General Plan Community Development Element, Land Use Plan contains the following goals and policies potentially relevant to the proposed Project:

Land Use

Policy LU 3.10: Ensure new development provides adequate improvements, dedications, and fees to the City to fully cover the cost of the City services and facilities.

[City of Gardena Municipal Code](#)

The City of Gardena has incorporated safety measures meant to ensure adequate supplies, services, and facilities are available to all residents within the City, into the City Municipal Code. Title 8 is reserved for *Health and Safety*; and Chapter 8.08 codifies the adoption of the most current version of the Los Angeles County Fire Code by reference, which is based on the California Fire Code. The Fire Code sets fire safety related building standards and practices to safeguard life and property.

Chapter 15.48, *Construction and development fees*, imposes a nonrecurring fee upon the development and construction of new multi-unit residential dwelling units to provide revenues with which the City may meet, deal with, and solve serious problems created by the occupancy and construction of such developments within the City. A multi-unit residential development impact fee is imposed upon the occupancy and construction of each new dwelling unit. All proceeds from the fees collected under Chapter 15.48 shall be paid to a special fund to be applied to the costs incurred by the City associated with the burden increased by the multi-unit residential facilities, open space, drainage and other public facilities and services related thereto.

LAW ENFORCEMENT

[State](#)

[California Penal Code](#)

The California Penal Code establishes the basis for the application of criminal law in California.

[Local](#)

[Gardena General Plan](#)

The Public Safety Plan, of the City's General Plan provides goals and policies relevant to creating and maintaining healthy, safe residential communities and commercial districts. The City of Gardena General Plan Community Safety Element, Public Safety Plan contains the following goals and policies potentially relevant to the proposed Project:



Community Safety Element, Public Safety Plan

Policy PS 1.4: Law Enforcement. Maintain a high level of law enforcement activities and expand crime suppression activities in collaboration with neighboring law enforcement agencies.

Policy PS 1.5: Sufficient Funding. Provide funding levels necessary for high level of police, fire protection, and building inspections, and code enforcement.

Policy PS 1.6: Adequate Facilities and Personnel. Require that adequate police and fire service facilities and personnel be maintained to provide services at sufficient levels.

Policy PS 1.7: Development Review. Ensure that law enforcement, crime prevention, and fire safety concerns are considered in the review of planning and development proposals in the City.

Policy PS 1.11: Emergency Evacuation Routes and Access. Work with LACoFD and the Gardena Police Department to define minimum standards for evacuation of residential areas and to maintain, update, and regularly exercise emergency access, protocols, and evacuation routes to assess their effectiveness under a range of emergency scenarios. If areas with inadequate evacuation routes are identified, develop appropriate mitigation measures, improvement plans, or education programs to ensure safe evacuation.

Policy PS 1.15: Community Training and Volunteer Programs. Promote community participation in crime prevention, fire safety, and other emergency training and volunteer programs as a valuable asset to the community.

Policy PS 2.2: Building and Fire Codes. Require that all buildings and facilities within Gardena comply with local, state, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards.

Policy PS 2.7: New Development.

- a. Require adequate fire protection services, fire protection plans, and emergency vehicle access for new development.
- b. Locate, design, and construct new development to minimize the risk of structural loss from fires.
- c. Install visible home and street addressing and signage.

The City of Gardena General Plan Environmental Justice Element contains the following goals and policies potentially relevant to the proposed Project:

Environmental Justice

Policy EJ 2.5: Coordinate with the Police Department to address safety in parks.



Policy EJ 2.11: Provide adequate public facilities and services for the convenience and safety of each neighborhood. (See Policy LU 4.7)

Policy EJ 2.18: Maintain a high level of fire and police protection for residents, businesses, and visitors. (See PS Goal 1)

The City of Gardena General Plan Community Development Element, Land Use Plan contains the following goals and policies potentially relevant to the proposed Project:

Land Use

Policy LU 3.10: Ensure new development provides adequate improvements, dedications, and fees to the City to fully cover the cost of the City services and facilities.

Gardena Municipal Code

Title 9 is dedicated *Public Peace, Morals and Welfare*. Law enforcement is granted various authorities through Title 9 as it specifically establishes standards and procedures law enforcement officials are to follow and abide by. Title 9 regulates: offenses against public officials, alcoholic beverage offenses, offenses against public peace, drugs, curfews, weapons, and emergency personnel response fees.

Refer to the discussion of Municipal Code Chapter 15.48, *Construction and development fees*, above.

SCHOOLS

State

Senate Bill 50 & Proposition 1A

Senate Bill (SB) 50, the Leroy F. Greene School Facilities Act of 1998, was signed into law on August 27, 1998. It placed a \$9.2 billion state bond measure (Proposition 1A), which includes grants for modernization of existing schools and construction of new schools, on the ballot for the November 3, 1998, election. Proposition 1A was approved by voters, thereby enabling SB 50 to become fully operative. Under SB 50, a program for funding school facilities largely based on matching funds was created. The construction grant provides funding on a 50/50 state and local match basis, while the modernization grant provides funding on a 60/40 basis. Districts unable to provide some, or all, of the local match requirement may meet financial hardship provisions and are potentially eligible for additional state funding.

In addition, SB 50 allows governing boards of school districts to establish fees to offset costs associated with school facilities made necessary by new development in their district. Pursuant to SB 50, LAUSD collected development fees for new construction within its district boundaries. Currently, LAUSD collects the maximum new school construction facility fee at a rate of \$3.36 per square foot of new residential construction, \$0.54 per square foot of commercial/industrial construction, \$0.28 per square foot of storage structure, and \$0.09 per square foot of parking structure. Payment of these fees is required prior to issuance of building permits. Pursuant to



California Government Code Section 65995, the payment of these fees by a developer serves to fully mitigate all potential project impacts on school facilities.

[California Education Code](#)

LAUSD's facilities and services are subject to the rules and regulations of the California Education Code and governance of the State Board of Education. Traditionally, the state has passed legislation for the funding of local and public schools and provided the majority of monies to fund education in the state. To assist in providing facilities to serve students generated from new development projects, the state passed Assembly Bill (AB) 2926 in 1986, allowing school districts to collect impact fees from developers of new residential, commercial, and industrial developments. Section 65996 of the California Government Code designates Section 17620 of the Education Code (the mitigation fees authorized by Senate Bill 50) and Section 65970 of the Government Code to be the exclusive method for considering and mitigating development impacts on school facilities.

[Kindergarten-University Public Education Facilities Bond Act of 2002 \(Prop 47\)](#)

This act was approved by California voters in November 2002 and provides for a bond issue to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds are targeted at areas of greatest need and must be spent according to strict accountability measures. Funds will also be used to upgrade and build new classrooms in the California Community Colleges, the California State University, and the University of California in order to provide adequate higher education facilities to accommodate growing student enrollment.

[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.

[Local](#)

[Gardena General Plan](#)

The Public Safety Plan, of the City's General Plan provides goals and policies relevant to creating and maintaining healthy, safe residential communities and commercial districts. The City of Gardena General Plan Community Safety Element, Public Safety Plan contains the following goals and policies potentially relevant to the proposed Project:



Community Safety Element, Public Safety Plan

Policy PS 1.7: Development Review. Ensure that law enforcement, crime prevention, and fire safety concerns are considered in the review of planning and development proposals in the City.

Policy PS 1.16: School Safety. Coordinate with local schools related to their programs and practices regarding emergency preparedness.

Policy PS 2.2: Building and Fire Codes. Require that all buildings and facilities within Gardena comply with local, state, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards.

Policy PS 2.7: New Development.

- a. Require adequate fire protection services, fire protection plans, and emergency vehicle access for new development.
- b. Locate, design, and construct new development to minimize the risk of structural loss from fires.
- c. Install visible home and street addressing and signage.

Policy PS 2.9: Essential Public Facilities and Infrastructure. Locate, when feasible, new essential public facilities and infrastructure outside of hazardous areas, including but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, fire stations, emergency command centers, emergency communication facilities, and utilities or identify construction methods or other methods to minimize damage if these facilities must be located in hazardous areas.

The City of Gardena General Plan Environmental Justice Element contains the following goals and policies potentially relevant to the proposed Project:

Environmental Justice

Policy EJ 3.1: Identify vacant lots and underutilized public land that can be used for neighborhood-run community gardens including coordination with Los Angeles Unified School District.

The City of Gardena General Plan Community Development Element, Land Use Plan contains the following goals and policies potentially relevant to the proposed Project:

Land Use

Policy LU 3.10: Ensure new development provides adequate improvements, dedications, and fees to the City to fully cover the cost of the City services and facilities.

Policy LU 4.7: Provide adequate public facilities and services for the convenience and safety of each neighborhood.



PARKS

State

Quimby Act

The Quimby Act (California Government Code Section 66477) states that “the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map.” Requirements of the Quimby Act apply only to the acquisition of new parkland and do not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act seeks to preserve open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new 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.

Gardena General Plan

The Environmental Justice and Land Use Elements are dedicated to preserving and enhancing parks and recreational facilities, as well as all open spaces. The City of Gardena General Plan Environmental Justice Element contains the following goals and policies potentially relevant to the proposed Project:

Environmental Justice

Policy EJ 2.1: Ensure that the development of parks and recreation facilities and services keep pace with development and growth within the City.

Policy EJ 2.3: Explore the possibility of adding more recreation classes to meet the needs of the community.

Policy EJ 2.4: Consider distributing City events across multiple parks as feasible.



Policy EJ 2.5: Coordinate with the Police Department to address safety in parks.

Policy EJ 2.6: Coordinate with partnering agencies that provide public facilities and service within the City to ensure effective, efficient, and equitable service delivery.

Policy EJ 2.11: Provide adequate public facilities and services for the convenience and safety of each neighborhood. (See Policy LU 4.7)

Policy EJ 2.16: Maintain and upgrade the existing parks and recreation facilities to meet the needs of all residents. (See OS Goal 1)

Policy EJ 2.17: Increase the City's supply and quality of parkland, open space, and recreational programs. (See OS Goal 2)

Policy EJ 4.12: Incorporate quality residential amenities such as private and communal open spaces into multi-unit development projects in order to improve the quality of the project and to create more attractive and livable spaces for residents to enjoy. (See Policy DS 2.11)

Policy EJ 5.10: Support mixed-use developments that include adequate open space areas and a full range of site amenities. (See Policy DS 3.4)

Policy EJ 5.13: Encourage the conversion of utility easements and right of ways to multi-purpose parkland, trails, and bicycle routes (i.e., the Southern California Edison right-of-way between Artesia Boulevard and 178th Street, storm channel side roads, and Vermont Avenue median strips). (See Policy OS 2.3)

The City of Gardena General Plan Community Development Element, Land Use Plan contains the following goals and policies potentially relevant to the proposed Project:

Land Use

Policy LU 1.5: Provide adequate residential amenities such as open space, recreation, off-street parking and pedestrian features in multifamily residential developments.

Policy LU 3.10: Ensure new development provides adequate improvements, dedications, and fees to the City to fully cover the cost of the City services and facilities.

Policy LU 4.1: Design parks and public facilities that enhance the appearance of the surrounding areas and promote the City's identity.

Policy LU 4.4: Utilize public easements and right of ways (flood control, power lines) for recreational, open space, and beautification purposes.

Policy LU 4.8: Promote the development of the Civic Center area as the focal point of the community and expand the Civic Center to Western Avenue.



City of Gardena Municipal Code

The City of Gardena has incorporated safety measures meant to ensure adequate supplies, services, and facilities are available to all residents within the City, into the City Municipal Code.

Title 11, *Parks, Recreation, and Human Services*, includes Chapter 11.04, *Public Parks*, Chapter 11.08, *Municipal recreation and parks facilities fees*, 11.12, *Primm Memorial Swimming Pool Fees*, 11.16, *Recreation Program Fees*, and 11.20, *Skate Park facilities*. Statutes established in Chapter 11.04 pertain to allowed uses; permits; care of facilities and grounds; and illicit uses and activities.

Refer to the discussion of Municipal Code Chapter 15.48, *Construction and development fees*, above.

Title 17, *Subdivisions*, contains Chapter 17.20, *Park and recreation dedication fees*. Chapter 17.20 requires the dedication of land or the payment of fees in lieu of land, which is based on a minimum of three (3) acres of useable park area per 1,000 persons residing within a subdivision. The amount and location of land, or the fee to be paid, should bear a reasonable relationship to the use of the park and recreational facilities by the future residents of a subdivision. The provisions of Chapter 17.20 shall apply to all subdivisions for the purpose of residential development. The amount of land dedicated or fees paid shall be based upon the residential density, which shall be determined based on the approved or conditionally approved tentative or parcel map. The dedication of land, or the payment of fees, or a combination of both shall be based on a minimum of three acres of usable park area, as defined in this chapter, per one thousand persons residing within the subdivision. The City currently has a fee of \$10,000 per unit.

5.13.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to public facilities.

- Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - Fire Protection (refer to Impact Statement 5.13-1);
 - Police Protection (refer to Impact Statement 5.13-2);
 - Schools (refer to Impact Statement 5.13-3);
 - Other Public Facilities (refer to Impact Statement 5.13-4); and
 - Parks (refer to Impact Statement 5.13-5)
- 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 (refer to Impact Statement 5.13-5).



- 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 (refer to Impact Statement 5.13-5).

Based on these standards and significance thresholds and criteria, the Project’s effects have been categorized as either “no impact,” a “less than significant impact,” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a “significant unavoidable impact.”

5.13.5 IMPACTS AND MITIGATION MEASURES

Impact 5.13-1: Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Fire protection?**

Impact Analysis: As discussed, the City contracts with the Los Angeles County Fire Department (LACoFD) to provide fire protection and emergency medical services to the City. There are two fire stations located within the City: Fire Station 158 located at 1650 West 162nd Street and Fire Station 159 located at 2030 West 135th Street.

The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For a majority of the parcels, the proposed amendments allow for new residential development or increased residential development when compared to existing conditions. Although the proposed Project does not involve site-specific development, the intent is to provide adequate sites for residential development to accommodate the City’s regional housing needs allocation (RHNA) and to allow for additional residential development opportunities should they arise. Based on the anticipated growth, as described in Chapter 3.0, Project Description, the Project could yield a net change over existing conditions of 12,167 additional dwelling units and 7,544,381 fewer square feet of non-residential uses within the Project Area. This new growth may increase the City’s population by approximately 33,338 residents (based on the 2022 California Department of Finance estimated household size of 2.74 persons per household); refer to Section 5.12, Population and Housing.

Future development associated with the implementation of the Project may result in the need for additional LACoFD resources (i.e., additional staffing, equipment, expanded/new facilities). At this time, it is unknown whether LACoFD would need to expand or construct new facilities to meet the demand of future development in the Project Area. Future Project development is assumed to occur over time through 2040; thus, any increase in demand for fire protection services would occur gradually with additional development and associated population growth.



LACoFD, in coordination with the City of Gardena, 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.

To ensure Project implementation does not adversely impact fire protection services, the General Plan includes policies that address public safety needs. General Plan Public Safety Plan Policy PS 1.6 requires adequate fire service facilities and personnel be maintained to provide sufficient services. Public Safety Plan Policy PS 1.7 ensures that fire safety concerns are considered in the review of planning and development proposals in the City; this Policy reinforces the importance of LACoFD's review process. Policy PS 1.11, has the City work with LACoFD to define standards for evacuation of residential areas and to maintain, update, and regularly exercise emergency access, protocols, and evacuation routes to assess their effectiveness under a range of emergency scenarios; if areas with inadequate evacuation routes are identified, develop appropriate mitigation measures, improvement plans, or education programs to ensure safe evacuation. Policy PS 2.2 requires that all buildings and facilities within Gardena comply with local, State, and federal regulatory standards such as the State Building and Fire Codes as well as other applicable fire safety standards. Policy PS 2.2 assures that all future fire facilities associated with the implementation of the Project would not result in substantial adverse physical or environmental impacts. Policy PS 2.4 has the City work with LACoFD to maintain an ongoing fire inspection program to further reduce fire hazards associated with multifamily development, critical facilities, public assembly facilities, industrial buildings, and nonresidential buildings. Policy PS 2.5 states that the City will coordinate with applicable water providers, as well as LACoFD, to ensure that water supply and pressure for new and existing development is adequate for structural fire suppression. Policy PS 2.6 coordinates with Los Angeles County, neighboring cities, and other fire protection agencies to reduce the potential for fire hazards in Gardena. As part of the development review process, Policy PS 2.7, requires adequate fire protection services, fire protection plans, and emergency vehicle access for all new development. Land Use Plan Policy LU 3.10 ensures new development provides adequate improvements, dedications, and fees to the City to fully cover the cost of the City services and facilities.

Future site-specific development would be required to comply with applicable City, County, and State code and ordinance requirements for fire protection. The City of Gardena Municipal Code Chapter 8.08, *Fire Code*, adopts the Los Angeles County Fire Code by reference. As part of the development review process, site-specific development proposals would be required to comply with standard LACoFD conditions of approval to demonstrate compliance with the Fire Code. LACoFD Fire Prevention Division reviews site plans to ensure that access and water system requirements, which would enhance the proposed development's fire protection, are adequate. Specifically, LACoFD addresses fire and life safety requirements for project construction at the fire plan check stage. This includes plan review of the design details of the architectural, structural, mechanical, plumbing, and electrical systems. Implementation of all Fire Code requirements would reduce potential impacts concerning fire protection services associated with site-specific development. Municipal Code Chapter 15.48, *Construction and development fees*,



requires new residential development to pay a construction and development fee in accordance with City. The fee is imposed on development within the City for the purposes of assuring that the current level of service goals of the City are met with respect to additional demands placed on fire facilities from such development.

As stated, new fire facilities would potentially be needed to serve growth contemplated under the Project. The environmental effect of providing the fire protection and emergency services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities would be speculative and cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded public facilities. However, it is anticipated that if new facilities or expansion of facilities are determined necessary, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development projects under the Project. Any future development specific to fire facilities would be required to comply with regulations, policies, and standards included in the General Plan and Municipal Code, and would be subject to CEQA review as appropriate. With adherence to local regulations established in the Municipal Code and General Plan, potential future development associate with the Project would not have adverse impacts to fire protection and emergency services. Therefore, impacts related to the provision of fire protection and emergency services are less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.13-2: Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Police protection?**

Impact Analysis. The Gardena PD, located at 1718 West 162nd Street provides police protection services to the City. The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For a majority of the parcels, the proposed amendments allow for new residential development or increased residential development when compared to existing conditions. Similar to fire protection services, future development associated with the implementation of the Project may result in the need for additional Gardena PD resources (i.e., additional staffing, equipment, expanded/new facilities). At this time, it is unknown whether Gardena PD would need to expand or construct new facilities to meet the demand of future development in the Project Area. Future



development is assumed to occur over time through 2040; thus, any increase in demand for police protection services would occur gradually as additional development and associated population growth is added to the City. The City would continue to regularly monitor police department resources to ensure that adequate facilities, staffing, and equipment are available to serve existing and future development and population increases. Project adoption would further allow Gardena PD to utilize the projected growth in population and residential units anticipated through implementation of the City's Housing Element and associated RHNA allocation to effectively plan for increases in population and police protection service demand.

The Gardena General Plan contains several policies that help ensure all residents within the City receive adequate police protection services. Public Safety Plan Policies PS 1.4 and 1.6 focus on maintaining adequate levels of law enforcement services for all residents. Public Safety Plan Policy PS 1.7 ensures that law enforcement and crime prevention concerns are considered during the review phase of planning and development proposals. Policy PS 1.11 has the City work with LACoFD and the Gardena PD to define evacuation standards for residential areas and, to maintain, update, and regularly exercise emergency access, protocols, and evacuation routes to assess their effectiveness under a range of emergency scenarios. Policy PS 1.11 further determines that if areas with inadequate evacuation routes are identified, appropriate mitigation measures, improvement plans, or education programs are to be developed to ensure safe evacuation. Policy PS 2.2 helps ensure that all future law enforcement facilities associated with the implementation of the Project would not result in substantial adverse physical or environmental impacts. Environmental Justice Element Policy EJ 2.18 requires a high level of police protection for residents, businesses, and visitors of Gardena be maintained. Land Use Policy 1.6 guarantees residential densities are compatible with available public service and infrastructure systems. Land Use Plan Policy LU 3.10 calls for new development to provide adequate improvements, dedications, and fees to the City to fully cover the cost of the City services and facilities, including law enforcement services.

As part of the development review process, the Gardena PD would review future site-specific development plans and applicants would be required to comply with any specific conditions related to safety and security specified by the Gardena PD. Municipal Code Chapter 15.48, *Construction and development fees*, requires new residential development to pay a construction and development fee in accordance with City. The fee is imposed on development within the City for the purposes of assuring that the current level of service goals of the City are met with respect to additional demands placed on police services and facilities from such development. Payment of the fee would offset the incremental increase in demand for police protection services associated with the Project.

As stated, new police facilities would potentially be needed to serve growth contemplated under the Project. The environmental effect of providing increased law enforcement services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities would be speculative and cannot be determined at this time, as the Project does not propose or authorize development nor does it designate



specific sites for new or expanded public facilities. However, it is anticipated that if new facilities or expansion of facilities are determined necessary, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development projects under the Project. With adherence to local regulations established in the Municipal Code and General Plan, potential future development associated with the Project would not have adverse impacts to police protection services. Therefore, impacts related to the provision of police protection services are less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.13-3: Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Schools?**

Impact Analysis. Students generated by the implementation of the Project would attend schools in the South Local District of LAUSD. Development accommodated under the Project would result in additional residential uses with the potential of school-aged children. Based on the anticipated growth, as described in Chapter 3.0, and summarized in Table 3-4, Proposed Project Net Development Potential, Project implementation could yield a net change over existing conditions of 12,167 additional dwelling units within the Project 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. Table 5.13-4, Students Generated by Proposed Project, identifies the number of potential students that would be generated from development anticipated by the Project based on LAUSD student generation factors by grade.



Table 5.13-4
Students Generated by Proposed Project

Grades	Student Generation Rate (Multi-Family)	Proposed Net Increase Dwelling Units	Total Students Generated
TK-6	0.2269	12,167	2,761
7-8	0.0611	12,167	744
9-12	0.1296	12,167	1,577
Total			5,082
Source: Schoolworks, Inc., 2020 Developer Fee Justification Study Los Angeles School District. March 2020.			
Note: Total number does not equate due to rounding.			

As identified in Table 5.13-4, the residential development potential associated with implementation of the Project would result in a net increase of approximately 5,082 school-aged children within the LAUSD. According to the LAUSD 2020 Developer Fee Justification Study, the District would have a capacity of 702,113 seats and a space need of 633,871 seats based on average new residential construction determined by reviewing the residential permits and school development impact fees paid to LAUSD, and communications with the various city planning departments within the school district boundaries. Although the Developer Fee Justification Study does not identify a specific number of residential units anticipated for each city, it does take into consideration some residential development within the City of Gardena. LAUSD anticipates a total space need of 633,871 seats, which is less than the capacity of 702,113 seats. Therefore, LAUSD anticipates available capacity of 68,242 students. The anticipated increase of 5,082 students, which does not take into consideration the residential development already anticipated by LAUSD for the City, could be accommodated within the available capacity. Also, it is noted that the LAUSD Study is based on average residential construction over the next five years whereas the Project considers residential development through 2040. Thus, the study would be updated to account for changes in average residential construction and anticipated development with input from cities served by LAUSD to ensure adequate planning for school facilities.

The exact location of future development and associated student generation is currently unknown. Future development associated with the Project 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 Project Area. Regardless, the City recognizes the importance of adequate education facilities and incorporates policies into the General Plan to sustain such facilities. General Plan Public Safety Plan Policy PS 1.16 coordinates with local schools to ensure each campus is fully prepared in cases of emergency. Policy PS 2.7 requires adequate fire protection services, fire protection plans, and emergency vehicle access for new development; indicating that all new or expanded school



facilities would need adequate services before approval. Policy PS 2.4 works with LACoFD to maintain an ongoing fire inspection program that reduces fire hazards associated with multifamily development, critical facilities, public assembly facilities, and nonresidential buildings. Environmental Justice Policy EJ 2.15 ensures that adequate public facilities and infrastructure that support the needs of City are provided.

As stated, school districts assess development impact fees against residential and non-residential development to mitigate impacts resulting from the increase in demand for school related services. Pursuant to SB 50, payment of fees to the applicable school district 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 schools. Therefore, individual development projects accommodated under the proposed Project would be required to pay the statutory fees, so that school facilities can be constructed/expanded, if necessary, at the nearest sites to accommodate the impact of project-generated students, reducing impacts to a less than significant level.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.13-4: Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Other public facilities?**

Impact Analysis: Development accommodated under the Project would allow for new residential development when compared to existing conditions. An increase in residents would increase the demand for public services, including library services. There is one library located within the City of Gardena, Gardena Mayme Dear Library; the Masao W. Satow Library is located just outside of the City's jurisdictional boundaries within unincorporated Los Angeles County.

Future development associated with the Project may result in the need for additional County of Los Angeles Public Library resources (i.e., additional staffing, equipment, expanded/new facilities) and other public facilities. At this time, it is unknown whether County of Los Angeles Public Library would need to expand or construct new facilities to meet the demand of future development in the Project Area. Future development is assumed to occur over time through 2040; thus, any increase in demand for public services would occur gradually as additional development and associated population growth is added to the City. Throughout this time, the



County's library system would continue receiving support and resources for library facilities through General Plan policies.

The Gardena General Plan includes policies to ensure that library services are adequately funded, are coordinated between the City and the County of Los Angeles Public Library, and that new development funds its fair share of services. Environmental Justice Element Policy EJ 2.6 coordinates with partnering agencies that provide public facilities and services within the City to ensure effective, efficient, and equitable service delivery. Policies EJ 2.9 and EJ 2.15 work to provide the highest quality of public facilities and infrastructure that support the needs of City residents and businesses. Additionally, future development associated with the Project would be required to pay the City's development fee as set forth in Municipal Code Chapter 15.48. The fee is imposed on development within the City for the purposes of assuring that the current level of municipal services of the City are met with respect to additional demands placed on public facilities from such development. Payment of the fee would offset the incremental increase in demand for public facilities associated with the Project.

The environmental effect of providing library and other public facilities is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities would be speculative and cannot be determined at this time, as the Project does not propose or authorize site-specific development. Any future development of library facilities or other public facilities to serve demand associated with implementation of the proposed Project would be required to comply with regulations, policies, and standards included in the Gardena General Plan and Municipal Code, and would be subject to CEQA review as appropriate. Therefore, impacts related to the provision of other facilities, including library services, are less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.13-5: Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Parks

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?

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



Impact Analysis: Development accommodated under the Project would result in additional residential uses in the Project Area, which would increase demand for parks and recreational facilities. Based on the anticipated growth, as described in Chapter 3.0, Project Description, the Project could yield a net change over existing conditions of 12,167 additional dwelling units and 7,544,381 fewer square feet of non-residential uses within the Project Area. This new growth may increase the City's population by approximately 33,338 residents (based on the 2022 California Department of Finance estimated household size of 2.74 persons per household); refer to Section 5.12, Population and Housing. These new residents are expected to use park and recreational facilities, and this additional use may result in greater demands on parks and recreational facilities in the City such that deterioration of these facilities could occur or be accelerated. The additional demand on existing parks and recreational facilities would increase the need for maintenance and improvements. These improvements could have environmental impacts, although the exact impacts cannot be determined at this time since the potential improvements are currently unknown.

The City has seven parks totaling 38 acres, indicating that the City currently provides approximately 1.6 acres of parkland for every 1,000 people, based on the current (2022) population of 59,947. The existing deficit in park land is currently being offset through dedication fees. Based on the City's adopted standard of three acres per 1,000 residents, the increase in population due to implementation of the Project would require approximately 100 acres of additional parkland, for a total of 138 acres of parkland. It should be noted that new development could be required to fund its fair share for required parkland but would not make up for existing system deficiencies.

Development under the Project could indirectly lead to the construction of new parks and recreation facilities to serve new growth and to meet existing parks and recreation needs. The Project does not specifically propose any development projects, including parks. As a result, site-specific physical impacts of future park development and construction would be speculative and cannot be determined until future projects are brought forward for review. As future parks and recreation projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Parks and recreation projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

Due to the existing parkland deficiency, the additional park acreage that would be needed to serve the potential increase in Project residents, and the lack of available land to expand or construct new parks, full Project implementation would likely increase the use of existing neighborhood and regional parks or other recreational facilities. This increased use of existing facilities could result in substantial physical deterioration of the facilities to occur or be accelerated, resulting in a significant impact. Although implementation of the Project would cause an increase in demand for parks in the future, potential impacts could be reduced through the payment of park fees on subdivisions, as established in Municipal Code Chapter 17.20, payment of construction and development fees, as established in Municipal Code Chapter 15.48,



and payment for the rental/use of recreation and parks facilities established in Municipal Code Chapter 11.08, and adherence to local regulations established in the Municipal Code and General Plan General Plan policies, which support the creation of new parks and recreation facilities, including new parks and trails, to accommodate a wide range of activities for all age groups. Environmental Justice Element Policy EJ 2.3 supports adding more recreation classes to meet the needs of the community as it grows. Policy EJ 5.13 encourages the conversion of utility easements and right of ways to multi-purpose parkland, trails, and bicycle routes. Open Space Plan Policy OS 1.5 requires annual review of recreational programs in order to respond to the changing needs of the community, and, Land Use Plan Policy LU 1.5 ensures that adequate residential amenities such as open space, recreation, off-street parking and pedestrian features are provided in multifamily residential developments. Additionally, new residential development associated with Project implementation would be required to meet the development standards associated with the specific zone for the site, which includes the provision of usable open space. Although impacts could be reduced upon implementation of General Plan policies and the Municipal Code requirements, with the amount of potential residential development and associated population increase, lack of available land to expand or construct new parks, and resulting reliance on the use of existing facilities, it is not anticipated that potential impacts would be reduced to a less than significant level. There are no additional feasible mitigation measures that could address the issue. The increased use and accelerated deterioration of existing facilities associated with Project implementation and the resulting population growth would result in a significant and unavoidable impact.

It is anticipated that any new parks or recreational facilities that may be constructed in the future would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the parks and recreational facilities would likely be similar to those associated with new residential development projects under the Project. Any future development under the Project would be required to comply with regulations, policies, and standards included in the Gardena General Plan and Municipal Code, and would be subject to CEQA review as appropriate. Therefore, impacts associated with the provision of recreation facilities or construction or expansion of recreational facilities associated with implementation of the Project would be significant.

Mitigation Measures: No mitigation measures are available.

Level of Significance: Significant and Unavoidable Impact.



5.13.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the methodology used to determine the potential for cumulative growth and development to interact with the proposed Project to the extent that a significant cumulative effect relative to public services may occur. The geographic setting for public services considers City as well as the service area for LACoFD and LAUSD.

Would the Project, combined with other relevant cumulative projects, 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Fire Protection**

Impact Analysis: As discussed, LACoFD provides fire protection services to the City of Gardena. In addition to the Project, cumulative projects within the City would receive fire protection services from LACoFD. Similar to future development associated with Project implementation, cumulative development projects would be required to comply with standard LACoFD conditions of approval. LACoFD Fire Prevention Division reviews site plans to ensure that access and water system requirements, which would enhance the proposed development's fire protection, are adequate. Specifically, LACoFD addresses fire and life safety requirements for project construction at the fire plan check stage. This includes plan review of the design details of the architectural, structural, mechanical, plumbing, and electrical systems.

Project implementation may require new or the expanded fire protection facilities. Municipal Code Chapter 15.48, *Construction and development fees*, requires new residential development to pay a construction and development fee in accordance with City. The fee is imposed on development within the City for the purposes of assuring that the current level of service goals of the City are met with respect to additional demands placed on fire facilities from such development. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded fire protection facilities. However, it is anticipated that if new facilities or expansion of facilities are determined necessary, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development projects under the Project. Thus, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts. Future development within the City and LACoFD service area would be reviewed to determine whether the development being proposed would require the new or expanded facilities with the potential for causing



significant environmental impacts. The provision of specific facilities or the expansion of facilities would undergo review pursuant to CEQA. Thus, the Project's incremental impacts to fire protection would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

- **Police Protection:**

Impact Analysis: As discussed, Gardena PD provides police protection services to the City of Gardena. In addition to the Project, cumulative projects within the City would receive police protection services from Gardena PD. Similar to future development associated with the Project, the Gardena PD would review cumulative development projects development plans and applicants would be required to comply with any specific conditions related to safety and security specified by the Gardena PD.

Project implementation may require new or the expanded police protection facilities. Municipal Code Chapter 15.48, *Construction and development fees*, requires new residential development to pay a construction and development fee in accordance with City. The fee is imposed on development within the City for the purposes of assuring that the current level of service goals of the City are met with respect to additional demands placed on police services and facilities from such development. Payment of the fee would offset the incremental increase in demand for police protection services associated with the Project. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded police facilities. However, it is anticipated that if new facilities or expansion of facilities are determined necessary, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development projects under the Project. Thus, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police facilities, or the need for new or physically altered police facilities, the construction of which could cause significant environmental impacts. Future development within the City would be reviewed to determine whether the development being proposed would require new or expanded facilities with the potential for causing significant environmental impacts. The provision of specific facilities or the expansion of facilities would undergo review pursuant to CEQA. Thus, the Project's incremental impacts to police services would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact



- **Schools:**

Impact Analysis: Students generated by the implementation of the Project, combined with other relevant cumulative projects within the City and South Local District LAUSD would combine to result in increased demand on schools within the area. As discussed, LAUSD has adequate capacity to serve the potential students generated from implementation of the Project. Based on the residential development being proposed by the cumulative projects that were not already planned and considered by LAUSD (e.g., those projects requesting a General Plan Amendment), an additional 1,132 dwelling units could be developed, resulting in approximately 472 additional students within LAUSD service area. The total students potentially generated by the Project (5,082 students) and cumulative development projects (472 students) would be within the available capacity identified by LAUSD.

As discussed, the exact location of future development and associated student generation is currently unknown. Future development associated with the Project 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 Project Area. Future residential development associated with implementation of the Project would be required to comply with SB 50, which would fully mitigate potential impacts related schools. Similarly, the cumulative development projects would be required would be required to pay the statutory fees, so that school facilities can be constructed/expanded, if necessary, to accommodate future students. As available capacity exists to serve the proposed Project and cumulative projects, the Project's incremental impacts relative to schools would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

- **Other Public Facilities**

Impact Analysis: Future Project development and cumulative development may result in the need for additional County of Los Angeles Public Library resources and other public facilities. As discussed, future development is assumed to occur over time through 2040; thus, any increase in demand for public services would occur gradually as additional development and associated population growth is added to the City. The Gardena General Plan includes policies to ensure that library services are adequately funded, are coordinated between the City and the County of Los Angeles Public Library, and that new development funds its fair share of services. Additionally, future development associated with the Project would be required to pay the City's development fee as set forth in Municipal Code Chapter 15.48. The fee is imposed on development within the City for the purposes of assuring that the current level of municipal services of the City are met with respect to additional demands placed on public facilities from such development. Payment of the fee would offset the incremental increase in demand for public facilities associated with the Project.



Similar to the Project, cumulative development projects within the City would be required to comply with General Plan policies and Municipal Code regarding payment of fees. Any future development of library facilities or other public facilities to serve demand associated with implementation of the proposed Project and cumulative projects would be required to comply with regulations, policies, and standards, and would be subject to CEQA review as appropriate. Thus, the Project's incremental impacts to public facilities would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

Would the Project 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 governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Parks

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?

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

Impact Analysis: The project, combined with other relevant cumulative projects, would bring new residents to the City of Gardena. These new residents are expected to use existing park and recreational facilities, and this additional use may result in greater demands on parks and recreational facilities in the Project Area such that deterioration of these facilities could occur or be accelerated. Additionally, the additional demand on existing parks and recreational facilities would increase the need for maintenance and improvements. These improvements could have potential environmental impacts, although the exact impacts cannot be determined since the potential improvements are currently unknown. As future parks and recreation projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Parks and recreation projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

As discussed, although implementation of the Project would cause an increase in demand for parks in the future, potential impacts could be reduced through the payment of park fees, as established in Municipal Code Chapter 17.20, and adherence to local regulations established in the Municipal Code and General Plan General Plan policies, which support the creation of new parks and recreation facilities, including new parks and trails, to accommodate a wide range of activities for all age groups. Additionally, future multi-family residential development associated



with the Project would be required to pay the City's construction and development fee as set forth in Municipal Code Chapter 15.48, as applicable. The fee collected is applied to the costs incurred by the City associated with the burden increased by the multi-unit residential facilities, open space, drainage and other public facilities and services related thereto. Similarly, cumulative development projects would be required to comply with Municipal Code and General Plan policies regarding parks and recreation facilities, including compliance with CEQA associated with any site-specific development of parks or recreational facilities. However, as discussed above, due to the existing parkland deficiency, the additional park acreage that would be needed to serve the potential increase in Project residents, and the lack of available land to expand or construct new parks, Project implementation, would likely increase the use of existing neighborhood and regional parks or other recreational facilities. This increased use of existing facilities could result in substantial physical deterioration of the facilities to occur or be accelerated, resulting in a significant impact. Although impacts could be reduced, with the amount of potential residential development and associated population increase, lack of available land to expand or construct new parks, and resulting reliance on the use of existing facilities, it is not anticipated that potential impacts would be reduced to a less than significant level. Further, there are no additional feasible mitigation measures that could address the issue. The increased use and accelerated deterioration of existing facilities associated with Project implementation and the resulting population growth would result in a significant and unavoidable impact. Thus, the Project's incremental impacts associated with parks and recreational facilities would be cumulatively considerable.

Mitigation Measures: No mitigation measures are available.

Level of Significance: Significant and Unavoidable Impact.

5.13.7 SIGNIFICANT UNAVOIDABLE IMPACTS

The Project would result in a significant unavoidable impacts for the following areas:

- Project implementation would 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.
- Project implementation would result in a cumulatively considerable contribution to the increase in 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.

All other impacts to public services associated with implementation of the Project would be less than significant.

If the City of Gardena approves the General Plan, Zoning Code & Zoning Map Amendment Project, the City will be required to make findings in accordance with CEQA Guidelines Section 15091 and



prepare a Statement of Overriding Considerations for consideration by the City's decision makers in accordance with CEQA Guidelines Section 15093.

5.13.8 REFERENCES

- California Office of the State Fire Marshal (CALFIRE), *Fire Hazard Severity Zones Map*, <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>, accessed February 24, 2023.
- City of Gardena, *For Parks & Recreation Reservations*, <https://cityofgardena.org/gardena-facilities-2/>, February 24, 2023a.
- City of Gardena, *Heritage Festival & Street Fair*, <https://cityofgardena.org/heritage-festival-street-fair/>, accessed February 24, 2023b.
- City of Gardena, *Programs and Meals*, <https://cityofgardena.org/programs-and-meals/>, accessed February 24, 2023c.
- City of Gardena, *Recreation Special Events*, <https://cityofgardena.org/recreation-special-events/>, accessed February 24, 2023d.
- City of Gardena, *Schools*, available at <https://cityofgardena.org/schools/>, accessed February 24, 2023e.
- City of Gardena, *Sports and Leisure*, <https://cityofgardena.org/sports-and-leisure-2/>, February 24, 2023f.
- City of Gardena, *Youth Fishing Event*, <https://cityofgardena.org/youth-fishing-event/>, February 24, 2023g.
- City of Gardena, *Gardena Emergency Operations Plan*, 2016.
- DOC, *School Accountability Report Card; Reported Using Data from the 2020-2021 School Year*, <https://www.cde.ca.gov/ta/ac/sa/>, February 24, 2023.
- Federal Bureau of Investigations (FBI), *Crime Data Explorer; Gardena Police Department*, <https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/explorer/crime/crime-trend>, accessed February 24, 2023a.
- Federal Bureau of Investigations (FBI), *Table 8, California: Offenses Known to Law Enforcement by City (2019)*, <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/tables/table-8/table-8-state-cuts/california.xls>, accessed February 24, 2023b.
- Los Angeles County Library, *About the Library*, <https://lacountylibrary.org/aboutus/>, accessed February 24, 2023a.
- Los Angeles County Library, *Gardena Mayme Dear Library*, <https://lacountylibrary.org/gardena-mayme-dear-library/>, accessed February 24, 2023b.



Los Angeles County Library, *Masao W. Satow Library*, <https://lacountylibrary.org/masao-w-satow-library/>, accessed February 24, 2023c.

Los Angeles Unified School District (LAUSD). *Local District Maps 2015-2016*, <https://achieve.lausd.net/domain/34>, accessed February 24, 2023.

Schoolworks, Inc. *2020 Developer Fee Justification Study Los Angeles School District*, March 2020.



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5.14 TRANSPORTATION

5.14.1 PURPOSE

This section describes the existing physical and operational conditions for the transportation system and provides an analysis of potential impacts to the transportation system associated with adoption and implementation of the Land Use Plan and Zoning Amendment Project. The impact analysis examines the roadway, transit, bicycle, and pedestrian components of the City's transportation system and recommends mitigation measures as necessary to address potentially significant impacts. This section is based on the *City of Gardena Land Use Plan, Zoning Code and Zoning Amendment Project Transportation Impact Analysis (TIA)*, prepared by Kittelson & Associates, Inc., dated July 23, 2023, and included as Appendix H, Transportation Analysis.

Under Senate Bill 743 as of July 1, 2020, local agencies may no longer rely on roadway/intersection delay and capacity-based analyses for California Environmental Quality Act (CEQA) purposes, but rather, agencies must analyze transportation impacts utilizing vehicle miles traveled (VMT), which measures the number of vehicle trips generated by a project and their average distance of travel to and from a project. These are calculated and assessed as rates (e.g., per capita for residential projects or per employee for commercial projects). This is a change from the prior method of analyzing transportation impacts, which measured travel time delay at intersections and roadway segments, assessed with a Level-of-Service (LOS) grade from LOS A to LOS F. Travel delay as measured by LOS is no longer a CEQA-related topic and is not discussed in this EIR.

5.14.2 ENVIRONMENTAL SETTING

EXISTING ROADWAY NETWORK

The roadway system in Gardena consists of arterials, major collector roadways, collector roadways, and local streets which serve local and regional traffic demand, including traffic to/from freeways.

Freeways

The City is served by four nearby freeways, which effectively provide connections to and from the South Bay subregion to other subregions within the metropolitan area. The four closest freeway facilities that are adjacent to Gardena provide regional connectivity and access to other local freeways are described below.

Interstate 105 (I-105) is an east-west freeway that connects the South Bay/LAX area to the I-605 freeway in Norwalk. The freeway traverses the City of Hawthorne, approximately 0.5-mile north of the Gardena City limits.



Interstate 110 (I-110) is a major north-south freeway in the greater Los Angeles Metropolitan area. It traverses the City of Los Angeles immediately east of Gardena.

Interstate 405 (I-405) is a ring freeway that connects I-5 to coastal cities within the Los Angeles Basin, between west Los Angeles and Orange County. The freeway traverses the City of Hawthorne, Lawndale, and Torrance.

State Route 91 (SR-91) is an east-west freeway that connects the local subregion to north Orange County and the Inland Empire. The western terminus of the freeway is just outside the eastern City limits of Gardena. West of this point, the SR-91 designation is terminated, and a transition occurs into the divided highway of Artesia Boulevard.

Local Roadways

Roadways within Gardena are classified in the Circulation Plan (updated 2020) as arterials, major collector roadways, collector roadways, and local streets.

- **Arterials** connect traffic from smaller roadways to freeway interchanges and regional roadway corridors. They provide a linkage between activity centers in the City to adjacent communities and other parts of the region, and provide intra-city mobility. They are generally served by regional bus transit routes and are the primary truck routes in the community. They are typically designed to accommodate between 40,000 to 60,000 vehicles per day.
- **Major Collector Roadways** serve as an intermediate route to carry traffic between collector roadways and arterial roadways. Access to adjacent land uses is generally unrestricted. Traffic controls typically consist of signalization at intersections with arterials; however, left-turn lanes and/or left-turn signalization are generally not provided. On street parking is generally allowed, although there may be certain time restrictions. They are typically designed to accommodate between 15,000 and 25,000 vehicles per day.
- **Collector Roadways** connect a defined geographic area of the City. They intend to move traffic from a local roadway to a secondary roadway and provide access to all types of land uses and generally have no limitations on access. Parking is generally allowed during most hours. Roadways classified as collector streets within Gardena can be broken down into collector roadways that serve two primary land uses: commercial-industrial uses and residential uses. They are typically designed to accommodate fewer than 15,000 vehicles per day.
- **Local Streets** are designed to provide vehicular, pedestrian, and bicycle access to individual parcels throughout the City. They allow unrestricted parking. In residential neighborhoods, they can include traffic calming measures such as speed humps, traffic diverters, chokers, traffic circles and pavement treatments to slow traffic or prevent through traffic from infiltrating residential neighborhoods.



Individual arterials in Gardena are described below. In general, the north-south arterials provide connections to I-105, I-405, and neighboring cities such as Torrance and Inglewood. The east-west roadways provide connections to I-110, I-405, and neighboring cities such as Lawndale, Hawthorne, Torrance, Compton, and El Segundo. Sidewalks are generally provided on both sides of the road for all arterials.

El Segundo Boulevard is an east-west six-lane arterial with three lanes in each direction. It connects the western and eastern areas of Gardena to the central commercial areas. The posted speed limit is 40 mph.

Rosecrans Avenue is an east-west six-lane arterial with three lanes in each direction. It connects the western and eastern areas of Gardena to the central commercial areas. The posted speed limit is 40 mph.

Redondo Beach Boulevard is an east-west four-lane arterial with two lanes in each direction and two-way left turn lanes periodically spaced throughout the roadway. It primarily serves commercial centers and provides access to several neighborhoods north and south of the roadway. It also provides a connection to El Camino College, directly west of Crenshaw Boulevard. The posted speed limit is 35 mph.

Artesia Boulevard is an east-west six-lane arterial with three lanes traveling in each direction. Heading east, the roadway turns into SR-91 and connects with I-110 and I-405. It primarily serves commercial centers and provides access to several neighborhoods north and south of the roadway. The posted speed limit is 45 mph.

Crenshaw Boulevard is a north-south four-lane arterial with two lanes traveling in each direction. It connects nearby communities to El Camino College directly north of Redondo Beach Boulevard. It also connects southern areas to the commercial districts in the north. The posted speed limit is 40 mph.

Western Avenue is a north-south four-lane arterial with two lanes traveling in each direction. It connects the central area of Gardena to the commercial areas on the north and south ends of the city. The posted speed limit is 40 mph.

Vermont Avenue is a north-south four-lane arterial with two lanes traveling in each direction. It primarily provides connections for residents to the commercial area towards the south. The posted speed limit is 40 mph. There are dedicated northbound bike lines along several segments of the roadway, primarily between 135th Street and Marine Avenue within the City of Los Angeles.



EXISTING TRANSIT SERVICE

Three transit agencies provide bus service within Gardena – GTrans, LA Metro, and Torrance Transit. With these bus services, transit riders can access LA Metro commuter rail stations to the north of the City. The existing various public transit services in and around Gardena are documented below and shown in [Figure 5.14-1, Existing Transit Service and Facilities](#).

[Bus Services](#)

GTrans provides local bus service that connects the City of Gardena to several nearby cities such as Carson, El Segundo, Hawthorne, Hermosa Beach, Inglewood, Lawndale, and Lomita. It also offers several connections to LA Metro rail stations. GTrans operates daily and provides service between 4:25 a.m. and 10:00 p.m.

LA Metro provides bus service throughout Los Angeles County and operates four lines within Gardena City limits. It operates daily and provide service between 4:10 a.m. and 2:43 a.m.

Torrance Transit provides bus services that connect the City of Torrance to neighboring cities such as Gardena. Torrance Transit operates five of its 12 fixed routes within the City of Gardena. It operates on weekdays and provides service between 5:20 a.m. and 10:10 p.m. Only one line currently operates on the weekend (Line 1) between 6:15 a.m. and 8:45 p.m.

[Table 5.14-1, City of Gardena Transit Services](#) presents a summary of the bus routes that serve the City of Gardena.

[Bus Stops](#)

Bus stop amenities such as shelters, benches, and bicycle parking can enhance security and comfort for transit riders. In the City, bus stops can include:

- Pole with signage and route information
- Bench
- Nearby trash receptacle

Covered shelters are generally not provided in the City.

[Rail Service](#)

In addition to bus service, LA Metro operates several commuter rail lines in the county. The C-Line (formerly Green Line) runs along I-105 to the north of the City, with stations at Crenshaw Boulevard (Crenshaw Station) and Vermont Avenue (Vermont/Athens Station). The C-Line operates Sunday through Saturday with 10- to 15-minute headways during commute periods and provides service between 3:33 a.m. and 12:44 a.m. on weekdays and weekends.



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**Table 5.14-1
City of Gardena Transit Services**

Agency	Route	Beginning and End Points		Peak /Off-Peak Frequency (in Minutes)
		North/West	South/East	
GTrans	1X	Harbor Freeway Green Line Station	Redondo Beach Green Line Station	45
	2	Normandie Ave & Pacific Coast Highway	Normandie Ave & PCH	15 / 30
	3	South Bay Galleria	MLK Transit Center	30
	5	Aviation Green Line Station	Rosa Park Station	60
	7X	Sofi Stadium	Harbor Gateway Transit Center	15
LA Metro	125	Plaza El Segundo	Norwalk Station	20 / 30
	209	Expo & Crenshaw Station	Crenshaw & Rosecrans	60
	210	Hollywood/Vine	South Bay Galleria Transit Center	10 / 15
	344	Harbor Gateway Transit Center	Palos Verdes Dr South & Seacove	40 / 60
Torrance Transit	1	Harbor Freeway Station	Del Amo Fashion Center	60
	2	Harbor Freeway Station	Madrona Ave at Carson St	60
	5	Crenshaw Station	Pacific Coast Highway at Crenshaw Blvd	60
	10	Crenshaw Station	Pacific Coast Highway at Crenshaw Blvd	30
	13	Torrance Blvd at Broadway	Artesia Station	45

Source: *City of Gardena Land Use Plan, Zoning Code and Zoning Amendment Project Transportation Impact Analysis (TIA)*, prepared by Kittelson & Associates, Inc., dated May 18, 2023.

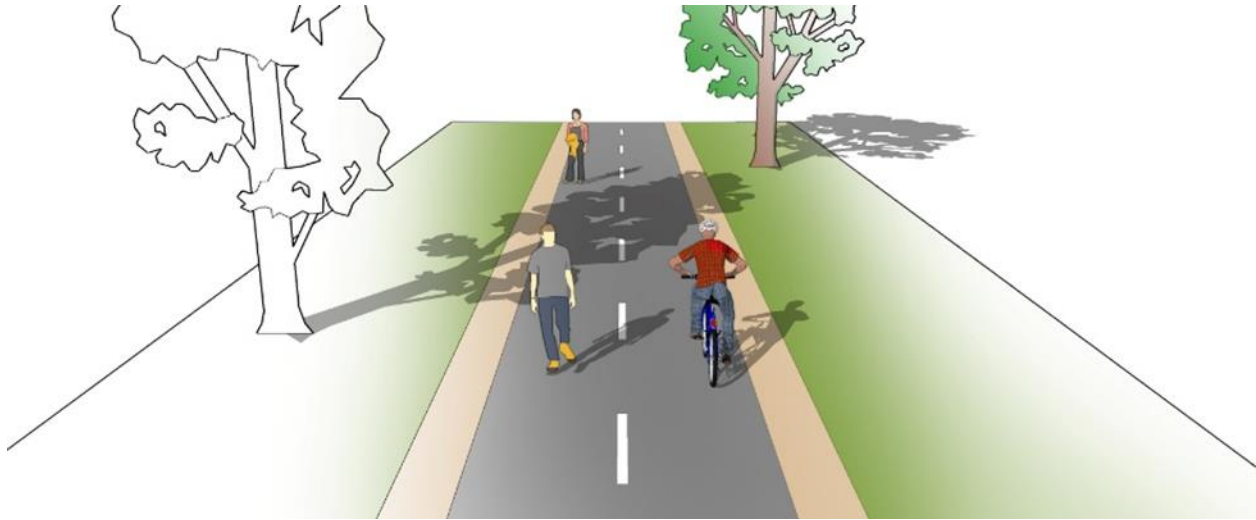


BICYCLE FACILITIES

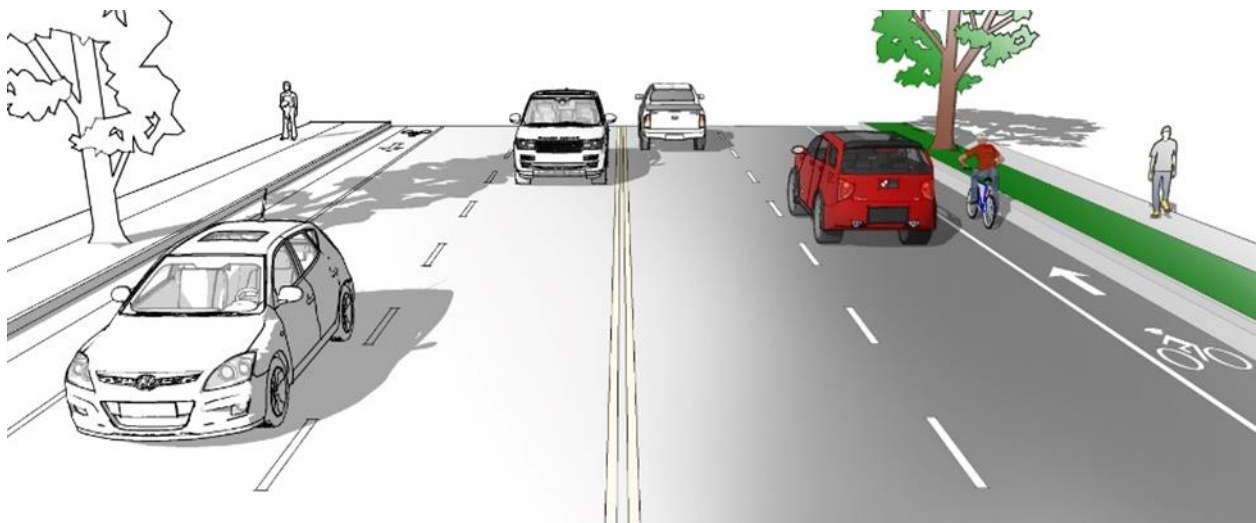
The City has a bicycle facilities network that primarily consists of on-street shared facilities. [Figure 5.14-2, Existing Bikeways](#), displays the existing designated bikeways in and around the City.

Bikeways are categorized into four types, as described and depicted in illustrations below.

- **Class I Bikeway (Bike Path):** Also known as a shared path or multi-use path, a bike path is a paved right-of-way for bicycle travel that is completely separate from any street or highway (e.g., along a creek or channel).



- **Class II Bikeway (Bike Lane):** A striped and stenciled lane for one-way bicycle travel on a street or highway. This facility could include a buffered space between the bike lane and vehicle lane (referred to as a buffered bike lane) and the bike lane could be adjacent to on-street parking.



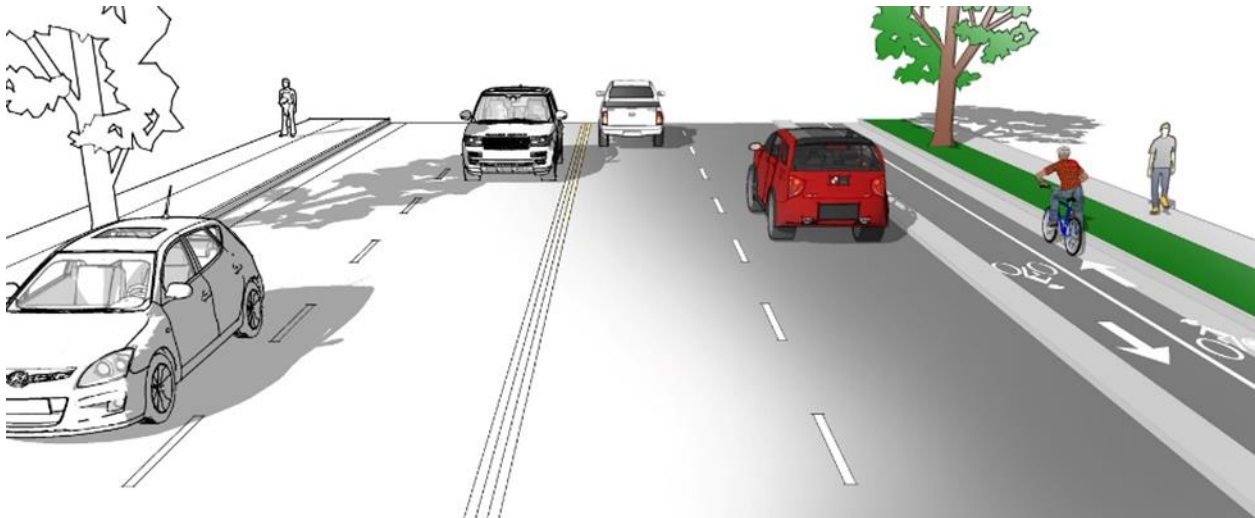
- **Class III Bikeway (Bike Route):** A signed route along a street where the bicyclist shares the right-of-way with motor vehicles. This facility can also be augmented using shared-



lane markings (also known as sharrows). An enhanced bike route, known as a bicycle boulevard, can include traffic calming treatments to slow down vehicles.



- **Class IV Bikeway (Separated Bike Lane):** Also known as a cycle track or a protected bike lane, this is a bikeway for the exclusive use of bicycles including a separation between the bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking. A cycle track can be one-way or two-way.



As shown in [Figure 5.14-2](#), the bikeway network in the City primarily consists of Class III bike routes. In addition, there is a northbound Class II bike lane along Vermont Avenue north of Redondo Beach Boulevard and south of Artesia Boulevard in the City of Los Angeles, and a Class I bike path along the Dominguez Channel north of Rosecrans Avenue (which runs between 120th Street and Redondo Beach Boulevard).



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PEDESTRIAN CONDITIONS

The City of Gardena provides several types of facilities and amenities that support walking in the City. The availability and quality of pedestrian facilities vary throughout the City and can be analyzed using seven key factors as shown in Table 5.14-2, Summary of Pedestrian Facility Conditions.

**Table 5.14-2
Summary of Pedestrian Facility Conditions**








Factor	Description	Assessment
 Sidewalk Availability	Sidewalk availability is core to supporting walkability and safety separating pedestrians from vehicles and other modes. In addition, it is important that sidewalks are present on <u>both sides</u> of the roadway and are available along the entire segment rather than end midblock.	Sidewalks are generally available on both sides of the streets on all roadways throughout the entire city. Along portions of El Segundo Boulevard, Vermont Avenue and Rosecrans Avenue, there are areas where the sidewalk curves into a parallel residential street on the other side of a buffer.
 Sidewalk Conditions	Cracked, broken, or otherwise damaged sidewalks can pose a safety hazard and discourage walking.	Sidewalks are generally in good condition and lack significant physical hazards along the pedestrian path of travel.
 Crosswalk Availability	Marked crosswalks can safely accommodate pedestrians that need to cross streets. A lack of marked crosswalks could hinder walkability since pedestrians need to travel greater distances to reach a safe marked crossing point. Drivers may also be less likely to yield to intersections at unmarked crossings.	Crosswalks are generally marked at every major intersection. They are mostly traditional crosswalks consisting of two parallel lines. High-visibility ladder crosswalks are provided at some intersections along El Segundo Boulevard and Vermont Avenue.
 Shading	Shading, whether natural or artificial, can encourage walking in areas such as Southern California which are relatively warm with limited rainfall, especially in the summer.	Overall, there is minimal shading for pedestrians walking in Gardena. There are some blocks with sidewalk-adjacent trees to help shade pedestrians.



Table 5.14-2 (continued)
Summary of Pedestrian Facility Conditions

Factor	Description	Assessment
 Flat Grade	Steep hills and ravines can discourage walking, especially for pedestrians with limited mobility.	The city is generally flat without steep grade changes at the pedestrian level.
 Buffer	Buffers which provide separation between pedestrians and moving vehicles can help improve the walking experience, and can include landscaping, parked vehicles, and bulbouts, which serve to both reduce pedestrian crossing distances at intersections and as a traffic calming measure.	Buffers are not provided along the city’s arterial roadways. However, buffers in the form of landscaping are provided along some collector and local roads.
 Amenities	In addition to physical facilities that accommodate walking, useful or interesting amenities along sidewalks create a more friendly walking environment and increase pedestrian comfort. Amenities can include sidewalk-adjacent retail and restaurants, landscaping, and street furniture.	There are little to no pedestrian-oriented amenities throughout the city.
Source: <i>City of Gardena Land Use Plan, Zoning Code and Zoning Amendment Project Transportation Impact Analysis (TIA)</i> , prepared by Kittelson & Associates, Inc., dated May 18, 2023.		

FREIGHT AND GOODS MOVEMENT

The Surface Transportation Assistance Act (STAA) defines a network of state facilities as truck routes which accommodate large trucks. STAA-designated truck routes near Gardena include I-405, I-110, SR-91, and I-105, as shown in [Figure 5.14-3, Designated Truck Routes](#).

Also as shown in [Figure 5.14-3](#), the City’s Circulation Plan designates a network of local truck routes, which are also documented in the City’s Municipal Code.

Figure 5.14-3. Designated Truck Routes





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EXISTING VEHICLE MILES TRAVELED

Table 5.14-3, *Existing (2023) VMT*, shows the existing VMT levels in Gardena and the six-county Southern California Association of Governments (SCAG) region. The existing VMT was estimated by interpolating VMT outputs from the 2018 and 2040 SCAG model outputs to estimate 2023 conditions. Three types of VMT were determined:

- **Total VMT:** This calculation represents the total daily VMT that starts and/or ends within a boundary (such as the City of Gardena) but does not include VMT that travels through an area without starting or stopping there.
- **VMT per Capita:** This calculation represents the VMT for all home-based trips that originate within an area, divided by the area’s resident population.
- **VMT per Service Population:** This calculation represents the VMT for all trips that originate or end within an area, divided by that area’s service population (residents + employees).

As shown in Table 5.14-3, the City’s existing VMT per capita is approximately 25 percent below the regional average.

**Table 5.14-3
Existing (2023) VMT**

Area	Total VMT	VMT per Capita	VMT per Service Population
City of Gardena	2,360,888	11.79	25.26
SCAG Region	791,216,126	15.75	27.92

Source: *City of Gardena Land Use Plan, Zoning Code and Zoning Amendment Project Transportation Impact Analysis (TIA)*, prepared by Kittelson & Associates, Inc., dated May 18, 2023.

5.14.3 REGULATORY SETTING

FEDERAL

Americans with Disabilities Act

The Americans with Disabilities Act of 1990 (ADA) provides comprehensive rights and protections to individuals with disabilities. The goal of the ADA is to assure equality of opportunity, full participation, independent living and economic self-sufficiency. To implement this goal, the United States Access Board has created accessibility guidelines for public rights-of-way. The guidelines address various issues, including roadway design practices, slope and terrain issues, pedestrian access to streets, sidewalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way.



Federal Highway Administration (FHWA)

The Federal Highway Administration (FHWA) is a federal agency that focuses on national highway programs. FHWA administers and manages federal highway programs and establishes national standards. The FHWA publishes the Manual on Uniform Traffic Control Devices (MUTCD) which specifies the standards for street markings, traffic signals, and street signs in the United States. The California Department of Transportation (Caltrans) developed the California MUTCD based on the FHWA MUTCD. Caltrans published the 2014 edition, Revision 5 on March 27, 2020.

STATE

California Department of Transportation (Caltrans)

The California Department of Transportation (Caltrans) is the primary State agency responsible for transportation issues. One of its duties is the construction and maintenance of the State highway system. Caltrans has established standards for roadway traffic flow and developed procedures to determine if State-controlled facilities require improvements. For projects that may physically affect facilities or require access to a State highway, Caltrans requires encroachment permits before such activity may be undertaken. For projects that would not physically affect facilities but may influence traffic flow and levels of services at such facilities, Caltrans may recommend measures to mitigate the traffic impacts of such projects.

Additionally, the following Caltrans procedures and directives are relevant to transportation improvements along the State highway system near Gardena:

- Caltrans recently updated its transportation analysis guidelines to reflect a statewide shift from level of service (LOS) to VMT. Caltrans has provided guidance in three recent publications: *Vehicle Miles Traveled-Focused Transportation Impact Study Guide* (May 2020), *Transportation Analysis Under CEQA: Evaluating Transportation Impacts of State Highway System Projects* (September 2020), and *Transportation Analysis Framework: Evaluating Transportation Impacts of State Highway System Projects* (September 2020).
- *Traffic Safety Bulletin 20-02-R1 (Interim Local Development Intergovernmental Review Safety Review Practitioners Guide)* provide instructions to Caltrans staff, lead agencies, developers, and consultants conducting safety reviews for proposed land use projects and plan affecting the State highway system. This guidance establishes the safety impact review expectations for Caltrans and lead agencies to comply with CEQA. This guidance is part of the shift away from using LOS or other similar metrics to assess transportation impacts.
- *The Caltrans Project Development Procedures Manual* outlines pertinent statutory requirements, planning policies, and implementing procedures regarding transportation facilities. It is continually and incrementally updated to reflect changes in policy and procedures. For example, the most recent revision incorporates the Complete Streets policy from Deputy Directive 64-R1, which is detailed below.
 - Caltrans Deputy Directive 64 (2001) requires Caltrans to consider the needs of non-motorized travelers, including pedestrians, bicyclists, and persons with



disabilities, in all programming, planning, maintenance, construction, operations, and project development activities and products. This includes incorporation of the best available standards in all of the Department's practices.

- Caltrans Deputy Directive 64-R1 (2014) requires Caltrans to provide for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the state highway system. Caltrans supports bicycle, pedestrian, and transit travel with a focus on "complete streets" that begins early in system planning and continues through project construction and maintenance and operations.
- Caltrans Director's Policy 22 (2001) establishes support for balancing transportation needs with community goals. Caltrans seeks to involve and integrate community goals in the planning, design, construction, and maintenance and operations processes, including accommodating the needs of bicyclists and pedestrians.
- Caltrans, as a responsible agency under CEQA, is available for early consultation on a project to provide guidance on applicable transportation analysis methodologies or other transportation related issues and is responsible for reviewing the traffic impact study for errors and omissions pertaining to the State highway facilities.

[Assembly Bill 32, Senate Bill 32 and Senate Bill 375](#)

On June 1, 2005, Governor Schwarzenegger signed Executive Order (EO) S-3-05. The goal of this EO is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. EO-S-20-06 establishes responsibilities and roles of the Secretary of Cal/EPA and State agencies in climate change.

In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." EO S-20-06 further directs State agencies to begin implementing AB 32, including the recommendations made by the State's Climate Action Team.

On December 11, 2008, CARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of CARB's plans to achieve GHG reductions in California required by Assembly Bill (AB) 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce carbon dioxide-equivalent (CO₂e) emissions by 169 million metric tons (MMT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT of CO₂e under a business-as-usual scenario. (This is a reduction of 42 MMT CO₂e, or almost 10 percent, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.) The Scoping Plan also breaks down the amount of GHG emissions reductions CARB recommends for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:



- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO₂e);
- The Low-Carbon Fuel Standard (15.0 MMT CO₂e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO₂e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO₂e).

CARB updated the Scoping Plan in 2013 (*First Update to the Scoping Plan*) and again in 2017. The 2013 Update built upon the initial Scoping Plan with new strategies and recommendations, and also set the groundwork to reach the long-term goals set forth by the State. Successful implementation of existing programs (as identified in previous iterations of the Scoping Plan) has allowed California to meet the 2020 target. The 2017 Update expands the scope of the plan further by focusing on the strategy for achieving the State's 2030 GHG target of 40 percent emissions reductions below 1990 levels (to achieve the target codified into law by SB 32), and substantially advances toward the State's 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

The 2017 Update relied on the preexisting programs paired with an extended, more stringent Cap-and-Trade Program, to deliver climate, air quality, and other benefits. The 2017 Update identified new technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction goals.

CARB adopted the 2022 Scoping Plan Update (2022 Scoping Plan) on December 15, 2022. The 2022 Scoping Plan Update assesses progress towards the SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030, while laying out a path to achieving carbon neutrality no later than 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.

SB 375 (Stats. 2008, ch. 728) (SB 375) was built on AB 32. SB 375's core provision is a requirement for regional transportation agencies to develop a Sustainable Communities Strategy (SCS) in order to reduce GHG emissions from passenger vehicles. The SCS is one component of the existing Regional Transportation Plan (RTP).

The SCS outlines the region's plan for combining transportation resources, such as roads and mass transit, with a realistic land use pattern, in order to meet a State target for reducing GHG emissions. The strategy must take into account the region's housing needs, transportation demands, and protection of resource and farmlands.

Additionally, SB 375 modified the State's Housing Element Law to achieve consistency between the land use pattern outlined in the SCS and the Regional Housing Needs Assessment allocation. The legislation also substantially improved cities' and counties' accountability for carrying out their housing element plans.



Finally, SB 375 amended CEQA (Pub. Resources Code, Section 21000 et seq.) to ease the environmental review of developments that help reduce the growth of GHG emissions.

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law. Previously, CEQA transportation analyses of individual projects were focused on the determination of impacts in the circulation system in terms of roadway capacity at specific locations, mostly located in proximity to a project site. SB 743 has fundamentally changed transportation impact analysis as part of CEQA compliance. These changes include the elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significance. Further, parking impacts are not considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service.

SB 743 was passed to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.

OPR published the Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) to provide recommendations for jurisdictions to apply VMT metrics and thresholds compliant with SB 743. OPR's advisory includes recommendations pertaining to screening criteria, metrics, and significant impact thresholds. OPR's recommendations are not binding, and lead agencies ultimately have the discretion to set or apply their own significance thresholds, provided they are based on significant evidence.

For land use and transportation projects, SB 743-compliant CEQA analysis became mandatory on July 1, 2020. The City of Gardena identified methodologies and thresholds to evaluate transportation impacts using VMT metrics from land use and transportation projects, which are discussed below.

REGIONAL & LOCAL

Southern California Association of Governments (SCAG)

SCAG is a federally designated MPO and is made up of six counties and 191 cities. SCAG develops long-range regional transportation plans including sustainable communities' strategies and growth forecast components, regional transportation improvement programs, regional housing needs allocations, and a portion of the South Coast Air Quality Management Plans.

On May 7, 2020, SCAG's Regional Council adopted Connect SoCal, the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which is an update of the previous 2016 RTP/SCS. The plan is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal outlines more than \$638 billion in transportation system investments in the region through 2045, and charts a path toward a more mobile, sustainable, and prosperous region. The 2020 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving a 19 percent reduction



by 2035 compared to the 2005 level. Although the focus of the 2020 RTP/SCS is on GHG emission-reduction, compliance with and implementation of 2020 RTP/SCS policies and strategies would also have co-benefits of reducing per capita criteria air pollutant and TAC emissions associated with reduced per capita VMT. Improved air quality with implementation of the 2020 RTP/SCS policies would decrease reactive organic gases (ROG) (i.e., VOCs), CO, NO_x, and PM_{2.5}.

SCAG's 2020 RTP/SCS builds on the land use policies that were incorporated into the 2016 RTP/SCS, and provides specific strategies for successful implementation. These strategies include implementing the Sustainable Communities Program (SCP) – Housing and Sustainable Development (HSD) which will both accelerate housing production as well as enable implementation of the Sustainable Communities Strategy of Connect SoCal; encouraging use of active transportation, or human powered transportation such as bicycles, tricycles, wheelchairs, electric wheelchairs/scooters, skates, and skateboards; and supporting alternative fueled vehicles. The 2020 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in infill areas well served by transit.

In addition, the 2020 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). The 2020 RTP/SCS strategies support local planning and projects that serve short trips, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. The 2020 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and state funding, and to expand the potential for all people to use active transportation.

SCAG also develops and maintains the regional travel demand model. Several local and county agencies have developed subregional travel demand models based on the SCAG model.

[Los Angeles Metropolitan Transportation Authority \(LA Metro\)](#)

The Los Angeles County Metropolitan Transportation Agency (LA Metro) coordinates transportation planning efforts throughout Los Angeles County and programs local, regional, state, and federal funding for project implementation. As the County's transportation planning agency, LA Metro administers two funding programs funded by sales tax measures. Measure R, a half-cent sales tax to finance new transportation projects and programs, took effect July 2009 and is expected to generate \$40 billion in new local sales tax revenues over 30 years. In November 2016, voters approved Measure M, which made Measure R permanent and added an additional half-cent sales tax.

In 2020, LA Metro updated its Long-Range Transportation Plan (LRTP), last adopted in 2009. The LRTP is a long-range policy document that guides transportation funding decisions for LA County's transportation system over a 25-year horizon. The LRTP lays out a strategy for meeting transportation needs for all users in LA County and includes projects and other improvements for



new and existing freeways, local streets, and public transit (paratransit, buses, rails, ferries), as well as facilities and programs to support bicycling and walking.

LA Metro has several countywide planning efforts that outline regional networks and provide guidance on best practices. These plans include the Countywide Multimodal Arterial Plan, Countywide Goods Movement Plan, Short Range Transportation Plan, Active Transportation Strategic Plan, the First Last Mile Strategic Plan.

[South Bay Cities Council of Governments \(SBCCOG\)](#)

The City of Gardena is a member of the South Bay Cities Council of Governments (SBCCOG). SBCCOG is a regional government planning agency and joint powers authority that includes 16 incorporated cities, the Harbor City/San Pedro/Wilmington communities of the City of Los Angeles, and the unincorporated areas in Los Angeles County Districts 2 and 4. SBCCOG collaborates with member agencies on several mobility-related efforts:

- Electric Vehicle Adoption
- A Local Travel Network for the South Bay
- Sustainable Neighborhood Strategy
- Measures R and M
- Transit Operators Working Group (TOWG)
- Transportation Demand Management

SBCCOG recently completed a plan for a proposed Local Travel Network (LTN), a safe network of routes to accommodate a growing market of personal zero-emission slow-speed vehicles. The plan examined the feasibility of more widespread adoption of a transportation concept known as micromobility, which refers to a range of lightweight vehicles operating at speeds below 25 mph, including neighborhood electric vehicles (NEVs). The first phase of implementation consists of two “Corridor” areas of the South Bay: one connecting inland cities and the other connecting beach cities.

[South Bay Bicycle Master Plan](#)

In 2011, the Los Angeles County Bicycle Coalition (LACBC) and the South Bay Bicycle Coalition (SBBC) partnered with the Cities of El Segundo, Gardena, Hermosa Beach, Lawndale, Manhattan Beach, Redondo Beach, and Torrance to develop the South Bay Bicycle Master Plan. The Plan is intended to guide the development and maintenance of a comprehensive bicycle network and set of programs and policies throughout these seven cities.

Figure 5.14-4, Existing and Planned Bikeways, shows the full buildout bikeway network in Gardena according to the South Bay Bicycle Master Plan. As shown in Figure 5.14-4, the Bicycle Master Plan envisions a grid network of bikeways throughout the City. While on-street bike lanes are planned on some arterial streets, the predominant bicycle facilities in the City will be bike



routes and bike boulevards on lower-volume and lower-speed roads, with bicyclists sharing the outer vehicle lane with automobiles.

City of Gardena General Plan

The City of Gardena General Plan Circulation Plan and Community Design Plan contains the following goals and policies potentially relevant to the proposed Project:

Circulation Plan

CI Goal 1: Promote a safe and efficient circulation system that benefits residents and businesses, and integrates with the greater Los Angeles/South Bay transportation system.

CI Policy 1.2: Minimize truck traffic through Gardena and minimize adverse impacts by regulating off-street truck parking, intrusions into neighborhoods, and noise levels.

CI Goal 2: Promote a safe and efficient local street system that is attractive and meets the needs of the community.

CI Policy 2.2: Apply creative traffic management approaches to address congestion in areas with unique problems, particularly in the vicinity of schools, businesses with drive through access and locations where businesses interface with residential areas.

CI Policy 2.4: Protect residential neighborhoods from cut-through traffic by improving intersections on major highways, prohibiting cut-through traffic, and improving street signage.

CI Policy 2.5: Traffic-calming measures and devices (e.g., sidewalks, streetscapes, speed humps, traffic circles, cul-de-sacs and signals) should promote safe routes through neighborhoods for pedestrians.

CI Goal 3: Develop Complete Streets to promote alternative modes of transportation that are safe and efficient for commuters, and available to persons of all income levels and disabilities.

CI Policy 3.1: Work with Gardena Municipal Bus Lines and MTA to increase the use of public transit, establish or modify routes, and improve connectivity to regional services.

CI Policy 3.3: Maintain and expand sidewalk installation and repair programs, particularly in areas where sidewalks link residential neighborhoods to local schools, parks, and shopping areas.

CI Policy 3.4: Maintain a citywide bicycle route and maintenance plan that promotes efficient and safe bikeways integrated with the MTA's regional bicycle system.

CI Policy 3.5: As roadways are repaved or otherwise improved, evaluate opportunities to enhance the quality and safety of the roadway by implementing new or improved walking, bicycle, or public transit infrastructure. If no walking, bicycling, or public transit



improvements are being provided, a report to the City Council should provide an explanation for why such improvements are not needed along this roadway segment.

Community Design Plan

DS Goal 1: Enhance the visual environment and create a positive image of the City.

DS Policy 1.6: Require streetscape development standards for major corridors, including streetlights, landscaping, public signage and street furniture, to reinforce Gardena's community image.

DS Goal 2 Enhance the aesthetic quality of the residential neighborhoods in the City.

DS Policy 2.4: Strengthen the important elements of residential streets that unify and enhance the character of the neighborhood, including pedestrian amenities, parkways, mature street trees, compatible setbacks, and unified architectural detailing and building.

DS Policy 2.9: Integrate new residential developments with the surrounding built environment. In addition, encourage a strong relationship between the dwelling and the street.

[Gardena SB 743 Implementation Transportation Analysis Updates](#)

Published in June 2020, this document serves as the City's SB 743-consistent transportation analysis guidelines; it provides guidance for both CEQA and non-CEQA transportation assessments. The guidelines include the following information:

- VMT screening criteria for land use projects;
- VMT metrics, thresholds, and significant impact criteria for land use projects;
- VMT metrics, thresholds, and significant impact criteria for land use plans (such as Specific Plans or the City's General Plan);
- VMT metrics, thresholds, and significant impact criteria for transportation projects; and
- Three tiers of requirements and methodologies for analyzing roadway operation effects of land use projects.

[Gardena Municipal Code](#)

Gardena Municipal Code Section 13.56.430, *Road closure or interference with highway use* requires permission from the traffic authority for any road or highway closure.



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5.14.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to transportation. A significant transportation impact would occur if the Project would:

- Conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities (refer to Impact Statement 5.14-1);
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (refer to Impact Statement 5.14-2);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (refer to Impact Statement 5.14-3); and/or
- Result in inadequate emergency access (refer to Impact Statement 5.14-4).

VEHICLE MILES TRAVELED THRESHOLDS

In June 2020, the City of Gardena adopted its *SB 743 Implementation Transportation Analysis Updates* which serves as the City's transportation analysis guidelines and includes methodologies and criteria for evaluating VMT impacts. The guidelines require the analysis of home-based VMT per capita for residential projects; home-based work VMT per employee for office, industrial, and hotel projects; and total VMT per service population (residents + employees) for all other project types. The guidelines also include criteria for screening land use projects out of a detailed VMT analysis; specifically, this can apply to affordable housing projects, local-serving retail projects, small projects (generating fewer than 110 daily trips), projects in low VMT areas, and projects in high-quality transit areas. The City has also prepared a VMT spreadsheet tool to estimate the VMT per capita and per employee for individual land use projects, when appropriate; otherwise, the SCAG regional travel demand model can be used to estimate project VMT.

The City's guidelines include the following metrics and thresholds for analyzing individual residential land use projects, using the SCAG travel demand model or the City's VMT spreadsheet tool (note, only the thresholds for residential development projects are listed since the project only provides for residential development):

- **Project Threshold:** A significant impact would occur if the project generates home-based VMT per capita exceeding 15 percent below the SCAG regional average (i.e. higher than regional VMT or 0-14 percent below regional VMT).
- **Cumulative Threshold:** A significant impact would occur if the project threshold (stated above) was exceeded or if the project is determined to be inconsistent with the RTP/SCS.

The City's guidelines include the thresholds listed below for analyzing land use plans such as specific plans or a general plan. For plans that propose a variety of land uses, the guidelines require analyzing VMT per service population using the SCAG travel demand model. For plans



focused on a singular land use, such as housing or commercial/office, the guidelines require analyzing VMT per capita or VMT per employee. Given that this Project includes residential development potential, the thresholds below refer to VMT per capita.

- **Project Threshold:** A significant impact would occur if the VMT per capita for the land use plan exceeds 15 percent below the SCAG regional average (i.e., higher than regional VMT or 0-14 percent below regional VMT).
- **Cumulative Threshold:** A significant impact would occur if the project threshold (stated above) was exceeded or if the project is determined to be inconsistent with the RTP/SCS.

Given these metrics and thresholds from the City’s guidelines, there are two potential, distinct approaches to analyzing the Project’s VMT impacts:

- Analyze the sites individually, potentially screen a majority of the sites out of a VMT analysis using the City’s screening criteria, and analyze the remaining sites using the City’s VMT spreadsheet tool.
- Analyze the entirety of the Project as a land use plan and utilize the SCAG travel demand model.

Given that the Project as a whole could potentially change local VMT patterns due to the number of dwelling units potentially being added, VMT impacts may not be captured if each site is analyzed individually using the spreadsheet tool. In addition, under CEQA, the Project provides for implementation of the Land Use Plan and Zoning Amendment Project as a singular land use plan, consisting of the entirety of the study sites. Therefore, the VMT analysis approach that is used in this EIR is to analyze the Project as a land use plan, assessing citywide VMT per capita (since the Project increases residential development potential).

For the VMT analysis in this EIR, citywide home-based VMT per capita was compared to the existing SCAG regional average. VMT was assessed by interpolating citywide and regional VMT per capita to the Notice of Preparation (NOP) year (2023) using the base and future year versions of the SCAG model. The 2016 RTP/SCS version of the SCAG model was used to remain consistent with the VMT information included in the City’s guidelines, VMT estimating tool, and other local analysis documents.

Based on these standards and significance thresholds and criteria, the Project’s effects have been categorized as either “no impact,” a “less than significant impact,” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a “significant unavoidable impact.”



5.14.5 IMPACTS AND MITIGATION MEASURES

Impact 5.14-1: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Impact Analysis:

Transit System

The City does not have defined measures of effectiveness for public transit service and circulation. The proposed Project would be expected to increase demand for travel given the proposed development and expected increase in residents. The Project proposes to increase housing development and density in areas which are served by high-quality transit, and will continue to do so, according to SCAG 2020 RTP/SCS. Project implementation would result in higher vehicle volumes on local roads due to the increase in housing units and the population. However, the Project is not expected to cause roadway segment volumes to exceed capacity in a manner that would negatively affect bus operations. The City's General Plan Circulation Plan includes policies to support and enhance transit service. Specifically, CI Policy 3.1 requires the City to work with the Gardena Municipal Bus Lines and MTA to increase the use of public transit and improve connectivity to regional services. The Project would not conflict with a program plan, ordinance, or policy addressing transit and impacts would be less than significant.

Roadway Facilities

Implementation of the proposed Project is not expected to cause roadway segment volumes to exceed capacity. Although the Project anticipates the development of residential uses, the Project does not propose site-specific development. Thus, no modifications to roadways within the City are proposed.

There is the potential that traffic lanes located immediately adjacent to a development site may be temporarily closed or controlled by construction personnel during construction activities. Any temporary closure would be required to receive permission from the traffic authority in accordance with Gardena Municipal Code Section 13.56.430, *Road closure or interference with highway use*. However, this would be temporary and emergency access to the site and surrounding area would be required to be maintained at all times. Additionally, all construction staging would be required to occur within the boundaries of the development site and would not interfere with circulation along adjacent or any other nearby roadways.

Bicycle Facilities

Figure 5.14-4 shows the full buildout bikeway network in Gardena according to the South Bay Bicycle Master Plan. As shown in Figure 5.14-4, the Bicycle Master Plan envisions a grid network of bikeways throughout the City. While on-street bike lanes are planned on some arterial streets, the predominant bicycle facilities in the City will be bike routes and bike boulevards on lower-volume and lower-speed roads, with bicyclists sharing the outer vehicle lane with automobiles. As detailed in the TIA, the Project is not expected to cause arterial roadway volumes to exceed



capacity in a manner that could result in conflicts with bicyclists using on-street bicycle facilities. In addition, housing intensification would generally occur in existing and planned high-quality transit areas, which would encourage less driving and more transit (and bike-to-transit) trips. As site-specific development is proposed, opportunities to implement the Bicycle Master Plan would be considered. The increase in residents could incrementally increase the use of bicycle facilities within the City; however, the Project would not conflict with a program plan, ordinance, or policy addressing bicycle facilities and impacts would be less than significant.

Pedestrian Facilities

As detailed in the TIA, the Project is not expected to cause arterial roadway volumes to exceed capacity in a manner that could result in conflicts with pedestrians (such as vehicle queues backing up into crosswalks). In addition, housing intensification would generally occur in existing and planned high-quality transit areas, which would encourage less driving and more transit (and walk-to-transit) trips. As stated, the Project does not propose site specific development. Thus, no modifications to existing pedestrian facilities within are proposed. Development of specific parcels with residential uses would be required to maintain or provide improved sidewalks and pedestrian access to the proposed development in accordance with City requirements. The Project would not conflict with a program, plan, ordinance or policy addressing pedestrian facilities and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.14-2: Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Impact Analysis: A significant Project VMT impact would occur if the City's VMT per capita would exceed 15 percent below the SCAG regional average with implementation of the proposed Project. Based on an interpolation of the base and future year SCAG models to 2023 conditions, the SCAG regional average is 15.75 VMT per capita. The interpolated Citywide average (without Project implementation) is 11.79 VMT per capita, which is approximately 25 percent below the regional average. With implementation of the Land Use Plan and Zoning Amendment Project, the interpolated Citywide average is 12.14 VMT per capita, which is 23 percent below the SCAG regional average. In addition, with implementation of the Project under the City's cumulative buildout conditions, the Citywide average is estimated to be 11.52 VMT per capita, which is 27 percent below the SCAG regional average.

With implementation of the Land Use Plan and Zoning Amendment Project, the City's VMT per capita would not exceed 15 percent below the SCAG regional average. Therefore, the Project's impacts related to VMT would be considered less than significant.

A significant cumulative VMT impact would occur if the Project threshold is exceeded or if the Project is determined to be inconsistent with the 2020-2024 RTP/SCS. As detailed in this section,



the Project VMT threshold is not exceeded. In addition, the Project is consistent with the SCAG RTP/SCS. Implementation of the proposed Project would increase the local and regional housing supply to meet regional housing needs and locating housing in a transit-rich area. Additionally, the Project helps further the goals of SCAG 2020 RTP/SCS. An analysis of the proposed Project's consistency with the relevant SCAG 2020 RTP/SCS goals adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 5.7, Greenhouse Gas Emissions, Table 5.7-4, Project Consistency with the 2020-2045 RTP/SCS.

The Project does not exceed the Project VMT threshold and is consistent with the relevant SCAG 2020 RTP-SCS goals. Therefore, the Project's cumulative impacts related to VMT would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.14-3: 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)?

Impact Analysis: A significant Project impact would occur if the Project substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

The Project does not propose changes to the Citywide roadway network and configuration. Geometric design features would generally be limited to individual projects' internal roadway networks, as well as driveways along City roads. Site-specific developments would be reviewed by the City to ensure adequate ingress and egress would be provided and site distance standards would be implemented. Individual projects would be required to comply with the property development standards established by the Gardena Municipal Code specific to the zone in which the site is located.

The Project would not result in the development of incompatible uses. Implementation of the Project would allow existing residential and non-residential sites to be developed into higher-density residential uses. The City is already built out, with a variety of residential and non-residential uses, and includes a dense grid network of roadways providing connections across the City. Additional residential development would not be incompatible with the existing and future land use and transportation contexts. Therefore, the Project's impacts related to geometric design and incompatible use hazards would be considered less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.



Impact 5.14-4: Would the project result in inadequate emergency access?

Impact Analysis: A significant project impact would occur if it results in inadequate emergency access. It is noted that the Project does not propose site-specific development; emergency accessibility is typically assessed at the project level.

The Project does not propose changes to the Citywide roadway network and configuration that would affect local emergency access. There is the potential that traffic lanes located immediately adjacent to a development site may be temporarily closed or controlled by construction personnel during construction activities. As discussed, any temporary closure would be required to receive permission from the traffic authority in accordance with Gardena Municipal Code Section 13.56.430, *Road closure or interference with highway use*. However, this would be temporary and emergency access to the site and surrounding area would be required to be maintained at all times. Additionally, all construction staging would be required to occur within the boundaries of the development site and would not interfere with circulation along adjacent or any other nearby roadways.

As site-specific development is not currently proposed, it is unknown if future development associated with implementation of the Project would involve the removal of existing driveways or the construction of new driveways or any associated improvements, such as curb, gutter, and sidewalks. The applicant of any proposed development would be required to submit appropriate plans for review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The proposed development would be required to comply with all applicable Building and Fire Code requirements and would submit construction plans to the Fire Department's Engineering Building Plan Check Unit for review and approval prior to issuance of any building permit. The Los Angeles County Fire Department (LACoFD) would review the proposed development for access requirements, minimum driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site.

In addition, as detailed in the TIA, Project implementation is projected to result in higher vehicle volumes on local roads due to the increase in housing units and the population; however, the Project is not expected to cause roadway segment volumes to exceed capacity in a manner that would negatively affect emergency vehicles. Therefore, the Project's impacts related to emergency access would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.14.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the related projects in the City determined as having the potential to interact with the proposed Project to the extent that a significant



cumulative effect relative to transportation impacts may occur. The cumulative projects' setting for transportation considers the region and projects within the City.

Would the project, combined with other related cumulative projects, conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Impact Analysis: A significantly cumulative impact would occur if the Project and cumulative projects conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Overall, the Project is a programmatic land use plan and is not proposing any changes to the circulation system. Any future development within the City would be assessed for consistency with local policies and ordinances, including the Municipal Code and General Plan goals and policies, as appropriate. Therefore, the Project's incremental contribution to cumulative impacts related to transit, roadway, bicycle, and pedestrian facilities would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Impact Analysis: As described above, with implementation of the Project under the City's cumulative buildout conditions, the Citywide average is estimated to be 11.52 VMT per capita, which is 27 percent below the SCAG regional average. With implementation of the Project, the City's VMT per capita would not exceed 15 percent below the SCAG regional average. Implementation of the Project would therefore not result in a cumulatively considerable impact relative to VMT.

A significant cumulative VMT impact would occur if the Project threshold is exceeded or if the Project is determined to be inconsistent with the 2020-2024 RTP/SCS. As discussed, the Project would be consistent with the SCAG RTP/SCS and would contribute toward furthering the goals of SCAG 2020 RTP/SCS.

As the Project does not exceed the Project VMT threshold and is consistent with the relevant SCAG 2020 RTP-SCS goals, the proposed Project's incremental contribution to cumulative VMT impacts would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.



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

Impact Analysis: As described under Impact 5.14-3, the types of uses included as part of the Project are generally similar to existing and surrounding uses and thereby are compatible with the existing uses in the Project Area and in the surrounding area. Additionally, site-specific developments would be reviewed by the City to ensure adequate ingress and egress would be provided and site distance standards would be implemented. Individual projects would be required to comply with the property development standards established by the Gardena Municipal Code specific to the zone in which the site is located. Implementation of the Project would therefore not contribute to a cumulatively considerable impact relative to an increase in hazards due to a geometric design feature.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, result in inadequate emergency access?

Impact Analysis: A cumulatively significant project impact would occur if implementation of the Project with cumulative projects would result in inadequate emergency access. As noted, the Project does not propose site-specific development; emergency accessibility is typically assessed at the project level.

The Project does not propose changes to the citywide roadway network and configuration that would affect local emergency access. The proposed Project along with the cumulative development projects could result in the temporary closure or control of traffic lanes located immediately adjacent to a development site during construction activities. Any temporary closure would be required to comply with the Gardena Municipal Code.

Similarly, the applicant of any proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. LACoFD would review all development projects for access requirements, minimum driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site.

In addition, as detailed in the TIA, Project implementation is projected to result in higher vehicle volumes on local roads due to the increase in housing units and the population; however, the Project combined with cumulative projects are not expected to cause roadway segment volumes to exceed capacity in a manner that would negatively affect emergency vehicles. Therefore, the proposed Project's incremental contribution to cumulative impacts relative to emergency access would not be cumulatively considerable.



Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.14.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with transportation would occur with the proposed Project.

5.14.8 REFERENCES

Kittelson & Associates, Inc., *City of Gardena Land Use Plan, Zoning Code and Zoning Amendment Project Transportation Impact Analysis (TIA)*, May 18, 2023.



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5.15 TRIBAL CULTURAL RESOURCES

5.15.1 PURPOSE

This section discusses tribal cultural resources within the Project Area, and provides an analysis of potential impacts associated with implementation of the Project. This section is primarily based upon the *Cultural and Paleontological Resource Assessment for the City of Gardena Land Use Plan & Zoning Amendment Project* prepared by Cogstone, dated July 2023 and included as Appendix F, Cultural and Paleontological Resources Assessment.

One comment was received during the NOP comment period regarding tribal cultural resources. The comment was received from the Native American Heritage Commission (NAHC). The NAHC provides recommendations for cultural resources assessments and recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the Project Area as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

5.15.2 ENVIRONMENTAL SETTING

Ethnography

Early Native American peoples of the Project Area are poorly understood. They were replaced about 1,000 years ago by the Gabrielino (Tongva) who were semi-sedentary hunters and gatherers. The Gabrielino speak a language that is part of the Takic language family. Their territory encompassed a vast area stretching from Topanga Canyon in the northwest, to the base of Mount Wilson in the north, to San Bernardino in the east, Aliso Creek in the southeast and the Southern Channel Islands, in all an area of more than 2,500 square miles. At European contact, the tribe consisted of more than 5,000 people living in various settlements throughout the area. Some of the villages could be quite large, housing up to 150 people.

The Gabrielino are considered to have been one of the wealthiest tribes and to have greatly influenced tribes they traded with. Houses were domed, circular structures thatched with tule or similar materials. The best known artifacts were made of steatite and were highly prized. Many common everyday items were decorated with inlaid shell or carvings reflecting an elaborately developed artisanship.

The main food zones utilized were marine, woodland, and grassland. Plant foods were, by far, the greatest part of the traditional diet at contact. Acorns were the most important single food source. Villages were located near water sources necessary for the leaching of acorns, which was a daily occurrence. Grass seeds were the next most abundant plant food used along with chia. Seeds were parched, ground, and cooked as mush in various combinations according to taste and availability. Greens and fruits were eaten raw or cooked or sometimes dried for storage. Bulbs, roots, and tubers were dug in the spring and summer and usually eaten fresh. Mushrooms and



tree fungus were prized as delicacies. Various teas were made from flowers, fruits, stems, and roots for medicinal cures as well as beverages.

The principal game animals were deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, dove, ducks, and other birds. Most predators were avoided as food, as were tree squirrels and most reptiles. Trout and other fish were caught in the streams, while salmon were available when they ran in the larger creeks. Marine foods were extensively utilized. Sea mammals, fish, and crustaceans were hunted and gathered from both the shoreline and the open ocean, using reed and dugout canoes. Shellfish were the most common resource, including abalone, turban, mussels, clams, scallops, bubble shells, and others.

The Project Area was not home to any known major villages. The closest known named villages are Tevaaxa'anga, 5.9 miles east-southeast of the Project Area, and Saa'anga, 6.65 miles northwest of the Project Area. However, smaller villages and seasonal camps may have been present closer to the Project Area.

TRIBAL CULTURAL RESOURCES

As discussed in Section 5.4, Cultural Resources, a search of the California Historic Resources Inventory System (CHRIS) at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton was conducted on February 10, 2022. The records search covered the entire City of Gardena. In addition, a variety of other sources were consulted in May 2022, including the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Built Environment Resource Directory (BERD), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI).

Results of the SCCIC records search indicate that 15 previous studies have been completed within the Project Area parcels and an additional 31 previous studies have been completed within the City. Previously recorded cultural resources within the City include three prehistoric archaeological sites; refer to [Table 5.4-1](#).

NATIVE AMERICAN CONSULTATION

A Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC) on February 10, 2022. On March 31, 2022, the NAHC responded that a search of the SLF was completed with negative results and included a list of Native American individuals or tribal organizations that may have knowledge of cultural resources within or near the Project Area.

The City conducted Native American consultations under Senate Bill (SB) 18 (Chapter 905, Statutes of 2004), which requires local governments to consult with Tribes prior to making certain planning decisions and requires consultation and notice for a general and specific plan adoption or amendments in order to preserve, or mitigate impacts to, cultural places that may be affected. In addition to SB 18 consultation, the City conducted tribal consultations under the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21080.3.1 subdivisions (b), (d) and (e)), also known as Assembly Bill (AB) 52, which requires consulting for



projects within the City’s jurisdiction and within the traditional territory of the Tribal Organizations who have previously requested AB 52 consultations with the City.

On September 13, 2021, the City sent letters via certified mail to eight Native American individuals and/or Tribal Organizations in compliance with AB 52 and SB 18; refer to Appendix I, Tribal Consultation/Correspondence. Most Tribal organizations declined consultation; however, the Kizh Nation responded stating they would like to request consultation on future projects within this location.

5.15.3 REGULATORY SETTING

FEDERAL

[National Historic Preservation Act 1966](#)

Enacted in 1966 and amended in 2000, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at the federal, state, and local levels. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP), established the position of State Historic Preservation Officer (SHPO) and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage and created the Advisory Council on Historic Preservation (ACHP).

[National Register of Historic Places](#)

Developed in 1981 pursuant to Title 36 CFR Section 60, the NRHP provides an authoritative guide to be used by federal, state and local governments, private groups and citizens to identify the nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment. It should be noted that the listing of a private property on the NRHP does not prohibit any actions which may otherwise be taken by the property owner with respect to the property. The listing of sites in California to the National Register is initiated through an application submitted to the State Office of Historical Preservation. Applications deemed suitable for potential consideration are handled by the State Historic Preservation Officer. All NRHP listings for sites in California are also automatically added to the California Register of Historical Resources by the State of California. The listing of a site on the NRHP does not generally result in any specific physical protection. Among other things, however, it does create an additional level of CEQA (and NEPA, the National Environmental Protection Act) review to be satisfied prior to the approval of any discretionary action occurring that might adversely affect the resource.

[American Indian Religious Freedom Act](#)

This American Indian Religious Freedom Act became law in 1978 (Public Law 95-341, 42 USC 1996) in order to protect and preserve for American Indians their inherent right of freedom to believe, express and exercise their traditional religions. These religious rights extend to, but are



not limited to, access to sites, use and possession of sacred objects and the freedom to worship through ceremonials and traditional rites.

Under this regulation, federal agencies and departments are charged with evaluating their policies and procedures in consultation with native traditional religious leaders in order to eliminate interference with the free exercise of native religion. Agencies must determine and make appropriate changes necessary to protect and preserve Native American religious cultural rights and practices, and to accommodate access to and use of religious sites “to the extent that the use is practicable and not inconsistent with an agency’s essential functions.” The intent is to protect Native Americans’ First Amendment right to “free exercise” of religion.

[Native American Graves Protection and Repatriation Act](#)

Enacted in 1990 under Title 25 U.S. Section 3001, the Native American Graves Protection and Repatriation Act (NAGPRA) describes the rights of Native American lineal descendants, Indian Tribes and Native Hawaiian organizations with respect to treatment, repatriation and disposition of Native American cultural items for which they can show a relationship of lineal descent or cultural affiliation. The statute also requires federal agencies and museums receiving federal funds to inventory holdings of Native American human remains and funerary objects and provide written summaries of other cultural items. In an attempt to recognize the religious and cultural significance of such sites and to protect their sacred integrity, it also provides for greater protection of Native American burial sites and more careful control over the removal of Native American human remains, funerary objects, sacred objects and items of cultural patrimony on federal and tribal lands.

STATE

[State Historic Preservation Office](#)

SHPO (or Office of Historic Preservation (“OHP”)) is a state governmental function created by the federal government in 1966 under Section 101 of the NHPA. SHPO administers the National Register of Historic Places, the California Register of Historical Resources, the California Historical Landmarks, and the California Points of Historical Interest programs. The purposes of a SHPO include surveying and recognizing historic properties, reviewing nominations for properties to be included in the National Register of Historic Places, reviewing undertakings for the impact on the properties as well as supporting federal organizations, state and local governments, and private sector. SHPO maintains the California Historical Resources Information System (CHRIS), which includes the statewide Historical Resources Inventory database.

[Native American Heritage Commission \(NAHC\)](#)

The NAHC, created by statute in 1976, is a nine-member body, appointed by the Governor, to identify and catalog cultural resources (i.e., places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands) in California. The Commission is charged with the duty of preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items,



maintain an inventory of Native American sacred sites located on public lands (i.e. Sacred Lands File), and review current administrative and statutory protections related to these sacred sites.

Assembly Bill 52

On July 1, 2015, California AB 52 of 2014 was enacted and expanded CEQA by defining a new resource category, “tribal cultural resources.” AB 52 establishes that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC §21084.2).

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments, and respecting the interests and roles of project proponents, the stated goals of AB 52 are the following:

1. Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.
2. Establish a new category of resources in CEQA called “tribal cultural resources” that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.
3. Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.
4. Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.
5. In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision making body of the lead agency.
6. Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
7. Ensure that local and tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of



identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.

8. Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.
9. Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment

The parties must consult in good faith, and consultation is deemed concluded when either the parties agree on measures to mitigate or avoid a significant effect on a tribal cultural resource (if such a significant effect exists) or when a party concludes that mutual agreement cannot be reached.

[Traditional Tribal Cultural Places Act \(Senate Bill 18\)](#)

Senate Bill (SB) 18 (California Government Code §65352.3) requires local governments to consult with Native American tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to the adoption and amendment of general plans and specific plans. The consultation process requires (1) that local governments send the State Native American Heritage Commission (NAHC) information on a proposed project and request contact information for local Native American tribes; (2) that local governments then send information on the project to the tribes that the NAHC has identified and notify them of the opportunity to consult; (3) that the tribes have 90 days to respond on whether they want to consult or not, and (4) that consultation begins if requested by a tribe and there is no statutory limit on the duration of the consultation. If issues arise and consensus on mitigation cannot be reached, SB 18 allows a finding to be made that the suggested mitigation is infeasible.

[California Register of Historical Resources \(Public Resource Code Section 5024.10 et seq.\)](#)

State law protects cultural resources by requiring evaluations of the significance of historical resources in CEQA documents. A cultural resource is an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the State CEQA Guidelines. These criteria are similar to those used in federal law. The CRHR is maintained by the state Office of Historic Preservation. Properties listed, or formally designated eligible for listing, on the NRHP are automatically listed on the CRHR, as are state historical landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

[CRHR Criteria](#)

For purposes of CEQA, a historical resource is any object, building, structure, site, area, place, record, or manuscript listed in or eligible for listing in the CRHR (California Public Resources Code [PRC] Section 21084.1). A resource is eligible for listing in the CRHR 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.

The California Code of Regulations (CCR) further provides that cultural resources of local significance are CRHR-eligible (Title 14 CCR, Section 4852).

[California Government Code Sections 6254\(r\) and 6254.10](#)

Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the SHRC, the State Lands Commission, the NAHC, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

[California Health and Safety Code \(Sections 7050.5, 7051, and 7054\)](#)

Sections 7050.5, 7051, and 7054 of the California Health and Safety Code collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the PRC), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

[California Public Resources Code Section 5097.98](#)

Public Resources Code §5097.98 stipulates that whenever the NAHC receives notification concerning discovery of Native American human remains from a county coroner pursuant to CHS §7050.5, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the landowner's permission, or his or her authorized representative, inspect the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with the appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 48 hours of being granted access to the site. The recommendation may include the scientific removal and non-destructive analysis of human remains and items associated with Native American burials. The NAHC would designate the Most Likely Descendant (MLD) for any future human remains found in the project area.



LOCAL

[City of Gardena General Plan](#)

The City of Gardena General Plan Community Resources Element, Conservation Plan, contains the following goals and policies potentially relevant to the proposed Project:

CN Goal 5: Protect the City’s cultural resources.

Policy CN 5.1: Maintain an inventory of the City’s historical resources, including a survey of buildings of architectural, cultural or historical significance.

Policy CN 5.2: Provide provisions in the Municipal Code to protect historical and cultural resources.

Policy CN 5.3: Protect and preserve cultural resources of the Gabrielino Native American Tribe found or uncovered during construction.

[City of Gardena Municipal Code](#)

Gardena Municipal Code Section 18.42.210, *Post-permit Requirements*, contains protections pertaining to tribal cultural resources. Specifically, Section 18.42.210(D)(1) requires, if Native American or tribal cultural resources are found on a proposed development site, that the applicant enter into a cultural resources treatment agreement with a local Native American tribe traditionally and culturally affiliated with Gardena that is acknowledged by the Native American Heritage Commission, which shall address the following:

- Treatment and disposition of cultural resources;
- Designation, responsibilities, and participation of professional tribal monitors during grading, excavation and ground disturbing activities;
- Project grading and development scheduling;
- Terms of compensation for the tribal monitors;
- Treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on site;
- Tribal monitor’s authority to stop and redirect grading in order to evaluate the significance of any potential resources discovered on the property, and to make recommendations as to treatment; and
- The applicant’s agreement to relinquish ownership of all cultural resources, including all archaeological artifacts that are found on the project area, to the tribe for proper treatment and disposition; and the applicant’s agreement that all tribal sacred sites are to be avoided and preserved.

With regards to human remains, Section 18.42.210(D)(2) requires, in compliance with State law, that if human remains are unearthed, the project developer, pursuant to State Health and Safety Code Section 7050.5, will contact the County coroner and ensure no further disturbance occurs



until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the Native American Heritage Commission (NAHC) must be notified within twenty-four hours.

5.15.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to tribal cultural resources. A project may create a significant environmental impact if it would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) (refer to Impact Statement 5.15-1); or
 - 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 (refer to Impact Statement 5.15-1).

Based on these standards and significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a "significant unavoidable impact."

5.15.5 IMPACTS AND MITIGATION MEASURES

Impact 5.15-1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**
- **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?

Impact Analysis: As described in Section 5.4, Cultural Resources, previously recorded cultural resources within the Project Area include three prehistoric archaeological sites. All three of the previously recorded archaeological (two prehistoric-aged, one historic-aged) sites within the City are located in the southeast corner of the City. The Cultural Resources Assessment notes this small number of previously identified resources is likely due as much to limited attempts at identification as it is absence of resources, as only a small portion of the City (less than five percent) has been systematically surveyed for cultural resources. Almost all land within the City is built out, but it is built upon alluvium with variable potential to preserve subsurface cultural resources. The Cultural Resources Assessment concludes that, due to previous disturbance by grading activities, the sensitivity for historic-aged cultural deposits is assessed to be low and cultural sensitivity for deeply buried prehistoric cultural resources is assessed to be low to moderate.

The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. There are no previously recorded tribal cultural resources within parcels that are proposed for land use and zone changes under Project implementation. Although the Project Area is primarily urbanized and has experienced extensive ground-disturbance, there is the potential that tribal cultural resources could occur below the surface; therefore, future development allowed under the proposed Project could cause a substantial adverse change in the significance of unknown tribal cultural resources which have not yet been identified. This is considered a potentially significant impact.

A Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC) on February 10, 2022. On March 31, 2022, the NAHC responded that a search of the SLF was completed with negative results. At the time of publication of this draft EIR, one tribe, the Kizh Nation, responded to tribal communications sent in compliance with AB 52 and SB 18. The Kizh Nation responded stating they would like to request consultation on future projects within this location.

The Gardena General Plan includes policies to identify and protect historic resources within the City. Specifically, General Plan Community Resources Element, Conservation Plan Policy CN 5.3 protects and preserves cultural resources of the Gabrielino Native American Tribe found or uncovered during construction. Additionally, Gardena Municipal Code Section 18.42.210, *Post-permit Requirements*, contains protections pertaining to tribal cultural resources. Section 18.42.210(D)(1) requires, if Native American or tribal cultural resources are found on a proposed development site, that the applicant enter into a cultural resources treatment agreement with a local Native American tribe traditionally and culturally affiliated with Gardena that is acknowledged by the Native American Heritage Commission. The agreement is required to



address the following: treatment and disposition of cultural resources; designation, responsibilities, and participation of professional tribal monitors during grading, excavation and ground disturbing activities; project grading and development scheduling; terms of compensation for the tribal monitors; treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on site; the tribal monitor's authority to stop and redirect grading in order to evaluate the significance of any potential resources discovered on the property, and to make recommendations as to treatment; the applicant's agreement to relinquish ownership of all cultural resources, including all archaeological artifacts that are found on the project area, to the tribe for proper treatment and disposition; and the applicant's agreement that all tribal sacred sites are to be avoided and preserved. With regards to human remains, Section 18.42.210(D)(2) requires, in compliance with State law, that if human remains are unearthed, the project developer, pursuant to State Health and Safety Code Section 7050.5, will contact the County coroner and ensure no further disturbance occurs until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the Native American Heritage Commission (NAHC) must be notified within twenty-four hours.

Subsequent development within the Project Area would be required to comply with existing federal, State, and local regulations, including the Gardena General Plan and Municipal Code, which would reduce potential impacts to tribal cultural resources to less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.15.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the related projects in the City determined as having the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to tribal cultural resources may occur. The cumulative projects' regional geologic setting and tribal cultural resource deposit sensitivity would be similar; however, the local geologic setting and tribal cultural significance would vary according to the site location and specific conditions.

Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**



- 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?

Impact Analysis: Tribal cultural resource impacts are site specific and generally do not combine to result in cumulative impacts. Construction of the individual development projects associated with implementation of the Project may result in the discovery of tribal cultural resources. The Gardena General Plan policies and Municipal Code, as well as federal, State, and local regulations, would reduce the risk to tribal cultural resources in the region. Future site-specific development associated with the Project and cumulative projects would be required to comply with Gardena Municipal Code Section 18.42.210(D)(1) if Native American or tribal cultural resources are found on a proposed development site. Municipal Code Section 18.42.210(D)(1) requires that the applicant enter into a cultural resources treatment agreement with a local Native American tribe traditionally and culturally affiliated with Gardena that is acknowledged by the Native American Heritage Commission, as described above. Adherence to existing federal, State and local regulations would avoid and/or minimize a cumulative loss of tribal cultural resources. Therefore, the Project's incremental contribution to cumulative tribal cultural resource impacts would be less than cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.15.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with tribal cultural resources would occur with the proposed Project.

5.15.8 REFERENCES

Cogstone, *Cultural and Paleontological Resource Assessment for the City of Gardena Land Use Plan & Zoning Amendment Project* prepared by Cogstone, July 2023.



5.16 UTILITIES AND SERVICE SYSTEMS

5.16.1 PURPOSE

The purpose of this section is to identify the existing regulatory and environmental setting related to utilities and service systems that serve the Project Area and assess potential environmental impacts that could result from Project implementation. Utilities and service systems addressed in this section include water, wastewater (sewer), solid waste, electricity, natural gas, and telecommunications facilities; stormwater is discussed in Section 5.9, Hydrology and Water Quality.

One comment was received during the NOP comment period regarding utilities and service systems. The comment was received from Vera Povetina, who expressed concern about impacts to water supplies, gas, electricity, and telecommunications resulting from additional dwelling units within the City.

5.16.2 ENVIRONMENTAL SETTING

WATER

The City of Gardena is served by the Golden State Water Company (GSWC) Southwest System (GSWC, 2021). The City is located within GSWC's Southwest System Service Area, which serves the Cities of Gardena and Lawndale; parts of the Cities of Carson, Compton, El Segundo, Redondo Beach, Hawthorne and Inglewood; and the adjacent unincorporated communities of Athens, Del Aire, El Camino Village, Lennox and Gardena Heights. The GSWC Southwest 2020 Urban Water Management Plan (UWMP) was prepared in accordance with the California Urban Water Management Planning Act, Water Code Sections 10610 through 10657. The 2020 UMWP addresses GSWC's water management planning efforts to assure adequate water supplies to meet forecast demands through 2045.

According to the 2020 UWMP, the Southwest area receives potable water from local groundwater and imported water purchased from the Metropolitan Water District of Southern California (MWD). Groundwater is pumped from GSWC's 13 active wells, which pump local groundwater from the Central subbasin and West Coast subbasin of the Coastal Plain of Los Angeles Groundwater Basin, and have a combined capacity of 13,400 gallons per minute. Treated groundwater is blended with water purchased from West Basin Municipal Water District and Central Basin Municipal Water District, delivered through 12 interconnections. The Southwest System does not include any treatment facilities besides at wellheads. The System also has 13 emergency interconnections to allow sharing of supplies during short term emergencies or during planned shutdowns of primary supply sources.

The 2020 UWMP's Tables 5-2 and 5-3 conclude that GSWC Southwest's supplies are expected to meet demands in normal-, single dry-, and multiple dry-year conditions through 2045; see [Table](#)



5.16-1, GSWC Southwest Service Reliability Assessment for Normal, Single Dry, and Multiple Dry Years.

**Table 5.16-1
GSWC Southwest Service Reliability Assessment for Normal, Single Dry,
and Multiple Dry Years**

Demand and Supply Projections (in acre-feet)	2025	2030	2035	2040	2045
<i>Normal Year</i>					
Service Area Supply	26,939	27,347	27,761	28,181	28,608
Service Area Demand	26,939	27,347	27,761	28,181	28,608
Difference	0	0	0	0	0
<i>Single-Dry Year</i>					
Service Area Supply	29,633	30,082	30,537	31,000	31,469
Service Area Demand	29,633	30,082	30,537	31,000	31,469
Difference	0	0	0	0	0
<i>Multiple-Dry Years (Year 1)</i>					
Service Area Supply	29,633	30,082	30,537	31,000	31,469
Service Area Demand	29,633	30,082	30,537	31,000	31,469
Difference	0	0	0	0	0
<i>Multiple-Dry Years (Year 2)</i>					
Service Area Supply	29,722	30,172	30,629	31,093	31,469
Service Area Demand	29,722	30,172	30,629	31,093	31,469
Difference	0	0	0	0	0
<i>Multiple-Dry Years (Year 3)</i>					
Service Area Supply	29,812	30,263	30,721	31,187	31,469
Service Area Demand	29,812	30,263	30,721	31,187	31,469
Difference	0	0	0	0	0
<i>Multiple-Dry Years (Year 4)</i>					
Service Area Supply	29,902	30,354	30,814	31,280	31,469
Service Area Demand	29,902	30,354	30,814	31,280	31,469
Difference	0	0	0	0	0
<i>Multiple-Dry Years (Year 5)</i>					
Service Area Supply	29,992	30,446	30,907	31,375	31,469
Service Area Demand	29,992	30,446	30,907	31,375	31,469
Difference	0	0	0	0	0
Source: GSWC, <i>Southwest Service Area 2020 Urban Water Management Plan</i> , July 2021.					

According to the 2020 UWMP, water use projections for 2025 to 2045 are based on 55 gallons per capita per day. Based on the 2022 California Department of Finance estimated population of 59,947 within the City, existing water use within the City is approximately 3.3 million gallons per day (MGD), or 3,691.5 acre-feet per year (AFY).



WASTEWATER

The City of Gardena, along with the Los Angeles County Sanitation Districts (LACSD), provide wastewater services to the Project Area. The City of Gardena owns and operates local wastewater transmission lines. According to the Draft 2021 Sewer Master Plan, the City's wastewater collection system is comprised of approximately 89 miles of gravity collection system pipe ranging from 6 to 12 inches, approximately 2,080 manholes, and one lift station (City of Gardena, 2023). The City's existing average dry weather flow is estimated to be 4.8 MGD (Ibid). The City lies entirely within LACSD's District Number 5. Wastewater from the City is conveyed to LACSD's Joint Water Pollution Control Plant (JWPCP) located in the City of Carson. The JWPCP has a capacity of 400 MGD and treats approximately 260 MGD of wastewater, resulting in a remaining capacity of 140 MGD (LACSD, 2023).

The Project Area is currently developed with 1,115 residential units and 7,544,381 square feet of non-residential development. Based on 2.74 persons per household and residential flow rates of 55 gallons per day (gpd) per person and 173.2 acres of non-residential development and commercial flow rates of 1,800 gpd per acre, the Project Area currently generates approximately 479,791 gpd (0.48 MGD) of wastewater requiring treatment (City of Gardena, 2023).

SOLID WASTE

Waste Resources provides solid waste and recycling collection services to the City (Waste Resources, 2023). Waste from the City is disposed of at a number of solid waste facilities, with the majority of waste disposed at the Chiquita Canyon Sanitary Landfill (CalRecycle, 2023a). The City generated approximately 115,967 tons of solid waste in 2019, with approximately 72 percent of that waste hauled to the Chiquita Canyon Sanitary Landfill, located in Castaic, California. The facility is located on 639 acres, 400 of which are used for disposal (CalRecycle, 2023b). At this time, Chiquita Canyon Sanitary Landfill has an expected closure date of 2047. The Chiquita Canyon Sanitary Landfill has a maximum permitted capacity of 110,366,000 cubic yards, with a remaining capacity of 60,408,000 cubic yards as of 2018.

ELECTRICAL POWER, NATURAL GAS, AND TELECOMMUNICATIONS

Electrical power to the area is provided by Southern California Edison (SCE). Electricity service is provided by a network of overhead and underground transmission lines. The majority of the electrical lines in the City are above ground, with underground lines primarily in the Underground Utility Districts located along Redondo Beach Boulevard. SCE also maintains an easement located adjacent to the Dominguez Creek Channel in the southern portion of the City. SCE obtains electricity from various generating sources that utilize natural gas, fossil fuels, hydroelectric sources, nuclear energy, and renewable resources, such as solar and wind (SCE, 2023). Natural gas service in the area is provided by Southern California Gas Company (SoCalGas). Various companies provide telecommunications within the City, including AT&T, Spectrum, and T-Mobile. SCE, SoCalGas, and local telecommunications companies operate and maintain transmission and distribution infrastructure throughout the City.



5.16.3 REGULATORY SETTING

Refer to Section 5.9, Hydrology and Water Quality for a discussion of the regulatory setting specific to stormwater.

FEDERAL

Water

[Federal Safe Drinking Water Act of 1974](#)

The Safe Drinking Water Act authorizes the U.S. Environmental Protection Agency (USEPA) to set 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 make sure that these standards are met. Originally, Safe Drinking Water Act 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. The Safe Drinking Water Act applies to every public water system in the United States.

Wastewater

[Federal Clean Water Act \(33 USC Sections 1251, Et Seq.\)](#)

The Clean Water Act's (CWA) primary goals are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. The CWA forms the basic national framework for the management of water quality and the control of pollution discharges; it provides the legal framework for several water quality regulations, including the National Pollutant Discharge Elimination System (NPDES), effluent limitations, water quality standards, pretreatment standards, antidegradation policy, nonpoint-source discharge programs, and wetlands protection. The USEPA has delegated the responsibility for administration of CWA portions to state and regional agencies. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality.

Solid Waste

[Resource Conservation and Recovery Act of 1976](#)

The Resource Conservation and Recovery Act (RCRA) of 1976 (Title 40 of the Code of Federal Regulations), Part 258 contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the Federal landfill criteria. The Federal regulations address the location, operation, design (liners, leachate collection, run-off control, etc.), groundwater monitoring, and closure of landfills.



STATE

Water

[State of California Water Recycling Act](#)

Enacted in 1991, the Water Recycling Act established water recycling as a state priority. The Water Recycling Act encourages municipal wastewater treatment districts to implement recycling programs to reduce local water demands.

[California Code of Regulations, Title 22, Division 4, Chapter 3 Water Recycling Criteria](#)

California regulates the wastewater treatment process and use of recycled water pursuant to CCR Title 22, Division 4, Chapter 3, *Water Recycling Criteria*. According to these regulations, recycled water to be used for irrigation of public areas must be filtered and disinfected to tertiary standards.

[California Code of Regulations, Title 22, Chapter 15, Article 20, Consumer Confidence Report](#)

California requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminants levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

[California Department of Health Services](#)

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for methyl tert-butyl ether and other oxygenates.

[California Urban Water Management Planning Act](#)

The California Urban Water Management Planning Act (California Water Code [CWC] Division 6, Part 2.6, §§10610-10656) addresses several State policies regarding water conservation and the development of water management plans to ensure the efficient use of available supplies. The California Urban Water Management Planning Act also requires water suppliers to prepare an UWMP every five years to identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years.



Specifically, municipal water suppliers that serve more than 3,000 customers or provide more than 3,000 AFY of water must adopt an UWMP.

Senate Bill 610

Water Code Sections 10610 to 10656 require water suppliers to prepare an UWMP to promote water demand management and efficient use in their service areas. UWMPs are included with the environmental document for specified projects. Concerning water supply, the Water Code requires preparation of a Water Supply Assessment for certain projects. The Water Code requires that a Water Supply Assessment be prepared for any “project” which would consist of one or more of the following¹:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of the projects specified above; 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.

Senate Bill 221

Senate Bill 221 (SB 221) amended State law, effective January 1, 2002, to improve the link between information on water supply availability and land use at the tentative map preparation phase of a project. SB 610 and SB 221 are companion measures which seek to:

- Promote more collaborative planning between local water suppliers and cities and counties;
- Require detailed information regarding water availability be provided to city and county decision-makers prior to approval of specific large development projects;
- Require that this detailed information be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects; and

¹ Specific proposed development projects meeting these conditions would be required to prepare a Water Supply Assessment at that time.



- Recognize local control and decision making regarding the availability of water for projects and the approval of projects.

SB 221 pertains only to residential projects and establishes the relationship between the Water Supply Assessment prepared for a project and the project approval under the Subdivision Map Act.

Water Efficiency Standards

CCR Title 24 contains the CBSC, including the California Plumbing Code (Part 5), which promotes water conservation. CCR Title 20 addresses public utilities and energy and includes appliance efficiency standards that promote water conservation. In addition, a number of California laws listed below require water-efficient plumbing fixtures in structures:

- CCR Title 20 Section 1604(g) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory faucets, sink faucets, and tub spout diverters.
- CCR Title 20 Section 1606 prohibits the sale of fixtures that do not comply with established efficiency regulations.
- CCR Title 24 Sections 25352(i) and (j) address pipe insulation requirements, which can reduce water used before hot water reaches equipment or fixtures. Insulation of water-heating systems is also required.
- Health and Safety Code Section 17921.3 requires low-flush toilets and urinals in virtually all buildings.

California Green Building Standards Code

The 2022 California Green Building Standards (CALGreen) Code sets standards for new buildings and development projects with the purpose of improving public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in several categories, including but not limited to, water efficiency and conservation. The 2022 CALGreen Code includes several amendments to the 2019 CALGreen Code, including new voluntary prerequisites for builders to choose from, such as battery storage system controls and heat pump space, and water heating, to encourage building electrification. Local jurisdictions also retain the administrative authority to exceed the CALGreen standards. The 2022 CALGreen Code went into effect Statewide on January 1, 2023.

Solid Waste

California Integrated Waste Management Act of 1989 (AB 939)

The Integrated Solid Waste Management Act of 1989 (AB 939) (California Public Resources Code Section 40050 et seq.) established an integrated waste management system that focuses on source reduction, recycling, composting, and land disposal of waste. AB 939 requires every city and county in California to divert 50 percent of its waste from landfills whether through waste reduction, recycling, or other means. Compliance with AB 939 is measured in part by comparing



solid waste disposal rates for a jurisdiction with target disposal rates. Actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.

[Assembly Bill 341](#)

Assembly Bill 341 (AB 341), which took effect on July 1, 2012, was designed to help meet California's recycling goal of 75 percent by the year 2020. AB 341 made "...a legislative declaration that it is the policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020..." AB 431 requires a business, defined to include a commercial or public entity that generates more than 4 cubic yards (CY) of commercial solid waste per week or a multifamily residential dwelling of 5 units or more to arrange for recycling services. Such business/residential development must: 1) source separate recyclable materials from the solid waste they are discarding, and either self-haul or arrange for separate collection of the recyclables; and 2) subscribe to a service that includes mixed waste processing that yields diversion results comparable to source separation.

[Assembly Bill 1826](#)

Assembly Bill 1826 (AB 1826) (California Public Resources Code Sections 42649.8 et seq.) requires recycling of organic matter by businesses generating such wastes in amounts over certain thresholds. AB 1826 also requires that local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses and multi-family developments that consist of five or more units.

[Los Angeles County Countywide Integrated Waste Management Plan](#)

AB 939 mandates each county prepare and administer a Countywide Integrated Waste Management Plan (CIWMP). The CIWMP is comprised of the County's and its cities solid waste reduction planning documents, an Integrated Waste Management Summary Plan (Summary Plan) and a Countywide Siting Element (CSE). The County of Los Angeles Department of Public Works is responsible for preparing the Summary Plan and CSE. The Summary Plan was approved by California Department of Resources Recycling and Recovery (CalRecycle) in June 1999 and describes the steps to be taken by local agencies, acting independently and together, to achieve the state mandated diversion rate by integrating strategies aimed toward reducing, reusing, recycling, diverting, and marketing solid waste generated within the County. The CSE, approved by CalRecycle in June 1998, identifies how the County and its cities would meet their long-term disposal capacity needs for a 15-year planning period to safely handle solid waste generated in the County that cannot be reduced, recycled, or composted.



Electricity, Natural Gas, and Telecommunications

California Electrical Code

The California Electrical Code is codified in Title 24, CCR, Part 3. The Electrical Code contains regulations including, but not limited to, electrical materials, electrical wiring, overcurrent protection, grounding, and installation.

LOCAL

City of Gardena General Plan

The City of Gardena General Plan Community Development Element, Land Use Plan; Community Development, Circulation Plan; and Community Resources Element, Conservation Plan contains the following goals and policies potentially relevant to the proposed Project:

Community Development Element, Land Use Plan

Policy LU 3.10: Ensure new development provides adequate improvements, dedications, and fees to the City to fully cover the cost of the City services and facilities.

Community Development, Circulation Plan

CI Goal 4 Provide adequate public facilities and infrastructure that support the needs of City residents and businesses.

Policy CI 4.1: The condition of sewer, drainage and water systems, streets, and other support facilities should be inventoried and monitored.

Policy CI 4.2: A comprehensive plan to finance the ongoing maintenance, repair, and rehabilitation of City infrastructure systems.

Policy CI 4.3: Maintain a collaborative relationship with service providers to ensure that infrastructure investments are protected.

Community Resources Element, Conservation Plan

CN Goal 2: Conserve and protect groundwater supply and water resources.

Policy CN 2.1: Encourage water conservation through education and water-conserving technology.

Policy CN 2.2: Comply with the water conservation measures set forth by the California Department of Water Resources.

CN Goal 3: Reduce the amount of solid waste produced in Gardena.

Policy CN 3.1: Comply with the requirements set forth in the City's Source Reduction and Recycling Element.

Policy CN 3.2: Maximize public awareness of all source reduction and recycling programs.



Policy CN 3.3: Encourage participation in local and County waste disposal programs for such household hazardous waste items as automotive products, paints, chemicals, tires, and batteries.

[City of Gardena Municipal Code](#)

Water

Gardena Municipal Code Chapter 3.20, *Utility Users' Tax*, in the City's Municipal Code, imposes a tax on users of utilities. Section 3.20.070, *Water Users' Tax*, imposes a tax on water users within the City.

Title 15 of the Municipal Code monitors and regulates Buildings and Construction through the establishment of construction, operation, and maintenance provisions. Section 15.04.010, *Adoption of the California Building Standards Code*, adopts the California Building Standards Code (CBSC), including the California Green Building Standards Code (CALGreen), which provides building and landscaping standards related to water efficiency and conservation. Section 15.60.010, *Adoption of the California Model Water Efficient Landscape Ordinance*, adopts the 2015 version of the Model Water Efficient Landscape Ordinance contained in the California Code of Regulations Title 23, Sections 490 through 495.

Wastewater

Gardena Municipal Code Title 13, *Public Works*, contains several provisions related to wastewater. Chapter 13.04, *Sewer System*, provides design standards, limitations and regulations, maintenance operations, and mitigation measures for wastewater infrastructure and operation. Chapter 13.24, *Sewer Connection Charges*, requires a sewer connection permit and payment of applicable fees to connect to the City's sewer system. Chapter 13.26, *Sewer Use Fee*, provides for an annual sewer service charge for all real property within the City which is connected to the City's sewer system. Chapter 13.48, *Required Dedications and Improvements*, requires a property owner to construct or replace public improvements along street and alley frontages as a condition of approval for all building permits for any structure, accessory structure, or addition to an existing structure with a floor area in excess of five hundred square feet.

Gardena Municipal Code Section 18.42.200, *Pre-Permit Requirements*, requires an applicant to submit a sewer capacity study for all projects in accordance with the department of public works policy to ensure that adequate sewer capacity is provided to serve the development being proposed.

Stormwater

Chapter 8.70, *Stormwater and Runoff Pollution Control*, in the City's Municipal Code, provides standards to protect water quality in the City, including the requirements of the Municipal NPDES Permit. Section 8.70.110, *Pollutant Source Reduction*, establishes pollution reduction and mitigation measures for development projects.



See Section 5.9, Hydrology and Water Quality for a list of all applicable regulations related to stormwater runoff.

Solid Waste

Chapter 8.20, *Solid Waste and Recyclable Collection and Disposal*, states that the collection and disposal of solid waste is a matter requiring the control and regulation by the City in order to protect the public peace, health, safety and welfare of the citizens. Chapter 8.20 establishes regulations for solid waste disposal and diversion; authorization for solid waste collection; requirements for collection and recovery facilities; solid waste charges; disposal and processing; prohibited activities; collection requirements; requirements for residential premises; self-hauler requirements; violations; and numerous other operations entwined with solid waste removal.

Electrical Power, Natural Gas, and Telecommunications

Chapter 3.20, *Utility Users' Tax*, in the City's Municipal Code, imposes a tax on users of electrical, natural gas, and telecommunications services within the City.

Chapter 13.64, *Underground Utility Districts*, establishes the roles and responsibilities of utility companies, property owners, and of the City with regards to all underground utilities.

5.16.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to utilities and service systems. A project would result in a significant impact related to utilities and service systems if it would:

- Require or result in the relocation or construction of new or expanded facilities, the construction or relocation of which could cause significant environmental effects (refer to Impact Statement 5.16-1):
 - Water facilities (refer to Impact Statement 5.16-1);
 - Wastewater treatment facilities (refer to Impact Statement 5.16-2);
 - Stormwater and drainage facilities (refer to Impact Statement 5.16-3);
 - Electrical power, natural gas, and telecommunications facilities (refer to Impact Statement 5.16-4);
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years (refer to Impact Statement 5.16-1);
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments (refer to Impact Statement 5.16-2);
- 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 (refer to Impact Statement 5.16-5);



- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste (refer to Impact Statement 5.16-5).

Based on these standards and significance thresholds and criteria, the Project’s effects have been categorized as either “no impact,” a “less than significant impact,” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant impact through the application of mitigation, it is categorized as a “significant unavoidable impact.”

5.16.5 IMPACTS AND MITIGATION MEASURES

Impact 5.16-1: 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?

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

Impact Analysis: The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. As described in Chapter 3.0, Project Description, and summarized in Table 3-3, Proposed Residential Development Potential, future development as contemplated under the proposed Project could yield a net change over existing conditions of an additional 12,167 new housing units, and 7,544,381 less square feet of non-residential building square footage within the Project Area. This new growth may increase the City’s population by approximately 33,338 residents (based on the 2022 California Department of Finance estimated household size of 2.74 persons per household).

Water Conveyance Facilities

As discussed above, water service in the Project Area is provided by the GSWC. The Project is expected to result in increased population in the Project Area, which could require new or expanded water infrastructure. New or expanded water infrastructure required to serve future site-specific development would be located within areas that are already developed and serviced by the GSWC.

Since no specific development projects are proposed as part of the Project, the environmental effects from constructing or expanding facilities are unknown at this time. All water infrastructure construction activities associated with future development would be subject to compliance with existing local, State, and federal laws, ordinances, and regulations, which would ensure impacts are reduced to less than significant levels. Municipal Code Section 3.20.070, *Water Users’ Tax*, imposes a tax on water users in the City and would help fund necessary infrastructure improvements. Implementation of existing regulations and compliance with the General Plan and



Municipal Code would reduce impacts associated with the relocation or construction of new or expanded water facilities to a level that is less than significant.

Water Supply

GSWC’s 2020 UWMP indicates that GSWC can meet projected water demands under normal-, single dry-, and multiple dry-year conditions through 2045 (GSWC, 2021). However, the Project is expected to result in increased population growth in the Project Area, and a corresponding increase in the demand for additional water supplies, which have not been accounted for in the UWMP. As shown in Table 5.16-2, Changes in Project Area Water Demand, the Project would result in increased water demand of approximately 9,133 AFY within the Project Area, which would be a net increase of 6,582 AFY (258 percent) over existing conditions.

**Table 5.16-2
Changes in Project Area Water Demand**

Category	Unit Demand Factor, AFY/Connection ¹	Existing		Proposed Project		Net Water Use (AFY)
		Connections	Water Use (AFY)	Connections	Water Use (AFY)	
Single-family Residential	0.25	154	38.5	0	0	(38.5)
Multi-family Residential	0.89	961	855.3	13,128	11,684	10,828.7
Commercial/Institutional	1.12	288	322.6	0	0	(322.6)
Industrial	3.96	337	1,334.5	0	0	(1,334.5)
Total	--	--	2,551	--	11,684	9,133

Source:
1. GSWC, *Southwest Service Area 2020 Urban Water Management Plan: Table 4-4*, July 2021.

As discussed, the California Urban Water Management Planning Act requires water suppliers to prepare an UWMP every five years to identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years. Current (2020) population used in the UWMP is determined utilizing the DWR Population Tool. However, as noted in the UWMP, the current DWR Population Tool does not contain 2020 census data, and therefore the values may change once the data is available. Additionally, conditions that may have been altered by the pandemic could result in changes. According to the UWMP, projected population is based on the current estimated population (using the DWR Population Tool) and projected growth from the Southern California Association of Governments (SCAG) (2020). The UWMP assumes SCAG’s growth rate to be constant throughout the planning period until 2045.



As discussed in Section 5.12, Population and Housing, SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts for local Los Angeles County governments, among other counties. SCAG provides household, population, and employment projection estimates in five-year increments through 2045. While Project growth projections are anticipated to exceed SCAG's 2045 population, SCAG's projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. It is likely that through a combination of market changes, catalytic projects, updated land use direction in the General Plan, and other factors, Gardena could capture either more or less of expected regional growth than forecasted by SCAG. Discrepancies between Project and regional forecasts can also be attributed to the RHNA process. The proposed Project is intended to accommodate the City's 2021-2029 RHNA; SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs and associated General Plan growth projections will be included as part of SCAG's future growth forecasts. Therefore, future updates to the UWMP will account for future residential growth associated with the City's 2021-2029 RHNA (inventory sites) and the additional residential growth opportunities (non-inventory sites) provided by Project implementation, and would identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years.

As site-specific development projects meeting the conditions for preparation of a Water Supply Assessment are not currently being proposed as part of this Project, there is the potential that for future qualifying projects, a Water Supply Assessment would be required pursuant to SB 610. The Water Supply Assessment discerns whether the expected demand from the development being proposed has been accounted for in the forecasted demands in the most recent UWMP. A Written Verification of Supply per SB 221 is prepared as a condition of approval for a subdivision map of 500 units or more. Considered a fail-safe mechanism to provide sufficient evidence that adequate water supplies are available before construction begins, the Written Verification of Supply is also prepared/adopted by the water supplier and approved by the land use authority. Depending on the project, one or both of these analyses may be required. Development proposals that may not warrant a Water Supply Assessment and/or Written Verification of Supply, but meet the definition of a project under CEQA, would still require an analysis of sufficient water supplies in the CEQA process.

The Gardena General Plan includes goals, policies, and actions directed toward water conservation. These actions would result in reduced water consumption on a per capita basis that would help offset the increased demand from additional residential uses. Title 15 of the Gardena Municipal Code, adopts the CBSC, including CALGreen, which provides building and landscaping standards related to water efficiency and conservation. Section 15.60.010, *Adoption of the California Model Water Efficient Landscape Ordinance*, adopts the 2015 version of the



Model Water Efficient Landscape Ordinance contained in the California Code of Regulations Title 23, Sections 490 through 495.

Individual development projects would be required to comply with the Municipal Code regarding water efficiency and conservation, including the Model Water Efficient Landscape Ordinance to reduce impacts to water supplies and provide for water conservation. Additionally, as individual development projects are proposed, verification of water supply availability would be required to be provided to the City. Through implementation of existing federal, State, and local regulations, including update of the UWMP to account for updated SCAG growth projections, and compliance with the General Plan and Municipal Code, the Project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.16-2: Would the Project require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects?

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

Impact Analysis: As stated, Project implementation could yield a net change over existing conditions of an additional 12,167 new housing units, and 7,544,381 less square feet of non-residential building square footage within the Project Area. This new growth may increase the City's population by approximately 33,338 residents.

Wastewater Conveyance Facilities

The Project Area currently generates approximately 479,791 gpd of wastewater. Project implementation would involve the removal of existing development and the development of new uses. Overall, the Project would allow for the development of 13,128 new residential units. Based on the Draft 2021 Sewer Master Plan's wastewater generation factors of 55 gpd per person, the new residential units would result in approximately 722,040 gpd of wastewater, which would be a net increase of 242,249 gpd (50.5 percent) over existing conditions.

The Project Area is urbanized and contains existing wastewater infrastructure. As indicated in the Draft 2021 Sewer Master Plan, the primary criterion used to identify wastewater pipeline capacity deficiencies or to size new sewer improvements is the peak flow depth criteria, which is represented by the depth to diameter ratio. The Draft 2021 Sewer Master Plan includes an existing and future (based on projected 2045 planning horizon) wastewater system analysis that concluded, in general, most of the City's collection system has sufficient capacity for the existing peak wet weather flow without exceeding the flow depth criteria. The Draft 2021 Sewer Master



Plan identifies improvement projects to mitigate pipeline capacity deficiencies for future (2045) conditions. A total of 15 recommended improvements were identified to address existing capacity deficiencies and 17 recommended improvements were identified to address future (2045) capacity deficiencies. The Draft 2021 Sewer Master Plan also includes a conditions assessment for the City's gravity sewers, manholes, and lift station. Based on the capacity deficiencies and conditions assessment, the Draft 2021 Sewer Master Plan presents a prioritized Capital Improvement Program for the City's wastewater collection system.

The Project does not include specific development proposals; therefore, the environmental effects of future wastewater collection systems are unknown at this time. Future developments would be reviewed by the City, during site plan review in order to determine if sufficient local and trunk sewer capacity exists to serve the specific development, in accordance with Gardena Municipal Code Chapter 18.44, *Site Plan Review*. Gardena Municipal Code Section 18.42.200, *Pre-Permit Requirements*, requires an applicant to submit a sewer capacity study for all projects in accordance with the department of public works policy to ensure that adequate sewer capacity is provided to serve the development being proposed. Additionally, Gardena Municipal Code Title 13, *Public Works*, contains several provisions related to wastewater. Chapter 13.04, *Sewer System*, provides design standards, limitations and regulations, maintenance operations, and mitigation measures for wastewater infrastructure and operation. Chapter 13.48, *Required Dedications and Improvements*, requires a property owner to construct or replace public improvements along street and alley frontages as a condition of approval for all building permits for any structure, accessory structure, or addition to an existing structure with a floor area in excess of five hundred square feet. Chapters 13.24, *Sewer Connection Charges*, and Chapter 13.26, *Sewer Use Fee*, provides for sewer connection and facilities expansion fees. The implementation of existing regulations and compliance with the General Plan and Municipal Code would reduce impacts associated with the relocation or construction of new or expanded wastewater facilities to a level that is less than significant.

Wastewater Treatment

As discussed above, wastewater from the City is conveyed to LACSD's JWPCP located in the City of Carson. The JWPCP has a capacity of 400 MGD and treats approximately 260 MGD of wastewater, resulting in a remaining capacity of 140 MGD (LACSD, 2023). The facility currently has capacity to serve the Project Area. As indicated above, growth associated with Project implementation would generate 722,040 gpd (0.72 MGD) of wastewater within the Planning Area, a net increase of 242,249 gpd (0.24 MGD) over existing conditions. Therefore, there is sufficient capacity to treat additional wastewater generated by Project implementation.

As noted above, the Project enables additional development but does not include specific development proposals. At the time future projects are proposed, they would be required to ensure adequate wastewater treatment capacity exists. Gardena Municipal Code Chapters 13.24, *Sewer Connection Charges*, and Chapter 13.26, *Sewer Use Fee*, provides for sewer connection and facilities expansion fees. Additionally, LACSD charges annual wastewater sewer fees through its



Wastewater Treatment Surcharge Program, as well as sewer connection fees through its Connection Fee Program, in order to maintain and expand wastewater services, including wastewater treatment. The implementation of existing federal, State, and local regulations and compliance with the Gardena General Plan and Municipal Code would ensure adequate wastewater treatment capacity and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.16-3: Would the Project require or result in the relocation or construction of new or expanded stormwater facilities, the construction or relocation of which could cause significant environmental effects?

Impact Analysis: As discussed in Chapter 3.0, Project Description, the City contains a mix of existing on-site development uses, with a limited amount of vacant or underutilized properties. The Project Area is generally developed; areas of impervious surfaces currently exist throughout the Planning Area. Further, the Project Area is served by existing stormwater drainage and conveyance facilities. The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions.

As described in Section 5.9, storm drain infrastructure in the City is jointly owned and operated by the City of Gardena and the Los Angeles County Flood Control District (LACFCD). The Project Area is primarily developed, with limited areas of pervious surfaces. Although future development activities could result in the removal of existing limited pervious surfaces within the Project Area, the majority of development activities associated with implementation of the Project would consist of infill and redevelopment on currently urbanized sites. Future infill and redevelopment activities pursuant to current and updated standards that address stormwater runoff and water quality conditions, such as Low Impact Development (LID) Best Management Practices (BMPs), and landscaping requirements associated with residential developments would likely provide for increased pervious areas and improved opportunities for infiltration when compared to existing conditions. Therefore, implementation of the Project would not substantially increase the rate or amount of surface runoff. Federal, State and local regulations would require individual projects to provide necessary on-site storm drain infrastructure and any off-site infrastructure improvements. The specific impacts of providing new and expanded drainage facilities cannot be determined at this time, as the Project does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities.

Stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development under the proposed Project. As future development and infrastructure projects are



considered by the City, each project would be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. As such, this is a less than significant impact and no additional mitigation is required.

The implementation of existing regulations and compliance with the Gardena General Plan and Municipal Code would reduce impacts associated with the relocation or construction of new or expanded stormwater facilities to a level that is less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Impact 5.16-4: Would the Project require or result in the relocation or construction of new or expanded electrical, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Impact Analysis: In regard to electrical, natural gas, and telecommunication services, the City is within the service areas of SCE, SoCalGas, and various telecommunication providers. The City is generally developed and existing electrical, natural gas, and telecommunications infrastructure exists within the Project Area. New growth accommodated under the proposed Project would require increased electrical, natural gas, and telecommunications services, potentially resulting in the new construction or relocation of facilities. The environmental effects of future expansions of electrical, natural gas, and telecommunication facilities would be evaluated with each development proposal and would require a separate environmental review, as required, related to the construction and operation of new electrical, natural gas, and telecommunications infrastructure. Future implementing projects under the Project would have to coordinate with each utility provider to establish service, provide any necessary extensions of facilities, and comply with regulations in existence at that time. As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the Gardena General Plan, Municipal Code, and other applicable regulations. The implementation of existing regulations and compliance with the General Plan and Municipal Code would reduce impacts associated with the relocation or construction of new or expanded electrical, natural gas, and telecommunications facilities to a level that is less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.



Impact 5.16-5: 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?

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

Impact Analysis: Future development as contemplated under the proposed Project could yield a net change over existing conditions of an additional 12,167 new housing units, and 7,544,381 less square feet of non-residential building square footage within the Project Area. The new residential development may increase the City's population by approximately 33,338 residents. The City of Gardena has achieved a disposal rate of 7.6 pounds per day (PPD) per resident in 2020 (CalRecycle, 2023c). Assuming these disposal rates remain constant throughout the life of the Project, the new growth under Project buildout would result in a net increase of approximately 253,369 PPD of solid waste over existing conditions, which equals 126.7 net tons per day or 46,245.5 net tons of solid waste per year. However, this does not account for the solid waste that is currently generated by the non-residential uses that are currently located within the Project Area and would be removed if new residential development were to occur.

The City's projected increase in solid waste generation is within the permitted capacity of Chiquita Canyon Sanitary Landfill (CalRecycle, 2023a). As noted previously, the City generated approximately 115,967 tons of solid waste in 2019, with the majority (72 percent) being disposed of at the Chiquita Canyon Sanitary Landfill. Another eight percent went to the El Sobrante Landfill (9,816 tons) (CalRecycle, 2023a). Other landfills that received relatively small amounts of waste from the City in 2019 include:

- Antelope Valley Public Landfill (816 tons);
- Azusa Land Reclamation Co. Landfill (6,278 tons);
- Frank R. Bowerman Sanitary LF (3,978 tons);
- Olinda Alpha Landfill (3,071 tons);
- Prima Deshecha Landfill (2,290 tons);
- Simi Valley Landfill & Recycling Center (164 tons); and
- Sunshine Canyon City/County Landfill (5,874 tons).

Chiquita Canyon Sanitary Landfill has a remaining capacity of 60,408,000 cubic yards as of 2018 and has enough projected capacity to serve residents and businesses until approximately 2047. The City's increase in solid waste generation as a result of increased residential development in the Project Area is within the daily permitted capacity of the Chiquita Canyon Landfill. Conservatively assuming the Chiquita Canyon Landfill reaches full capacity, future solid waste would be distributed to the other landfills serving the City. Additionally, all development within the City would be required to comply with waste reduction and recycling requirements, including the Gardena Municipal Code Chapter 8.20, that aim to reduce the amount of solid waste being diverted to the landfill.



As described above, the Gardena Municipal Code, Chapter 8.20 establishes mandatory solid waste and recycling collection to comply with the requirements of AB 939 and AB 341. As permitted by AB 939, the City authorizes a private solid waste franchisee (i.e., Waste Resources) to handle the City's solid waste and cooperate in the preparation of solid waste disposal characterization studies and the preparation of waste stream audits. Waste Resources and the City work together to submit information to meet the reporting requirements of AB 939, or any other law or regulation, to reach the solid waste and recycling goals mandated by the AB 939.

Through the implementation of existing regulations and compliance with the General Plan and Municipal Code, the Project would comply with regulations related to solid waste and would not exceed the permitted capacity of the landfill serving the City; therefore, this is a less than significant impact.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.16.6 CUMULATIVE IMPACTS

Section 4.0, Basis of Cumulative Analysis identifies the methodology used to determine the potential for cumulative growth and development to interact with the proposed Project to the extent that a significant cumulative effect relative to utilities and service systems may occur. The geographic setting for utilities and service systems considers development within the City as well as the service areas specific to water, wastewater conveyance and treatment, and solid waste, which serve a larger region.

Would the project, combined with other related cumulative projects, 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, or have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact Analysis: As discussed, water service in the Project Area is provided by the GSWC. In addition to the Project, cumulative projects within the City would receive water service from GSWC. Similar to future development associated with Project implementation, cumulative development projects would be located within areas that are already developed and serviced by the GSWC. Additionally, Gardena Municipal Code Section 3.20.070, *Water Users' Tax*, imposes a tax on water users in the City and would help fund necessary infrastructure improvements. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded water facilities. Cumulative development projects are anticipated to occur gradually as development occurs in the Project Area and would be required to pay applicable development impact fees to ensure water facilities can be constructed/expanded, if necessary.



Thus, the Project's incremental impacts to water facilities would not be cumulatively considerable.

Project implementation may result in increased population growth in the Project Area, and a corresponding increase in the demand for additional water supplies. Similar to future development associated with Project implementation, cumulative development projects would require an analysis of sufficient water supplies through provisions in SB 610 and/or the CEQA process. Additionally, future development associated with the Project and cumulative projects would be required to comply with existing federal, State, and local regulations, including the General Plan and Municipal Code, to conserve water and ensure the efficient use of available water supplies. Thus, the Project's incremental impacts to water supplies would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects, or result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact Analysis: As discussed, the City and LACSD provide wastewater services to the Project Area. In addition to the Project, cumulative projects within the City would be provided wastewater services by the City and LACSD. Similar to future development associated with Project implementation, cumulative development projects would be located within areas that are already developed and serviced by the City and LACSD. The City reviews site to determine if sufficient local and trunk sewer capacity exists to serve each specific development project, in accordance with Gardena Municipal Code Chapter 18.44, *Site Plan Review*. Additionally, Gardena Municipal Code Chapters 13.24, *Sewer Connection Charges*, and Chapter 13.26, *Sewer Use Fee*, provides for sewer connection and facilities expansion fees that would help fund necessary infrastructure improvements. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded wastewater facilities. Cumulative development projects are anticipated to occur gradually as development occurs in the Project Area and would be required to pay applicable development impact fees to ensure wastewater facilities can be constructed/expanded, if necessary, to ensure adequate capacity to serve the proposed development. Thus, the Project's incremental impacts to wastewater facilities would not be cumulatively considerable.

Project implementation may result in increased population growth in the Project Area, and a corresponding increase in the flow of wastewater requiring treatment. As noted above, the



Project enables additional development but does not include specific development proposals. At the time future projects are proposed, they would be required to ensure adequate wastewater treatment capacity exists. Gardena Municipal Code Chapters 13.24, *Sewer Connection Charges*, and Chapter 13.26, *Sewer Use Fee*, provides for sewer connection and facilities expansion fees. Additionally, LACSD charges annual wastewater sewer fees through its Wastewater Treatment Surcharge Program, as well as sewer connection fees through its Connection Fee Program, in order to maintain and expand wastewater services, including wastewater treatment. Thus, the Project's incremental impacts to wastewater would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded stormwater facilities, the construction or relocation of which could cause significant environmental effects?

Impact Analysis: As discussed, storm drain infrastructure in the Project Area is owned and operated by the City and the LACFCD. The Project Area is primarily developed, with limited areas of pervious surfaces. Similar to the Project, cumulative projects have the potential to slightly increase impervious areas within the Project Area. However, due to the urbanized nature of the Project Area, the majority of development activities associated with cumulative development would consist of infill and redevelopment on currently urbanized sites and would not substantially increase the rate or amount of surface runoff. Federal, State and local regulations would require individual projects to provide necessary on-site storm drain infrastructure and any off-site infrastructure improvements.

The specific impacts of providing new and expanded drainage facilities cannot be determined at this time, as the Project does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities. Stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development under the proposed Project. As future development and cumulative development projects are considered by the City, each project would be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Thus, the Project's incremental impacts to stormwater would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.



Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded electrical, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Impact Analysis: As discussed, the City is within the service areas of SCE, SoCalGas, and various telecommunication providers. The Project Area is primarily developed and includes an existing electrical, natural gas, and telecommunications infrastructure. Similar to the Project, cumulative projects have the potential to increase demand for electrical, natural gas, and telecommunications services, potentially resulting in the new construction or relocation of facilities. The specific impacts of providing new and expanded electrical, natural gas, and telecommunications services cannot be determined at this time, as the Project does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities. The environmental effects of future expansions of electrical, natural gas, and telecommunication facilities would be evaluated with each development proposal and would require a separate environmental review, as required, related to the construction and operation of new electrical, natural gas, and telecommunications infrastructure. Future development associated with the Project and cumulative projects would have to coordinate with each utility provider to establish service, provide any necessary extensions of facilities, and comply with regulations in existence at that time. As future development and cumulative development projects are considered by the City, each project would be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Thus, the Project's incremental impacts to electrical, natural gas, or telecommunications would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, 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, and comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact Analysis: Similar to the Project, cumulative projects have the potential to increase solid waste generated within the Project Area. As described above, the Gardena Municipal Code, Chapter 8.20 establishes mandatory solid waste and recycling collection to comply with the requirements of AB 939 and AB 341. As permitted by AB 939, the City authorizes a private solid waste franchisee (i.e., Waste Resources) to handle the City's solid waste and cooperate in the preparation of solid waste disposal characterization studies and the preparation of waste stream audits. Waste Resources and the City work together to submit information to meet the reporting requirements of AB 939, or any other law or regulation, to reach the solid waste and recycling goals mandated by the AB 939. Future development associated with the Project and cumulative projects would be required to implement existing regulations, including the General Plan and



Municipal Code, to comply with regulations related to solid waste and ensure the permitted capacity of landfills serving the City is not exceeded. Thus, the Project's incremental impacts to solid waste would not be cumulatively considerable.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.16.7 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts associated with utilities and service systems would occur with the proposed Project.

5.16.8 REFERENCES

California Department of Resources Recycling and Recovery (CalRecycle), *Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility*, <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>, accessed February 22, 2023a.

California Department of Resources Recycling and Recovery (CalRecycle), *SWIS Facility/Site Summary: Chiquita Canyon Sanitary*, <https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/1037>, accessed February 22, 2023b.

California Department of Resources Recycling and Recovery (CalRecycle), *Jurisdiction Review Reports*, <https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports>, accessed February 27, 2023c.

City of Gardena, *Final Environmental Impact Report: City of Gardena General Plan 2006*, April 2006.

City of Gardena, *2021 Sewer Master Plan, Draft*, April 2023.

Golden State Water Company (GSWC), *Southwest Service Area 2020 Urban Water Management Plan*, July 2021.

Los Angeles County Sanitation Districts (LACSD), *Joint Water Pollution Control Plant (JWPCP)*, <https://www.lacsd.org/services/wastewater-sewage/facilities/joint-water-pollution-control-plant>, accessed February 22, 2023.

Southern California Electric (SCE), *About Us*, <https://www.sce.com/about-us>, accessed February 22, 2023.

Waste Resources, *City of Gardena*, <https://wasteresources.com/gardena/>, accessed February 22, 2023.



6.0 OTHER CEQA CONSIDERATIONS

Pursuant to CEQA Guidelines Section 15126.2, Consideration and Discussion of Significant Environmental Effects, an EIR is required to consider: (a) The Significant Environmental Effects of the Proposed Project; (b) Energy Impacts; (c) Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented; (d) Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented; and (e) Growth-Inducing Impact of the Proposed Project.

In response to CEQA Guidelines, Section 15162.2 (a), Significant Environmental Effects of the Proposed Project and Section 15162 (c), Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented, are considered and identified in Section 5.0, Environmental Analysis, of this EIR. Energy Impacts, pursuant to CEQA Guidelines Section 15162.2 (b), are analyzed in Section 5.5, Energy.

6.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

According to CEQA Guidelines 15126.2(d), an EIR is required to address any significant irreversible environmental changes that could occur should the proposed Project be implemented. As stated in CEQA Guidelines Section 15126.2(d):

“Uses of nonrenewable 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.”

Determining whether the proposed Project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

CONSUMPTION OF NONRENEWABLE RESOURCES

The environmental impacts associated with implementation of the Project are analyzed in Section 5.0. Future development would consume limited, slowly renewable and non-renewable resources. This consumption would occur during each individual project’s construction phase and would continue throughout its operational lifetime.



Construction associated with future development would require a commitment of resources that would include: (1) building materials; (2) fuel and operational materials/resources; and (3) the transportation of goods and persons to and from individual development sites. Construction would also require the consumption of resources that are not renewable or which may renew so slowly as to be considered non-renewable. These resources would include the following construction supplies: lumber and other forest products; aggregate materials used in concrete and asphalt; metals; and water. Fossil fuels such as gasoline and oil would also be consumed to power construction vehicles and equipment.

The operational activities of new development associated with implementation of the Project would consume resources which would be similar to those currently consumed within the City (i.e., energy resources such as electricity and natural gas, petroleum-based fuels required for vehicle-trips, fossil fuels, and water). Fossil fuels would represent the primary energy source associated with both construction and ongoing operation, and the existing, finite supplies of these natural resources would be incrementally reduced. Future development operations would occur in accordance with California Code of Regulations (CCR) Title 24, Part 6, which sets forth conservation practices that would limit energy consumption. Nonetheless, the proposed Project's energy requirements would represent a long-term commitment of essentially non-renewable resources.

Construction activities associated with implementation of the Project could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions; refer to Section 5.8, Hazards and Hazardous Materials. All potential demolition, grading, and excavation activities would be subject to the established regulatory framework to ensure that hazardous materials are not released into the environment. Compliance with the established regulatory framework and mitigation measures would protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials.

In addition, there is the potential that individual future development projects would use and store limited amounts of potentially hazardous materials typical; refer to Section 5.8. All future development activities requiring the routine use, storage, transport, or disposal of hazardous materials would be subject to all applicable federal, State, and local regulations and standards in place for hazardous materials. Compliance with these regulations and standards would protect against significant and irreversible environmental changes due to the accidental release of hazardous materials.

In conclusion, future construction and operations would result in the irreversible commitment of limited, slowly renewable, and nonrenewable resources, which would limit the availability of these resource quantities for future generations or for other uses during the life of the individual developments. It is noted that the continued use of such resources would be on a relatively small scale in a regional context.



IRRETRIEVABLE COMMITMENTS/IRREVERSIBLE PHYSICAL CHANGES

Implementation of the Project would result in a commitment of land uses designated for the foreseeable future. Land use and development consistent with the Project would result in irreversible commitments by designating land for development that is more intense, in some instances, than current designations allow. Additionally, residential development would be allowed on land not currently designated for residential development. Development would physically change the environment in terms of aesthetics, air emission, noise, and traffic. These physical changes are irreversible after development occurs. Therefore, the Project would result in changes in land use within the Project Area that would commit future generations to these uses.

The Project would support the Gardena General Plan goals and policies that guide growth and development in the City. Construction and operation of future development projects associated with Project implementation would result in the irreversible commitment of limited, slowly renewable, and nonrenewable resources that would limit the availability of these resource quantities for future generations or for other uses during the life of the Project. However, the Project Area is an urbanized area and already uses such resources. Additionally, the continued use of such resources would be on a relatively small scale and consistent with regional and local growth forecasts in the area. As such, although irreversible environmental changes would result from the Project, such changes would not be considered significant.

6.2 GROWTH INDUCING IMPACTS OF THE PROPOSED PROJECT

Section 15126.2(e) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed project. A growth-inducing impact is defined by the CEQA Guidelines as:

“The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”

The State CEQA Guidelines do not provide specific criteria for evaluating growth inducement. Growth-inducing impacts fall into two general categories: direct or indirect. Direct growth-inducing impacts are generally associated with new residences or businesses that could induce population growth directly. Indirect growth-inducing impacts provide urban services, such as the extension of roads or other infrastructure, to an undeveloped area that could induce population growth indirectly.



In general, a project may foster spatial, economic, or population growth in a geographic area if it results in any of the following:

- Removal of an impediment to growth (e.g., establishment of an essential public service and provision of new access to an area);
- Fostering of economic expansion or growth (e.g., changes in revenue base and employment expansion);
- Fostering of population growth (e.g., construction of additional housing), either directly or indirectly;
- Establishment of a precedent-setting action (e.g., an innovation, a change in zoning and general plan amendment approval); or
- Development of or encroachment on an isolated or adjacent area of open space (being distinct from an infill project).

Should a project meet any one of the above-listed criteria, it may be considered growth inducing. Generally, growth-inducing projects are either located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure such as sewer and water facilities or roadways, or encourage premature or unplanned growth. Note that the CEQA Guidelines require an EIR to “discuss the ways” a project could be growth inducing and to “discuss the characteristics of some projects that may encourage...activities that could significantly affect the environment.” However, the CEQA Guidelines do not require that an EIR predict (or speculate) specifically where such growth would occur, in what form it would occur, or when it would occur. The answers to such questions require speculation, which CEQA discourages (refer to CEQA Guidelines Section 15145).

In accordance with the CEQA Guidelines and based on the above-listed criteria, the Project’s potential growth-inducing impacts are evaluated below.

Removal of an Impediment to Growth: The Project Area and surrounding area are fully developed and urbanized. Transportation and infrastructure exist to serve the range of residential and non-residential uses within the surrounding area. The Project does not introduce new roadways or new or significantly expanded infrastructure that would provide for additional development within the surrounding area. Potential infrastructure improvements associated with future site-specific development would not remove obstacles to growth since the Project Area and surrounding area are already served by existing utility providers and potential improvements would be to serve the specific development being proposed. As the Project would not establish an essential public service or provide new access to an area, the proposed Project would not be considered growth-inducing.

Economic Expansion or Growth: Implementation of the proposed Project would allow for the development of up to 12,167 net new housing units, resulting in the potential removal of approximately 7,544,381 square feet of non-residential development. The construction of future development projects would result in construction-related jobs. However, construction activities



and durations would vary depending upon the specific development and would be temporary in respect to each individual development site and therefore, would not be considered growth-inducing.

As Project implementation would involve an overall reduction in non-residential square footage (a potential reduction of 7,544,381 square feet), in order to accommodate new residential development, long-term employment opportunities are not anticipated. However, the Project would allow for the development of up to 12,167 net new housing units with a population increase of approximately 32,915. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development and densities when compared to existing conditions. Potential new residents would seek shopping, entertainment, employment, and other economic opportunities in the City and surrounding area. This could create an increased demand for goods and services that would encourage the creation of new businesses or the expansion of existing businesses. Although economic growth is anticipated within the Project Area, significant economic growth resulting in the potential to significantly affect the environment is not anticipated as the surrounding area is urbanized.

Population Growth: A project could induce population growth in an area either directly or indirectly. More specifically, the development of new residences or businesses could induce population growth directly, whereas the extension of roads or other infrastructure could induce population growth indirectly. The Project Area is located throughout the City, which is an urbanized area served by existing roads, transit, and infrastructure. The Project does not involve the extension of roads or infrastructure into undeveloped areas; refer to the “Removal of an Impediment to Growth” discussion above.

As analyzed in Section 5.12, Population and Housing, implementation of the proposed Project would allow for the development of up to 12,167 net new housing units with a population increase of approximately 33,338 people. It is noted that residential development associated with implementation of the proposed land use designations would result in a reduction of the non-residential development capacity anticipated by the General Plan, as sites currently anticipated for non-residential development would be developed with residential uses. As the Project provides for increased residential development opportunities, the Project is not anticipated to provide significant additional employment opportunities within the area.

Although the proposed Project would provide for increased population growth within the Project Area when compared to the current General Plan, the proposed Project is intended to identify and plan for future population growth and housing development within the City. The Project would implement the goals and policies of the General Plan and accommodate the City’s fair share of statewide housing needs, which are allocated by SCAG, based on regional numbers provided by the HCD on a regular basis (every five to eight years). The City of Gardena 2021-2029 Housing Element was adopted in February 2023 and accommodates the City’s share of the regional housing need for the 2021-2029 RHNA period of 5,735 units. The City’s 2021-2029 Housing Element identifies the implementation of Housing Overlays as the primary opportunity



to accommodate the City's RHNA allocation. In addition to implementation of the housing overlays to the parcels (Inventory Sites) identified in the 2021-2029 Housing Element, the City identified opportunities for the exploration of additional residential development by proposing to apply the housing overlays to additional parcels (Non-inventory Sites) and introducing and applying Very High-Density Residential land use designations and zones. The Project has the potential to yield an additional 12,167 dwelling units and 33,338 residents over existing conditions based on a DOF persons per household of 2.74. This would be an approximately 56 percent increase over existing conditions and an approximately 42 percent increase over SCAG's projected future conditions (2045). Thus, Project implementation would exceed the population projections anticipated by SCAG's growth forecasts and the City's General Plan.

SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts for local Los Angeles County governments, among other counties. SCAG provides household, population, and employment projection estimates in five-year increments through 2045. While Project growth projections are anticipated to exceed SCAG's 2045 population, SCAG's projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. It is likely that through a combination of market changes, catalytic projects, updated land use direction in the General Plan, and other factors, Gardena could capture either more or less of expected regional growth than forecasted by SCAG. Discrepancies between Project and regional forecasts can also be attributed to the RHNA process. The proposed Project is intended to accommodate the City's 2021-2029 RHNA; SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs and associated General Plan growth projections will be included as part of SCAG's future growth forecasts.

The proposed Project does not include site-specific development and would provide for the planning of the potential growth associated with the RHNA and additional residential development, which would also be considered as part of future updates to plans and programs, including the next update to SCAG's RTP/SCS. The General Plan includes policies that reduce environmental impacts associated with growth, such as air quality, noise, and traffic; Sections 5.1 through 5.16 and 6.0 of this Draft EIR provide a discussion of environmental effects associated with overall development allowed under the proposed Project. Each of these EIR sections include relevant policies and action items that would reduce potential environmental impacts associated with growth, to the greatest extent feasible. The General Plan also includes policies that regulate direct population and housing growth to ensure adequate services and infrastructure are provided to serve direct growth associated with site-specific development. Land Use Policy 1.5 provides for adequate residential amenities such as open space, recreation, off-street parking and pedestrian features in multi-family residential developments. Land Use Policy 1.6, ensures residential densities are compatible with available public service and infrastructure systems. Future residential development would be required to demonstrate sufficient service and



infrastructure capacities are available to serve the development being proposed at that time. Land Use Policy 3.10 ensures new development provides adequate improvements, dedications, and fees to the City to fully cover the cost of expanded City services and facilities when required. Municipal Code Chapter 15.48, *Construction and development fees*, imposes a nonrecurring fee upon the development and construction of new multi-unit residential dwelling units to provide revenues with which the City may meet, deal with, and solve serious problems created by the occupancy and construction of such developments within the City. A multi-unit residential development impact license fee is imposed upon the occupancy and construction of each new dwelling unit. All proceeds from the fees collected are paid to a special fund to be applied to the costs incurred by the City associated with the burden increased by the multi-unit residential facilities, open space, drainage and other public facilities and services related thereto. Individual development projects would be reviewed to ensure that adequate levels of public services and facilities are provided and that payment of fees occur to offset expansion of such services and facilities associated with site-specific growth and development.

The Project would not result in land use changes, nor implement any new policies that could induce substantial unplanned population or employment growth within other areas of the region. The Project is in an urban area with existing infrastructure that can support future infill development and redevelopment and the potential physical environmental impacts of such improvements are analyzed in Section 5.16, Utilities and Service Systems. No additional infrastructure improvements (e.g., roadways and utilities) would be implemented that could indirectly induce population growth elsewhere in the City.

Establishment of a Precedent-Setting Action: The Project proposes to amend the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels, resolve split-zoned parcels, and resolve inconsistencies between the zones and existing on-site conditions. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development when compared to existing conditions. There is no increased development capacity for those parcels to be redesignated or rezoned only to resolve inconsistencies with existing on-site conditions. The proposed approvals would only regulate future land development within the Project Area and would not induce growth within the surrounding area. Further, implementation of the Project would not establish a procedure that would make future General Plan or zoning amendments more likely. Discretionary projects within the City would also be subject to environmental review on a project-by-project basis and Project implementation would not involve a precedent-setting action that could significantly impact the environment.

Development or Encroachment of Open Space: As stated, the Project Area is located within an urbanized area of the City. Park and open space resources include Rowley Park, Bell Park, Mas Fukai Park, Arthur Johnson Park, Freeman Park, Thornburg Park, Harvard Parkette, and the Willows Wetland Preserve. The Project does not propose modifications to these existing resources and would not result in encroachment into these areas. The Project would not be



growth-inducing with respect to development or encroachment into an isolated or adjacent area of an existing open space.



7.0 ALTERNATIVES TO THE PROPOSED PROJECT

7.1 INTRODUCTION

Under CEQA, the identification and analysis of alternatives to a project is a fundamental part of the environmental review process. CEQA Public Resources Code Section 21002.1(a) establishes the need to address alternatives in an Environmental Impact Report (EIR) by stating that in addition to determining a project’s significant environmental impacts and indicating potential means of mitigating or avoiding those impacts, “the purpose of an environmental impact report is ... to identify alternatives to the project.”

Direction regarding the definition of project alternatives is provided in the CEQA Guidelines as follows:

An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.

The CEQA Guidelines emphasize that the selection of project alternatives is to be based primarily on the ability to reduce significant effects relative to the proposed project, “even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.” The range of alternatives is to be guided by a “rule of reason,” such that only those alternatives necessary to permit a reasoned choice are addressed.

Project alternatives selected for analysis must be considered for their feasibility. Specifically, CEQA Guidelines Section 15126.6(f)(1) states that:

Among the factors that may be taken into account when addressing the feasibility of alternatives are 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...

Beyond these factors, CEQA Guidelines Section 15126.6(e) also require the analysis of a “no project” alternative and an evaluation of alternative location(s) for the project, if feasible. Based on the alternatives analysis, an environmentally superior alternative is to be designated. If the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives. In addition, CEQA Guidelines Section 15126.6(c) requires that an EIR identify any alternatives that were considered for analysis but rejected as infeasible and discuss the reasons for their rejection.



The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. The range of potential alternatives to the proposed project shall also include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Among the factors that may be considered when addressing the feasibility of alternatives are 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). Only locations that would avoid or substantially lessen any of the project’s significant effects need be considered for inclusion. An alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative need not be considered.

7.2 ALTERNATIVES CONSIDERED IN THIS EIR

Potential environmental impacts associated with the following alternatives, as described further below, are compared to the Project’s impacts:

- Alternative 1 – “No Project/Existing General Plan” Alternative
- Alternative 2 – “Proposed Project With Inventory Sites Only” Alternative
- Alternative 3 – “Proposed Project With Fewer Non-inventory Sites” Alternative

Throughout the following analysis, impacts of the alternatives are analyzed for each of the issue areas examined in Section 5.0 of this EIR, allowing for a comparison of each alternative to the proposed action on an issue-by-issue basis.

FACTORS GUIDING SELECTION OF ALTERNATIVES

An EIR must only discuss in detail an alternative that is capable of feasibly attaining most of the basic objectives associated with an action, while at the same time avoiding or substantially lessening any of the significant effects associated with the proposed project. As described in Chapter 3.0, *Project Description*, the following objectives have been identified for the proposed Project:

Implement Housing Element programs: Several of the programs described in the City’s 6th Cycle Housing Element are intended to increase residential development potential to make Gardena’s share of regional housing development goals attainable and to implement state law. The implementation of the Housing Element programs is achieved through a combination of Land Use Element, zoning text, and zoning map amendments, as well as the adoption of new policies and procedures. The implementation of these various amendments and changes is the objective of this project.



Create consistency between general plan and zoning: Recent court decisions and amendments to state law provide that where there is a conflict between density allowed in the general plan and zoning, the general plan will prevail. In order to insure that properties will not be developed at a higher density than originally anticipated by the City's zoning, new land use designations and zoning designations are being created to resolve inconsistencies.

Preservation of multi-family lots for higher density: To assist the City in reaching its RHNA numbers and providing as much housing as possible, minimum densities are imposed.

Provide opportunities for a mix of housing at varying densities: To meet the needs of current and future Gardena residents, maintain existing residential land use and zoning designations, while creating and applying new and modified land use and zoning designations throughout the City that allow for housing at varying densities.

Provide opportunities to align housing production with state and local sustainability goals: Contribute toward the reduction of vehicle miles traveled (VMT) and greenhouse gas emissions by allowing for infill residential and mixed-use development at higher densities in proximity to areas served by transit, jobs, and services.

SIGNIFICANT AND UNAVOIDABLE IMPACTS

Pursuant to Section 15126.6(a) of the CEQA Guidelines, an EIR shall describe a range of reasonable alternatives to the project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. Only those impacts found significant and unavoidable are relevant in making the final determination of whether an alternative is environmentally superior or inferior to the proposed Project.

As analyzed in Section 5.0 of this EIR, the Land Use Plan and Zoning Amendment Project would result in the following significant and unavoidable impacts:

Air Quality

- The Project would not be consistent with AQMP Consistency Criteria No. 1 and No. 2 and would therefore conflict with or obstruct implementation of the applicable air quality plan resulting in a significant project and cumulative project impact.
- Project implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts during construction activities.



Public Services

- Project implementation would 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.
- Project implementation would result in a cumulatively considerable contribution to the increase in 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.

All other impacts are less than significant or can be reduced to a less than significant level with adherence to the regulatory requirements and implementation of identified mitigation measures. This section considers alternatives that could otherwise avoid or minimize these significant and unavoidable impacts. A description of each alternative and a comparative environmental evaluation of the impacts identified for the proposed Project is provided below.

ALTERNATIVES TO THE PROPOSED PROJECT

Three alternatives to the proposed Project were considered based on the analysis performed to identify the environmental effects of the proposed Project. The alternatives analyzed in this EIR include the following:

Alternative 1: No Project/Existing General Plan

As required by CEQA Guidelines Section 15126.6(e), under Alternative 1, the City would not implement the Land Use Plan and Zoning Amendment Project. This Alternative assumes the City Council would not approve the entire Project, as defined and analyzed in this EIR, and would therefore take an affirmative action to rescind changes to the Land Use Map, Zoning Code, and Zoning Map that were previously approved in February 2023.

Specifically, the approvals associated with Resolution No. 6620 updating the Land Use Plan, including changes to the Land Use Map, Urgency Ordinance No. 1847¹ amending the Zoning Code and revising the Zoning Map, and Resolution No. 6621 adopting a color palette for buildings, fences, and walls would be rescinded, thereby reverting back to the General Plan, Zoning Code, and Zoning Map in effect prior to February 15, 2023. The exception would be the pre-permit requirements (Municipal Code Section 18.42.200), which include providing a geotechnical

¹ In addition to the Urgency Ordinance, the same changes to the Zoning Code and Zoning map were also made by Ordinance No. 1848 which was introduced on February 15, 2023 and adopted on February 28, 2023.



investigation; compliance with air quality objective standards; provision of demolition and construction waste recycling plans; compliance with the noise ordinance and noise reduction techniques; submittal of a sewer capacity study; and submittal of a Phase I Environmental Site Assessment under specific conditions, and post-permit requirements (Municipal Code Section 18.42.210) including compliance with all mitigation measures in the mitigation monitoring program for the City's General Plan and implementation of mitigation measures to specifically address paleontological resources, tribal cultural resources, and migratory birds established under Urgency Ordinance No. 1847, which amended Title 18 of the Gardena Municipal Code. These requirements would continue to be required under this Alternative.

Additionally, this Alternative would not result in land use and zoning changes to the Non-inventory Sites to allow for additional residential development or amendment of the Zoning Map to eliminate split-zoned properties or re-zone other properties to match the existing uses, densities, or intensities that already occur on the property. This Alternative assumes development of the Project Area would occur in accordance with the development potential assumed in the General Plan Community Development Element's Land Use Plan as it existed in March 2021, which would not be consistent with the adopted 2021-2029 Housing Element.

[Alternative 2: Proposed Project With Inventory Sites Only](#)

Alternative 2 would implement all components of the Project, but without applying the Housing Overlays to the Non-inventory Sites. The land use designations and zoning for the Non-inventory Sites would remain unchanged from existing conditions. Alternative 2 would continue to implement the Housing Element through changes to the land use designations and zoning for the 122 Inventory Sites, consistent with the proposed Project. The proposed amendments to the Land Use Plan of the Community Development Element including technical updates, proposed Zoning Code amendments, including new zoning designations with development standards, and Zoning Map amendments to apply the new zones and to eliminate split-zoned properties and rezone other properties to match the existing uses, densities or intensities, and to rescind the Artesia Corridor Specific Plan (ACSP) would also occur under Alternative 2. Overall, Alternative 2 would allow for reduced residential development potential when compared to the Project; refer to [Table 7-1, Net Development Potential By Alternative](#).

[Alternative 3: Proposed Project With Fewer Non-inventory Sites](#)

Alternative 3 would implement all components of the Project, but fewer Non-inventory Sites would be included; therefore, fewer sites would receive Housing Overlays. Alternative 3 would continue to implement the Housing Element through changes to the land use designations and zoning for the 122 Inventory Sites, consisting of 468 parcels, and would provide additional housing opportunities within 672 Non-inventory Sites, consistent with the proposed Project (130 fewer Non-inventory Sites when compared to the Project). The proposed amendments to the Land Use Plan of the Community Development Element including technical updates, proposed



Zoning Code amendments, including new zoning designations with development standards, and Zoning Map amendments to apply the new zones and to eliminate split-zoned properties and rezone other properties to match the existing uses, densities or intensities, and to rescind the Artesia Corridor Specific Plan (ACSP) would also occur under Alternative 3. Overall, Alternative 3 would allow for reduced residential development potential when compared to the Project; refer to [Table 7-1](#).

Table 7-1
Net Development Potential By Alternative

Alternatives	Dwelling Units		Non-Residential Development (square feet)
	Single-Family Development	Multi-Family Development	
Proposed Project	-154	+12,167	-7,544,381
Alternative 1: No Project/Existing General Plan	0	+2,563	+3,626,289
Alternative 2: Proposed Project With Inventory Sites Only	-26	+7,436	-4,413,275
Alternative 3: Proposed Project With Fewer Non-inventory Sites	-146	+10,371	-6,087,399
Source: City of Gardena, November 22, 2022.			

7.3 ENVIRONMENTAL ANALYSIS

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for each of the environmental issue areas analyzed in this EIR. Following the analysis of each alternative, [Table 7-7, Comparison of Alternatives](#), summarizes the comparative effects of each alternative with the proposed Project.

ALTERNATIVE 1 – NO PROJECT/EXISTING GENERAL PLAN

As described above, Alternative 1 assumes the Project would not be implemented and development of the Project Area would occur in accordance with the development potential assumed in the General Plan Community Development Element’s Land Use Plan as it existed in March 2021, which would not be consistent with the adopted 2021-2029 Housing Element.

[Table 7-2, Alternative 1: No Project/Existing General Plan Net Development Compared to the Proposed Project](#), compares the assumed development potential for the Project Area associated with the existing General Plan and the proposed Project buildout.



Table 7-2
Alternative 1: No Project/Existing General Plan Net Development
Compared to the Proposed Project

Alternative	Single Family Dwelling Units	Multiple Family Dwelling Units	Non-Residential Development Building Square Feet
Alternative 1: No Project/Existing General Plan	0	+2,563	+3,626,289
Proposed Project	-154	+12,167	-7,544,381

[Aesthetics](#)

As described in Section 5.1, Aesthetics, impacts related to Aesthetics were found to be less than significant. The Project would provide for increased development within the Project Area that would allow for new residential development or increased residential development and densities when compared to existing conditions. Alternative 1 assumes development of the Project Area would occur in accordance with the development potential assumed in the General Plan Community Development Element’s Land Use Plan as it existed in March 2021. Buildout under Alternative 1 has a net development potential of 2,563 additional multi-family units and 3,626,289 square feet of non-residential development over existing conditions. Therefore, Alternative 1 would result in less multi-family residential development and greater non-residential development when compared to the proposed Project. Overall the Project Area would experience significant development compared to existing conditions which would change the character and image of the area under both Alternative 1 and the proposed Project.

Development under either Alternative 1 or the proposed Project would be guided by Gardena Municipal Code Title 18 (i.e., the Zoning Code), which contains land use zoning regulations and design guidelines for development within the City. Individual projects would be reviewed under both Alternative 1 and the proposed Project to ensure the development being proposed at the time is consistent with the applicable development standards. However, as changes to the Zoning Code that were previously approved in February 2023 would be rescinded under Alternative 1 with the exception of the pre- and post-permit requirements, Alternative 1 would generally not address the visual character of future development to the extent of the Project. For example, Alternative 1 would rescind text changes to Section 18.42.120, *Residential Design Criteria*, which establishes residential criteria for all multi-family and overlay zones, including multifamily site design in residential and commercial zones; massing and articulation; exterior surfaces; roofs; main entries; windows, trellises; lighting; and balconies, porches, and other projections. Alternative 1 would also rescind Chapter 18.45, *Design Review*, which was added to the Zoning



Code to ensure that a proposed project meets all applicable objective standards while also encouraging affordable housing. As such, Alternative 1 would be considered environmentally inferior to the Project.

Agriculture and Forestry Resources

As described in Section 8.0, Effects Found Not To Be Significant, the Project would result in no impacts to agriculture and forestry resources. Given that the City does not contain any mapped Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; does not contain zones for agricultural use or properties under a Williamson Act contract; and does not contain forest land, timberland, or timberland zoned Timberland Production, impacts associated with Alternative 1 would be the same and no impacts would occur. As such, Alternative 1 would be neither environmentally superior nor inferior to the Project.

Air Quality

As described in Section 5.2, Air Quality, construction and operation of future developments would occur within close proximity to sensitive receptors, and there is the potential for construction emissions to exceed regulatory levels. The following significant impacts related to air quality have been identified:

- The Project would not be consistent with AQMP Consistency Criteria No. 1 and No. 2 and would therefore conflict with or obstruct implementation of the applicable air quality plan resulting in a significant project and cumulative project impact.
- Project implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts during construction activities.

Although the Project's operational impacts would be below the applicable SCAQMD's regional thresholds for operational emissions, the Project's construction impacts as a whole would exceed SCAQMD's thresholds for construction emissions. Therefore, the Project would violate air quality standards during Project construction and would not be consistent with the first criterion of the SCAQMD's AQMP, and therefore would generate a significant and unavoidable impact. Additionally, the Project would allow for the development of up to 12,167 net new housing units with a population increase of approximately 33,338 residents based on a DOF persons per household of 2.74. This would be an approximate 56 percent increase over existing conditions and an approximate 42 percent increase over SCAG's projected future conditions (2045). Since Project implementation accommodates residential development opportunities that exceed the City's 2021-2029 RHNA and would exceed the AQMP's growth assumptions since they are based on SCAG's forecast data, the Project would not be consistent with the second criterion, and therefore would generate a significant and unavoidable impact relative to this topic.

In order to reduce impacts associated with construction activities, future development would be required to comply with Mitigation Measures AQ-1 through AQ-7, which would require



construction activities to utilize “Super-Compliant” low VOC paints that have no more than 10 g/L of VOC, which exceeds the regulatory VOC limits put forth by SCAQMD’s Rule 1113; require all construction equipment greater than 150 horsepower (>150 HP) to be CARB certified tier 4 or higher; and require construction activities to use electrical and alternative fueled equipment, and other similar measures. Additionally, future development would be subject to compliance with SCAQMD Rules 402, 403, and 1113, which would reduce specific construction-related emissions. With implementation of Mitigation Measures AQ-1 through AQ-7, emissions of ROG, NO_x, CO, and PM from construction activities would be reduced and emissions from most individual developments projects within the Project Area would be reduced to below the SCAQMD significance thresholds for construction. However, due to the unknown detail about future development projects and the potential overlap of construction activities, it cannot be assured that the mitigation measures would reduce emissions below the SCAQMD significance thresholds. Therefore, impacts related to construction emissions would remain significant and unavoidable.

In regards to operational emissions, area source emissions, energy source emissions, and mobile source emissions, emission calculations demonstrate that Project operations would not exceed the SCAQMD thresholds for any criteria air pollutants, when compared to the existing conditions, and the Project would generate a net benefit in these areas since the existing scenario generates greater emissions than the proposed Project.

The localized construction emissions analysis concludes that the Project would not result in significant concentrations of pollutants at nearby sensitive receptors. In addition, specific development projects would be subject to compliance with SCAQMD Rules 402, 403, and 1113, which would further reduce specific construction-related emissions. Therefore, the proposed Project would result in a less than significant impact concerning LSTs during construction activities. Additionally, future residential developments associated with implementation of the proposed Project would not result in significant concentrations of pollutants at nearby sensitive receptors, and impacts associated with the release of toxic air contaminants would be less than significant. Further, Project-related emissions would not exceed the ambient air quality standards or cause an increase in the frequency or severity of existing violations of air quality standards; would not generate CO hotspots; would not expose sensitive receptors to substantial amounts of air toxins due to construction-related diesel particulate matter; and would not create objectionable odors.

Future development under both Alternative 1 and the proposed Project would be required to adhere to the same policy guidance and local, State, and regional air quality measures, including implementation of Mitigation Measures AQ-1 through AQ-7. As changes to the Zoning Code that were previously approved in February 2023 would be rescinded under Alternative 1 with the exception of the pre- and post-permit requirements, both Alternative 1 and the proposed Project would also be required to comply with Section 18.42.200, *Pre-permit Requirements*, of the



Gardena Municipal Code, which requires development projects to comply with Rule 403 for fugitive dust control, Rule 1113 for architectural coatings, Rule 1403 for asbestos-containing materials, and Regulation XIII for new on-site nitrogen oxide emissions.

Alternative 1 assumes development of the Project Area would occur in accordance with the development potential assumed in the General Plan Community Development Element's Land Use Plan as it existed in March 2021, and therefore, would not provide opportunities for infill residential and mixed-use development at higher densities in proximity to areas served by transit, jobs, and services to the extent of the Project. However, Alternative 1 would be consistent with the AQMP's growth assumptions and would be required to adhere to the same policy guidance and local, State, and regional air quality measures as the Project. Therefore, Alternative 1 would be considered environmentally superior to the Project.

Biological Resources

The Project Area is highly urbanized and developed with residential and non-residential uses. As described in Section 5.3, Biological Resources, the City is not known to support any significant wildlife or native planning communities or species. Further, the proposed Project does not include any specific development proposals and would not result in significant direct impacts to existing biological resources. Similar to the parcels identified for land use and zone changes under the proposed Project, future development under Alternative 1 is anticipated to occur within urbanized areas that are primarily developed or paved, with landscaping consisting primarily of ornamental and/or nonnative plant species. Future development under both the Project and Alternative 1 would not occur within Open-Space-designated land or within the Willows Wetland Preserve. Under both scenarios, it is possible that specific properties proposed for future development could include trees with the potential to support nesting migratory birds that are protected by the Migratory Bird Treaty Act and California Fish and Game Code. Future construction activities or removal of the trees could potentially impact nesting migratory birds. To address potential impacts to migratory birds, future development that would result in construction activities or removal of trees with the potential to support nesting migratory birds would be required to comply with Municipal Code Section 18.42.210, *Post-permit Requirements*, which requires construction activities to occur outside of the State identified nesting season for migratory birds (typically March 15 through September 1), if possible. If construction is conducted during nesting season, a Pre-construction Nesting Bird Survey would be conducted by a qualified professional biologist no more than seven days prior to the beginning of any project-related physical activity that is likely to impact migratory birds. If active nests are found during the Pre-Construction Nesting Bird Survey, a Nesting Bird Plan (NBP) would be prepared by a qualified biologist and implemented during construction. At a minimum, the NBP would be required to include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. Compliance with the Municipal Code requirements for migratory bird protection



would reduce potential impacts to nesting migratory birds under both Alternative 1 and the proposed Project to a less than significant level.

Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the General Plan Land Use Plan as it existed in March 2021. When compared to the Project, Alternative 1 would allow for less residential development potential and greater non-residential development potential. The Project Area does not provide for habitat linkages. Thus, neither Alternative 1 nor the Project would 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. Further, the Project Area is urbanized and is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

As with the proposed Project, future development accommodated under Alternative 1 would be subject to all applicable Federal, State, regional, and local policies and regulations related to the protection of biological resources, including Gardena Municipal Code Chapter 13.60, which establishes requirements for the preservation and proper maintenance of existing trees located on public property, as well as certain trees located on private property. Neither Alternative 1 nor the Project would alter or conflict with the Plan for the Gardena Willows Wetland, and any future development near the Willows Wetland Preserve would be required to comply with the General Plan goal and policies to preserve and enhance the Willows Wetlands and to protect its natural resources, including implementation of the Plan for the Gardena Willows Wetland. Therefore, the impact to biological resources under the Project and Alternative 1 would remain the same. As such, Alternative 1 would be neither environmentally superior nor inferior to the Project.

Cultural Resources

As described in Section 5.4, Cultural Resources, while the proposed Project does not involve site-specific development and does not directly propose any changes to any historic resources, future development allowed under the proposed Project could cause a substantial adverse change in the significance of known historical resources or unknown historical resources which have not yet been identified. Additionally, future development allowed under the proposed Project could cause a substantial adverse change in the significance of unknown archaeological resources which have not yet been identified. Mitigation Measure CUL-1 would ensure evaluation of a project site for historical resources and, if necessary, implementation of mitigation measures to reduce impacts to a level that is less than significant. Mitigation Measure CUL-2 would ensure that future ground disturbing projects would be required to conduct a technical cultural resources assessment by a qualified archaeologist meeting Secretary of the Interior Standards, or agree to full-time monitoring by an archaeologist and a Native American monitor. If resources are known or reasonably anticipated, the assessment must take appropriate measures to protect or preserve them for study. Compliance with existing Federal, State, and local regulations,



including the General Plan and implementation of Mitigation Measures CUL-1 and CUL-2, would reduce potential impacts to historical and archeological resources to a level that is less than significant.

Although no conditions exist that suggest human remains are likely to be found in the Project Area, future construction activities could have the potential to disturb or destroy buried Native American human remains as well as other human remains. As required by State law, the requirements and procedures set forth in PRC Section 5097.98 would be implemented during future development activities, including notification of the County Coroner, notification of the NAHC and consultation with the individual identified by the NAHC to be the “most likely descendant (MLD).” Additionally, Gardena Municipal Code Section 18.42.210, *Post-permit Requirements*, contains protections pertaining to human remains. Specifically, Section 18.42.210(D)(2) requires, in compliance with State law, that if human remains are unearthed, the project developer, pursuant to State Health and Safety Code Section 7050.5, will contact the County coroner and ensure no further disturbance occurs until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the Native American Heritage Commission (NAHC) must be notified within twenty-four hours. Thus, compliance with the Gardena Municipal Code, Health and Safety Code Sections 7050.5 to 7055, and PRC Section 5097.98 would ensure that in the event human remains are discovered, the remains would be handled in accordance with applicable laws, and impacts would be less than significant.

Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the existing General Plan Land Use Plan, as it existed in March 2021. When compared to the Project, Alternative 1 would allow for less residential development potential and greater non-residential development potential. As with the proposed Project, there is potential that future development allowed under Alternative 1 could cause a substantial adverse change in the significance of known historic resources, and unknown historic and archaeological resources, or disturb or destroy buried human remains. Both the Project and Alternative 1 would be required to comply with the existing regulatory environment, including Gardena Municipal Code Section 18.42.210, which would reduce potential impacts to human remains to less than significant. Similar to the Project, Alternative 1 would also be required to implement Mitigation Measures CUL-1 and CUL-2. As such, Alternative 1 would be neither environmentally superior nor inferior to the Project.

Energy

As described in Section 5.5, Energy, Project implementation would use energy resources for the operation of new residential buildings (e.g., electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel fuel) generated by the Project (both during project construction and operation), and from off-road construction activities (e.g., diesel fuel) associated with implementation of the Project. Future development projects associated with implementation of



the proposed Project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. Therefore, energy use impacts associated with the implementation of the Project would be less than significant.

Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the General Plan Land Use Plan as it existed in March 2021. When compared to the Project, Alternative 1 would allow for less residential development potential and greater non-residential development potential. While new development under Alternative 1 would be required to adhere to the same local, State, and regional measures regulating energy usage as the Project, Alternative 1 would not provide for the redevelopment of industrial sites to the extent of the Project. These sites are primarily developed with older buildings that do not provide for energy efficiencies as currently required under Title 24 building efficiency standards. Therefore, operational energy use would be more inefficient when compared to the Project since redevelopment of older buildings would not occur to the extent of the Project. As such, Alternative 1 would be considered environmentally inferior to the Project.

Geology and Soils

The Project would result in less than significant impacts involving the exposure of additional people or structures to potential adverse effects associated with seismic hazards (i.e., strong seismic ground shaking, and seismically induced liquefaction, lateral spreading, landsliding, and settlement), geologic hazards (i.e., subsidence, shallow groundwater) and soil erosion.

As described in Section 5.6, Geology and Soils, the Planning Area contains areas with low and moderate potential for fossils. It is possible that undiscovered paleontological resources could be encountered during future ground-disturbing activities within the Project Area. In compliance with the City's Municipal Code Section 18.42.210, *Post-permit Requirements*, prior to ground-disturbance activities, a qualified vertebrate paleontologist would be required to provide WEAP Training for construction personnel. If fossils or fossil bearing deposits are encountered during future ground disturbing activities, work would halt and a professional vertebrate paleontologist would be contacted to assess and evaluate the find pursuant to State CEQA Guidelines. Compliance with the City's Municipal Code requirements would reduce potential impacts to unanticipated paleontological resources associated with ground disturbance activities within areas identified as having a low potential for fossils.

In order to reduce potentially significant impacts to paleontological resources associated with future development under the Project in undisturbed sediments ranked moderate or above, project applicants would be required to implement Mitigation Measure GEO-1, which would require either a technical paleontological assessment consisting of a record search, survey, background context, and project specific recommendations or an agreement to conduct monitoring of all excavations below five feet. If resources are known or reasonably anticipated,



recommendations would be required to include a detailed mitigation plan requiring monitoring during grading and other earthmoving activities in undisturbed sediments. The recommendations would provide a fossil recovery protocol that includes data to be collected; professional identification, radiocarbon dates and other special studies as appropriate; curation at local curation facility for fossils meeting significance criteria; a comprehensive final mitigation compliance report including a catalog of fossil specimens with museum numbers; and an appendix containing a letter from the museum stating that they are in possession of the fossils. With implementation of Mitigation Measure GEO-1, potential impacts to paleontological resources within undisturbed sediments ranked moderate or above would be reduced to a less than significant level.

Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the existing General Plan Land Use Plan as it existed in March 2021. When compared to the Project, Alternative 1 would allow for less residential development potential and greater non-residential development potential. Since the Project Area contains the same geologic setting, similar physical constraints related to geology and soils exist. However, the potential for new development to expose people or structures to adverse effects associated with seismic ground shaking and geologic instabilities would be slightly reduced under Alternative 1, as less residential development and resulting population would occur. However, under Alternative 1, sites currently developed with older structures would not be redeveloped with newer buildings constructed under current building code requirements to the extent of the Project. New development under both Alternative 1 and the Project would be required to comply with the California Building Code and other applicable Municipal Code requirements, reducing the potential for impacts specific to geology and soils. Additionally, similar to the Project, future development under Alternative 1 would be required to incorporate Mitigation Measure GEO-1 and comply with Gardena Municipal Code Section 18.42.210, reducing potential impacts to paleontological resources to less than significant. Since Alternative 1 would not provide for the redevelopment of sites to the extent of the Project, Alternative would be considered environmentally inferior to the Project.

Greenhouse Gas Emissions

As described in Section 5.7, Greenhouse Gas Emissions, although potential future development associated with implementation of the Project would generate GHGs during the construction and operational phases, the Project would not generate GHG emissions that would have a significant impact on the environment or conflict with any applicable plans, policies, or regulations, including GHG reduction actions/strategies in the City's CAP, the 2022 Scoping Plan and the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS). The Project's operational GHG emissions would result in a net decrease when compared to existing conditions. The Project's incremental contribution to GHG emissions and climate change would be less than significant. Thus, the Project would not conflict with any applicable plan, policy, or



regulation of an agency adopted for the purpose of reducing emissions of GHGs, and impacts would be less than significant.

Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the existing General Plan Land Use Plan as it existed in March 2021. Similar to the proposed Project, potential future development projects would generate GHGs during the construction and operational phases. When compared to the Project, Alternative 1 would allow for less residential development potential and greater non-residential development potential. Alternative 1 would result in reduced emissions associated with construction activity due to the Project Area including fewer parcels anticipated for redevelopment. However, operational emissions would likely be greater when compared to the Project, as Alternative 1 allows for greater non-residential development potential and would not provide for existing commercial and industrial uses to be removed and replaced with residential uses to the extent of the proposed Project. Additionally, as Alternative 1 would not allow for infill residential development at higher densities in locations near existing transit routes, goods, and services, Alternative 1 would not support GHG reduction actions/strategies in the City's CAP, the 2022 Scoping Plan, and the 2020-2045 RTP/SCS to the extent of the Project. Accordingly, Alternative 1 would be considered environmentally inferior to the Project.

Hazards and Hazardous Materials

As described in Section 5.8, Hazards and Hazardous Materials, the Project does not include any specific development proposals; however, future development has the potential to expose people or structures to adverse effects associated with hazardous materials. Future residential development associated with implementation of the Project would be required to comply with Federal and State standards, including but not limited to, California *Health and Safety Code* Sections 17920.10 and 105256 and California Code of Regulations Title 8, Section 1532.1, which would ensure a less than significant impact with regards to hazards and hazardous materials.

Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the existing General Plan Land Use Plan as it existed in March 2021. When compared to the Project, Alternative 1 would allow for less residential development potential and greater non-residential development potential. As with the proposed Project, future development projects under Alternative 1 would be required to comply with Federal, State, and local regulations. As changes to the Zoning Code that were previously approved in February 2023 would be rescinded under Alternative 1 with the exception of the pre- and post-permit requirements, both Alternative 1 and the proposed Project would be required to comply with Section 18.42.200, *Pre-permit Requirements*, of the Gardena Municipal Code, which requires all new residential construction and construction involving grading or other ground disturbance below a depth of twelve inches to prepare and adhere to the recommendations of a Phase I Environmental Site Assessment. As



with the proposed Project, compliance with the existing regulatory framework would reduce potential impacts from hazards and hazardous materials to less than significant. The potential for new residential development to expose people or structures to adverse effects associated with hazards and hazardous materials would be similar under Alternative 1 and the Project. However, Alternative 1 would allow for greater non-residential development potential than the Project and under Alternative 1, removal of existing non-residential uses, including industrial uses with the potential to use and generate hazardous materials and redevelopment of the sites with residential uses would not occur to the extent proposed by the Project. Thus, potential hazards associated with historic and existing operations within the Project Area would not be removed and/or remediated under Alternative 1 to the extent that could occur with the Project. Additionally, existing and future operations with the potential to use and generate hazards and hazardous materials would continue to occur to a greater extent under Alternative 1. As such, Alternative 1 is considered environmentally inferior to the Project.

Hydrology and Water Quality

As described in Section 5.9, Hydrology and Water Quality, implementation of the Project would result in less than significant impacts related to Hydrology and Water Quality.

Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the existing General Plan Land Use Plan as it existed in March 2021. When compared to the Project, Alternative 1 would allow for less residential development potential and greater non-residential development potential. However, as changes to the Zoning Code that were previously approved in February 2023 would be rescinded under Alternative 1 with the exception of the pre- and post-permit requirements, Alternative 1 would generally not address water conservation and water quality standards to the extent of the Project. For example, Alternative 1 would rescind text changes to Section 18.42.075, *Landscape Regulations*, which amends landscape regulations for all properties in the City to comply with water efficiency regulations; and Section 18.40.060, *General Development Standards for Parking Areas*, which adds requirements related to drainage and water quality in parking areas. In addition, although future development projects under Alternative 1 would be required to comply with other regulations related to water quality, including preparation of a SWPPP and identification of project-specific BMPs designed to control drainage and erosion if a project proposes to disturb one acre or more, the Project would provide opportunity for more sites to be redeveloped, resulting in implementation of more current water quality requirements and improved water quality conditions overall. As the Project would provide for improved water conservation and water quality conditions associated with the potential redevelopment of more sites and implementation of current standards and conditions related to water efficiency and quality when compared to Alternative 1, Alternative 1 would be considered environmentally inferior to the Project.



Land Use and Planning

As described in Section 5.10, Land Use and Planning, all impacts related to land use and planning were found to be less than significant under the Project. The proposed Project would amend the Land Use Plan of the Community Development Element of the General Plan with the addition of new land use designations and other technical updates to reflect changes that have occurred since 2006 and amend the General Plan Land Use Policy Map to apply the new land use designations, including rescinding the ACSP and apply the proposed Housing Overlay designations to numerous sites designated for non-residential uses. Additionally, new zones and development standards would be created to provide consistency with the Land Use Plan update. Several other changes to the Zoning Code would also occur including providing new objective Residential Design Standards and adding a new chapter of Design Review for residential development.

Under Alternative 1, the City would not implement the Land Use Plan and Zoning Amendment Project and would rescind changes to the Land Use Map, Zoning Code, and Zoning Map that were previously approved in February 2023. Alternative 1 would not result in land use and zoning changes to the Non-inventory Sites to allow for additional residential development or amendment of the Zoning Map to eliminate split-zoned properties or re-zone other properties to match the existing uses, densities, or intensities that already occur on the property. Under Alternative 1, development of the Project Area would occur in accordance with the development potential assumed in the General Plan Community Development Element's Land Use Plan as it existed in March 2021, which would not be consistent with the adopted 2021-2029 Housing Element, which received approval from the Department of Housing and Community Development (HCD) based on the Inventory Sites that were rezoned. Without rezoning of the Inventory Sites that accommodate the City's RHNA allocation, HCD's approval of the Housing Element would likely be rescinded. Without an approved Housing Element, the City is subject to the Builder's Remedy set forth in the Housing Accountability Act (Government Code § 65589.5). Under the Builder's Remedy, if a city does not have a housing element that substantially complies with state law, then the city has only very limited grounds on which to deny an affordable housing project, even if the development does not comply with zoning or applicable development standards.

Additionally, as Alternative 1 would not allow for infill residential development at higher densities in locations near existing transit routes, goods, and services, Alternative 1 would not support GHG reduction actions/strategies in the City's CAP, the 2022 Scoping Plan, and the 2020-2045 RTP/SCS to the extent of the Project, resulting in a significant unavoidable impact. As Alternative 1 would not be consistent with the adopted 2021-2029 Housing Element and would not support the goals of other State and regional plans to the extent of the Project, Alternative 1 would be considered environmentally inferior to the Project.



Mineral Resources

As described in Section 8.0, the Project would result in no impacts relating to mineral resources. The State Division of Mines and Geology has not designated any lands within the City as a State classified mineral resources deposit area, and no areas within the City are designated for mineral resources extraction. Given that the City does not contain any designated mineral resource deposit areas and no areas within the City are designated for mineral resources, impacts related to mineral resources associated with Alternative 1 would be the same as the Project and would remain less than significant. As such, Alternative 1 would be neither environmentally superior nor inferior to the Project.

Noise

As described in Section 5.11, Noise, while the Project does not directly propose site-specific development, future development associated with implementation of the Project could generate additional transportation noise, stationary noise, and construction noise. With regards to transportation noise, implementation of the proposed Project would result in inaudible increases in ambient noise and would result in a less than significant impact to roadway noise level. Further, the Project would not result in substantial increases in ambient noise along analyzed roadways and would result in less than significant impacts related to exceedances of the land use compatibility criteria.

With regards to stationary noise, while no specific development projects are proposed under the Project, changes in land use may allow for more intensive noise-generating uses in closer proximity to noise-sensitive uses; however, future development projects would be required to comply with Gardena General Plan policies, including Policy N-2.5 which requires new commercial/industrial operations located in proximity to existing or proposed residential areas to incorporate noise mitigation into the project design, and Policy N-3.2, which requires compliance with noise regulations, and compliance with Gardena Municipal Code Section 8.36.040 exterior and interior noise standards. Following conformance with the existing regulatory framework, potential noise impacts would be less than significant in this regard. With regards to construction noise, the Project would result in on- and off-site short-term noise impacts; however, these impacts would be reduced to less than significant with the implementation of Section 18.42.200 of the Municipal Code and Mitigation Measure NOI-1, which requires applicants of future development projects within 500 feet of a sensitive use to prepare a noise study that addresses the potential impacts upon off-site sensitive uses due to construction. Further, future construction activities in the Project Area have the potential to result in significant impacts related to groundborne vibration. However, project applicants would be required to implement Mitigation Measure NOI-2, which would require vibration impact studies when construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. The vibration impact studies would be required to include a detailed mitigation plan to avoid any potential significant impacts to existing structures



due to groundborne vibrations, and potential vibration impacts related to construction vibration would be less than significant.

Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the existing General Plan Land Use Plan as it existed in March 2021. Alternative 1 would result in the development of fewer residential units when compared to the proposed Project and a corresponding decrease in population. Both the Project and Alternative 1 would be required to comply with Gardena General Plan policies and the Municipal Code, including Gardena Municipal Code Section 18.42.200, *Pre-permit Requirements*, which would require project applicants to demonstrate HVAC units comply with Chapter 8.36 (Noise Ordinance) and implement specified noise reduction techniques during construction. Additionally, Alternative 1 would be required to implement Mitigation Measures NOI-1 and NOI-2, similar to the Project. As such, Alternative 1 is considered neither environmentally superior nor inferior to the Project.

Population and Housing

As described in Section 5.12, Population and Housing, the General Plan Land Use Plan as it existed in March 2021 anticipates a total of 23,617 dwelling units, a population of 64,492, and a non-residential development capacity of 16,879,240 square feet. The proposed Project would accommodate future residential growth in Gardena primarily by amending the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development and densities when compared to existing conditions. As shown in Table 7-1 Project implementation could yield a net change over existing conditions of 12,167 additional multi-family dwelling units and 7,544,381 fewer square feet of non-residential uses. The Project has the potential to yield an additional 33,338 residents over existing conditions and would exceed the population projections anticipated by the Southern California Association of Governments' (SCAG) growth forecasts and the City's General Plan. However, the proposed Project is intended to accommodate the City's 2021-2029 Regional Housing Needs Allocation (RHNA); SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs and revised General Plan growth projections associated with implementation of the Project will be included as part of SCAG's future growth forecasts. With implementation of General Plan policies and Municipal Code requirements intended to guide growth and provide services necessary to accommodate growth, including reducing potential environmental impacts related to growth, impacts associated with the unplanned population growth would be less than significant. Additionally, as the Project does not propose any site-specific development and would increase the overall number of dwelling units in the Project Area by approximately 12,167 additional multi-family residential units over



existing conditions, no existing residents would be displaced. Therefore, the Project would result in less than significant impacts related to population and housing.

Under Alternative 1, the City would not implement the Land Use Plan and Zoning Amendment Project and would rescind changes to the Land Use Map, Zoning Code, and Zoning Map that were previously approved in February 2023. Alternative 1 would not result in land use and zoning changes to the Non-inventory Sites to allow for additional residential development or amendment of the Zoning Map to eliminate split-zoned properties or re-zone other properties to match the existing uses, densities, or intensities that already occur on the property. Under Alternative 1, development of the Project Area would occur in accordance with the development potential assumed in the General Plan Community Development Element's Land Use Plan as it existed in March 2021. However, Alternative 1 would not accommodate the City's share of the regional housing need for the 2021-2029 RHNA period (5,735 units) and would not be consistent with the City's adopted 2021-2029 Housing Element, which received approval from HCD based on the Inventory Sites that were rezoned. As discussed above under *Land Use and Planning*, without rezoning of the Inventory Sites that accommodate the City's RHNA allocation, HCD's approval of the Housing Element would likely be rescinded. Without an approved Housing Element, the City is subject to the Builder's Remedy, which would limit the City's ability to deny an affordable housing project, even if the development does not comply with zoning or applicable development standards. Although Alternative 1 would be more consistent with the population and housing growth currently anticipated by SCAG's RTP/SCS and the City's General Plan, it would not provide the Inventory Sites to meet the City's RHNA, which will be accommodated within SCAG's future population and housing growth projections. Thus, Alternative 1 would not plan and provide for the population growth anticipated to occur, resulting in a significant unavoidable impact. Additionally, Alternative 1 would leave the City open to "Builder's Remedy" projects under Government Code section 65589.5. If this were the case, the City would have little control over an affordable housing development. Alternative 1 would be considered environmentally inferior to the Project.

Public Services and Recreation

As described in Section 5.13, Public Services, the Project would result in less than significant impacts relating to public services with the exception of parks and recreation facilities. New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services; however, the specific impacts of providing new and expanded facilities would be speculative and cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded public facilities. Project implementation could 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. This is a significant and unavoidable impact.



Under Alternative 1, there would be fewer residential dwelling units and population when compared to the Project. However, similar to the proposed Project, due to the existing parkland deficiency, the additional park acreage that would be needed to serve the potential increase in residents, and the lack of available land to expand or construct new parks, Alternative 1 would likely increase the use of existing neighborhood and regional parks or other recreational facilities. This increased use of existing facilities could result in substantial physical deterioration of the facilities to occur or be accelerated, resulting in a significant impact. Similar to the Project, potential impacts could be reduced through the payment of park fees, as established in Municipal Code Chapter 17.20, payment of construction and development fees, as established in Municipal Code Chapter 15.48, and payment for the rental/use of recreation and parks facilities established in Municipal Code Chapter 11.08, and adherence to local regulations established in the Municipal Code and General Plan General Plan policies. Additionally, new residential development under Alternative 1 would be required to meet the development standards associated with the specific zone for the site, which typically includes the provision of usable open space. Although impacts could be reduced, it is not anticipated that potential impacts under Alternative 1 would be reduced to a less than significant level due to the limited land area and ability to construct new parks. The increased use and accelerated deterioration of existing facilities would result in a significant and unavoidable impact. Since overall impacts to public services (the demand for police, fire and other public services), including to park and recreation facilities would be reduced when compared to the Project, Alternative 1 would be considered environmentally superior to the Project.

Transportation

As described in Section 5.14, Transportation, transportation impacts associated with implementation of the Project would be less than significant. The proposed Project would not conflict with policies, plans, or programs regarding roadways, bicycle, pedestrian, or transit facilities. While the proposed Project would be expected to increase demand for travel given the proposed development and expected increase in residents, the Project proposes to increase housing development and density in areas which are served by high-quality transit in accordance with the SCAG 2020 RTP/SCS. Thus, the Project is not expected to cause roadway segment volumes to exceed capacity or negatively affect multi-modal transit options. Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the existing General Plan Land Use Plan as it existed in March 2021. When compared to the Project, Alternative 1 would allow for less residential development potential and greater non-residential development potential. Similar to the Project, Alternative 1 would not conflict with policies, plans, or programs regarding roadways, bicycle, pedestrian, or transit facilities.

The Project does not propose changes to the Citywide roadway network and configuration. Any temporary road closure due to project-specific development would be required to receive



permission from the traffic authority in accordance with Gardena Municipal Code Section 13.56.430 and would be required to maintain temporary and emergency access to the site and surrounding area. Similar to the Project, Alternative 1 would not increase hazards related to geometric design and incompatible use hazards or result in inadequate emergency access.

Under the proposed Project, the City's VMT per capita would not exceed 15 percent below the SCAG regional average. Therefore, the Project's impacts related to VMT would be considered less than significant. In addition, the Project would increase the local and regional housing supply to meet regional housing needs and locating housing in a transit-rich area, and is consistent with the SCAG 2020 RTP/SCS. The City's existing VMT per capita is approximately 25 percent below the regional average, and Project implementation would result in a VMT per capita of approximately 23 percent below the SCAG regional average. Similar to the Project, Alternative 1 would not exceed 15 percent below the SCAG regional average; therefore, impacts related to VMT under Alternative 1 would be considered less than significant. However, when compared to the Project, it would not provide for increased local and regional housing supply to meet regional housing needs and locating housing in a transit-rich area, to the extent of the Project. Alternative 1 would be considered environmentally inferior to the Project.

Tribal Cultural Resources

As described in Section 5.15, Tribal Cultural Resources, although the Project Area is primarily urbanized and has experienced extensive ground-disturbance, there is the potential that tribal cultural resources could occur below the surface; therefore, future development allowed under the proposed Project could cause a substantial adverse change in the significance of unknown tribal cultural resources which have not yet been identified. Future development within the Project area would be required to comply with the existing regulatory environment protecting tribal cultural resources, including General Plan Community Resources Element, Conservation Plan Policy CN 5.3, which protects and preserves cultural resources of the Gabrielino Native American Tribe found or uncovered during construction. Gardena Municipal Code Section 18.42.210, *Post-permit Requirements*, contains protections pertaining to tribal cultural resources. Section 18.42.210(D)(1) requires, if Native American or tribal cultural resources are found on a proposed development site, that the applicant enter into a cultural resources treatment agreement with a local Native American tribe traditionally and culturally affiliated with Gardena that is acknowledged by the Native American Heritage Commission. The agreement is required to address the following: treatment and disposition of cultural resources; designation, responsibilities, and participation of professional tribal monitors during grading, excavation and ground disturbing activities; project grading and development scheduling; terms of compensation for the tribal monitors; treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on site; the tribal monitor's authority to stop and redirect grading in order to evaluate the significance of any potential resources discovered on the property, and to make recommendations as to treatment; the applicant's agreement to



relinquish ownership of all cultural resources, including all archaeological artifacts that are found on the project area, to the tribe for proper treatment and disposition; and the applicant's agreement that all tribal sacred sites are to be avoided and preserved. With regards to human remains, Section 18.42.210(D)(2) requires, in compliance with State law, that if human remains are unearthed, the project developer, pursuant to State Health and Safety Code Section 7050.5, will contact the County coroner and ensure no further disturbance occurs until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the Native American Heritage Commission (NAHC) must be notified within twenty-four hours. Therefore, compliance with existing Federal, State, and local regulations, including the General Plan and Municipal Code, would reduce potential impacts to tribal cultural resources to less than significant.

Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the existing General Plan Land Use Plan as it existed in March 2021. When compared to the Project, Alternative 1 would allow for less residential development potential and greater non-residential development potential. As with the proposed Project, there is the potential that future development allowed under Alternative 1 could result in the discovery of currently unknown tribal cultural resources. Existing Federal, State, and local regulations, including the General Plan and Gardena Municipal Code Section 18.42.210, would reduce potential impacts to tribal cultural resources to a level that is less than significant. The potential impact to tribal cultural resources under Alternative 1 would remain relatively similar compared to the proposed Project. As such, Alternative 1 is considered neither environmentally superior nor inferior to the Project.

Utilities and Service Systems

As described in Section 5.16, Utilities and Service Systems, the Project would result in less than significant impacts relating to utilities and service systems. New development projects under either Alternative 1 or the proposed Project would place increased demands on utilities. Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the existing General Plan Land Use Plan as it existed in March 2021. When compared to the Project, Alternative 1 would allow for less overall residential development potential and greater non-residential development potential. Overall demand on utilities and service systems would be similar when compared to the proposed Project. Both Alternative 1 and the proposed Project would likely require the construction or expansion of new utilities to serve the site-specific development that is being proposed. The potential environmental effects associated with infrastructure projects would be similar under Alternative 1 and the proposed Project. As such, Alternative 1 is considered neither environmentally superior nor inferior to the Project.



Wildfire

As described in Section 8.0, Effects Found Not To Be Significant, the Project area is not located within a State Responsibility Area, nor is the City located within a Very High Fire Hazard Severity Zone within a Local Responsibility Area; therefore, the Project would result in no impacts related to wildfire. Alternative 1 would allow for residential and non-residential development primarily through infill development and redevelopment of existing developed sites, consistent with the existing General Plan Land Use Plan as it existed in March 2021. Like the Project, these areas are, for the most part, already urbanized. Given that the Project Area is not located in an area of high wildfire hazard potential, impacts associated with Alternative 1 would be the same and no impacts would occur. As such, Alternative 1 would be neither environmentally superior nor inferior to the Project.

Ability To Meet The Project Objectives

Alternative 1 fails to meet the Project's fundamental objectives, including: implementing Housing Element programs; creating consistency between the General Plan and Zoning Code; preserving multi-family lots for higher density; providing opportunities for a mix of housing at varying densities; and providing opportunities to align housing production with State and local sustainability goals.

ALTERNATIVE 2 – PROPOSED PROJECT WITH INVENTORY SITES ONLY

As described above, Alternative 2 would implement all components of the Project, but without applying the Housing Overlays to the Non-inventory sites. Table 7-3, Alternative 2: Proposed Project With Inventory Sites Only Buildout Potential, identifies the number of residential units that could occur within each land use designation based on the density assumptions and acreages provided. This Alternative was developed to reduce the severity of potential impacts related to air quality, as overall development of residential uses associated with Alternative 2 would be less than what is projected under the proposed Project.

Overall, the number of parcels within the Project Area proposed for General Plan and Zoning Code amendments would be reduced. This would result in a decrease in net residential development potential and an associated decrease in the Project Area's population when compared to the proposed Project. Table 7-4, Alternative 2: Proposed Project With Inventory Sites Only Net Development Compared to the Proposed Project, compares the assumed development potential associated with Alternative 2 and the proposed Project. As shown in Table 7-4, Alternative 2 would result in the removal of 4,413,275 existing square feet of non-residential uses when compared to the removal of 7,544,381 existing square feet assumed with the Project, and the development of 4,731 more multi-family residential units when compared to the Project.



**Table 7-3
Alternative 2: Proposed Project With Inventory Sites Only Buildout Potential**

Proposed Land Use Designations	Density Assumption (du/ac)	Total Acres	Total Units
Medium Density Residential	17	3.1	52.7
High Density Residential	23	1.15	26.45
Very High Density Residential	51	7.61	388.11
Home Business/Medium-Density Overlay	17	17.63	299.71
Home Business/High-Density Overlay 50	31	1.82	56.42
Commercial/Medium-Density Overlay	17	13.9	236.3
Commercial/High-Density Overlay 30	23	9.15	210.45
Commercial/High-Density Overlay 50	31	37.26	1,155.06
Commercial/Very High-Density Overlay 70	51	33.37	1,701.87
Neighborhood Commercial/High-Density Overlay 50	31	2.95	91.45
Industrial/Medium-Density Overlay	17	11.01	187.17
Industrial/High Density Overlay 30	23	33.99	781.77
Industrial/High-Density Overlay 50	31	24.41	756.71
Industrial/Very High-Density Overlay 70	51	28.15	1,435.95
Public/Institutional/High-Density Overlay 50	31	1.44	44.64
Religious Institution Overlay ²	--	--	200
Total Buildout Potential			7,625¹

Source: City of Gardena, November 22, 2022.

Notes: du/ac = dwelling unit per acre

1. Number does not equate due to rounding.

2. A Religious Institution Overlay is not currently being proposed; however the analysis considers the potential for a future overlay and assumes 50 sites could receive the overlay with an average of 4 DU/site.



Table 7-4
Alternative 2: Proposed Project With Inventory Sites Only Net Development
Compared to the Proposed Project

Alternative	Single Family Dwelling Units	Multiple Family Dwelling Units	Non-Residential Development Building Square Feet
Alternative 2: Proposed Project With Inventory Sites Only	-26	+7,436	-4,413,275
Proposed Project	-154	+12,167	-7,544,381
Source: City of Gardena, November 22, 2022.			

[Aesthetics](#)

As described in Section 5.1, Aesthetics, impacts related to Aesthetics were found be less than significant. Both the Project and Alternative 2 would provide for increased development within the Project Area that would allow for new residential development or increased residential development and densities when compared to existing conditions. However, Alternative 2 would reduce the number of parcels within the Project Area proposed for General Plan and Zoning Code amendments when compared to the Project. Although buildout of Alternative 2 would result in a decrease in net residential development potential when compared to the proposed Project, overall the Project Area would experience significant development compared to existing conditions which would change the character and image of the area under both Alternative 2 and the proposed Project.

Future development associated with Alternative 2 and the proposed Project could result in new residential development at higher densities within the Project Area; however, scenic vistas and resources do not readily occur within the City and long-range views are limited due to the existing topography and urbanized nature of the area. Additionally, there are no scenic highways officially designated by Caltrans within or adjacent to the Project Area, and no roadways within the Project Area are currently eligible for scenic highway designation.

Development under either Alternative 2 or the proposed Project would be guided by Gardena Municipal Code Title 18 (i.e., the Zoning Code), which contains land use zoning regulations and design guidelines for development within the City. Section 18.42.095, *Residential Design Criteria*, establishes various design criteria for all new and expanded single-family residential developments, including standards for scale and massing; street-facing entries; architectural detailing; rooflines; garages, driveways, and parking; walls and fences; and materials, color, and



texture. Section 18.42.120, *Residential Criteria*, establishes residential criteria for all multi-family and overlay zones, including multifamily site design in residential and commercial zones; massing and articulation; exterior surfaces; roofs; main entries; windows, trellises; lighting; and balconies, porches, and other projections. Applicable development projects would be subject to review under either Chapter 18.44, *Site Plan Review*, or Chapter 18.45, *Design Review*. Chapter 18.44, *Site Plan Review*, outlines requirements related to site plan review. Development projects requiring site plan review are subject to specific findings that the project is consistent with applicable standards, including the physical location, size, massing, setbacks, pedestrian orientation, and placement of proposed structures on the site and the location of proposed uses within the project; compatibility with surrounding sites and neighborhoods; and other factors, including but not limited to, location, amount, and nature of landscaping; placement, height, and direction of illumination of light standards; the location, number, size and height of signs; location, height and materials of walls, fences, or hedges; and the location and method of screening of refuse and storage areas and building equipment. Chapter 18.45, *Design Review*, ensures that a project meets the applicable objective standards while also encouraging affordable housing. A project's design is reviewed pursuant to the provisions of Chapter 18.45, all applicable and objective standards contained in Chapter 18.42, and all applicable and objective development standards in the zone in which the development occurs. Individual projects would be reviewed under both Alternative 2 and the proposed Project to ensure the development being proposed at the time is consistent with the applicable development standards.

Under both Alternative 2 and the proposed Project, the Zoning Code provides for project-specific design review of future development proposals within the City, which would ensure that development is consistent with the General Plan goals, policies, and actions and the specific zoning district development standards. Neither Alternative 2 nor the proposed Project would conflict with applicable zoning and other regulations governing scenic quality. As such, Alternative 2 would be neither environmentally superior nor inferior to the Project.

[Agriculture and Forestry Resources](#)

As described in Section 8.0, Effects Found Not To Be Significant, the Project would result in no impacts to agriculture and forestry resources. Given that no agriculture and forestry resources would be impacted by the proposed Project, impacts associated with Alternative 2 would be the same and no impacts would occur. As such, Alternative 2 would be neither environmentally superior nor inferior to the Project.

[Air Quality](#)

As described in Section 5.2, Air Quality, construction and operation of future developments would occur within close proximity to sensitive receptors, and there is the potential for



construction emissions to exceed regulatory levels. The following significant impacts related to air quality have been identified:

- The Project would not be consistent with AQMP Consistency Criteria No. 1 and No. 2 and would therefore conflict with or obstruct implementation of the applicable air quality plan resulting in a significant project and cumulative project impact.
- Project implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts during construction activities.

Although the Project's operational impacts would be below the applicable SCAQMD's regional thresholds for operational emissions, the Project's construction impacts as a whole would exceed SCAQMD's thresholds for construction emissions. Therefore, the Project would violate air quality standards during Project construction and would not be consistent with the first criterion of the SCAQMD's AQMP, and therefore would generate a significant and unavoidable impact. Additionally, the Project would allow for the development of up to 12,167 net new housing units with a population increase of approximately 33,338 residents based on a DOF persons per household of 2.74. This would be an approximate 56 percent increase over existing conditions and an approximate 42 percent increase over SCAG's projected future conditions (2045). Since Project implementation accommodates residential development opportunities that exceed the City's 2021-2029 RHNA and would likely exceed the AQMP's growth assumptions since they are based on SCAG's forecast data, the Project would not be consistent with the second criterion, and therefore would generate a significant and unavoidable impact relative to this topic.

In order to reduce impacts associated with construction activities, future development would be required to comply with Mitigation Measures AQ-1 through AQ-7, which would require construction activities to utilize "Super-Compliant" low VOC paints that have no more than 10 g/L of VOC, which exceeds the regulatory VOC limits put forth by SCAQMD's Rule 1113; require all construction equipment greater than 150 horsepower (>150 HP) to be CARB certified tier 4 or higher; and require construction activities to use electrical and alternative fueled equipment, and other similar measures. Additionally, future development would be subject to compliance with SCAQMD Rules 402, 403, and 1113, which would reduce specific construction-related emissions. With implementation of Mitigation Measures AQ-1 through AQ-7, emissions of ROG, NO_x, CO, and PM from construction activities would be reduced and emissions from most individual developments projects within the Project Area would be reduced to below the SCAQMD significance thresholds for construction. However, due to the unknown detail about future development projects and the potential overlap of construction activities, it cannot be assured that the mitigation measures would reduce emissions below the SCAQMD significance thresholds. As the Project could violate air quality standards, impacts related to construction emissions would remain significant and unavoidable.

In regards to operational emissions, area source emissions, energy source emissions, and mobile source emissions, emission calculations demonstrate that Project operations would not exceed



the SCAQMD thresholds for any criteria air pollutants, when compared to the existing conditions, and the Project would generate a net benefit in these areas since the existing scenario generates greater emissions than the proposed Project.

The localized construction emissions analysis concludes the Project would not result in significant concentrations of pollutants at nearby sensitive receptors. In addition, specific development projects would be subject to compliance with SCAQMD Rules 402, 403, and 1113, which would further reduce specific construction-related emissions. Therefore, the proposed Project would result in a less than significant impact concerning LSTs during construction activities. Additionally, future residential developments associated with implementation of the proposed Project would not result in significant concentrations of pollutants at nearby sensitive receptors, and impacts associated with the release of toxic air contaminants would be less than significant. Further, Project-related emissions would not exceed the ambient air quality standards or cause an increase in the frequency or severity of existing violations of air quality standards; would not generate CO hotspots; would not expose sensitive receptors to substantial amounts of air toxins due to construction-related diesel particulate matter; and would not create objectionable odors.

Future development under both Alternative 2 and the proposed Project would be required to adhere to the same policy guidance and local, State, and regional air quality measures, including implementation of Mitigation Measures AQ-1 through AQ-7. Alternative 2 would result in a net reduction in residential development when compared to the proposed Project, resulting in fewer construction emissions, operational emissions, and potential reductions in overall traffic volumes resulting in reductions to air emissions. However, similar to the Project, overall construction-related emissions would continue to be significant under Alternative 2 and development opportunities under Alternative 2 would exceed the AQMP's growth assumptions. Therefore, as with the Project, Alternative 2 would not be consistent with AQMP Consistency Criteria No. 1 and No. 2 and as a result would conflict with or obstruct implementation of the applicable air quality plan, resulting in a significant and unavoidable impact.

Both Alternative 2 and the Project provide opportunities for infill residential and mixed-use development at higher densities in proximity to areas served by transit, jobs, and services. While land uses and development under Alternative 2 would be required to adhere to the same policy guidance and local, State, and regional air quality measures as the Project, the decrease in residential units, and corresponding reduction in construction emissions, operational emissions, and potential reductions in overall traffic volumes would result in reductions in air emissions under Alternative 2 when compared to the proposed Project. As such, Alternative 2 would be considered environmentally superior to the Project.

Biological Resources

The Project Area is highly urbanized and developed with residential and non-residential uses. As described in Section 5.3, Biological Resources, the City is not known to support any significant



wildlife or native planning communities or species. Further, the proposed Project does not include any specific development proposals and would not result in significant direct impacts to existing biological resources. The parcels identified for land use and zone changes under both Alternative 2 and the proposed Project are located within urbanized areas and are primarily developed or paved and any landscaping consists primarily of ornamental and/or nonnative plant species. Future development of the sites with residential uses would not occur within Open-Space-designated land or within the Willows Wetland Preserve. However, it is possible that specific properties proposed for future development could include trees with the potential to support nesting migratory birds that are protected by the Migratory Bird Treaty Act and California Fish and Game Code. Future construction activities or removal of the trees could potentially impact nesting migratory birds. To address potential impacts to migratory birds, future development that would result in construction activities or removal of trees with the potential to support nesting migratory birds would be required to comply with Municipal Code Section 18.42.210, which requires construction activities to occur outside of the State identified nesting season for migratory birds (typically March 15 through September 1), if possible. If construction is conducted during nesting season, a Pre-construction Nesting Bird Survey would be conducted by a qualified professional biologist no more than seven days prior to the beginning of any project-related physical activity that is likely to impact migratory birds. If active nests are found during the Pre-Construction Nesting Bird Survey, a Nesting Bird Plan (NBP) would be prepared by a qualified biologist and implemented during construction. At a minimum, the NBP would be required to include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. Compliance with the Municipal Code requirements for migratory bird protection would reduce potential impacts to nesting migratory birds under both Alternative 2 and the proposed Project to a less than significant level.

Similar to the Project, Alternative 2 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the amount of residential development potential would be reduced. The parcels identified for land use and zone changes are located within urbanized areas and are primarily developed or paved, and the Project Area does not provide for habitat linkages. Thus, neither Alternative 2 nor the Project would 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. Further, the Project Area is urbanized and is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

As with the proposed Project, future development accommodated under Alternative 2 would be subject to all applicable Federal, State, regional, and local policies and regulations related to the protection of biological resources, including Gardena Municipal Code Chapter 13.60, which establishes requirements for the preservation and proper maintenance of existing trees located on public property, as well as certain trees located on private property. Neither Alternative 2 nor



the Project would alter or conflict with the Plan for the Gardena Willows Wetland, and any future development near the Willows Wetland Preserve would be required to comply with the General Plan goal and policies to preserve and enhance the Willows Wetlands and to protect its natural resources, including implementation of the Plan for the Gardena Willows Wetland. Therefore, the impact to biological resources under the Project and Alternative 2 would remain the same. As such, Alternative 2 would be neither environmentally superior nor inferior to the Project.

Cultural Resources

As described in Section 5.4, Cultural Resources, while the proposed Project does not involve site-specific development and does not directly propose any changes to any historic resources, future development allowed under the proposed Project could cause a substantial adverse change in the significance of known historical resources or unknown historical resources which have not yet been identified. Additionally, future development allowed under the proposed Project could cause a substantial adverse change in the significance of unknown archaeological resources which have not yet been identified. Mitigation Measure CUL-1 would ensure evaluation of a project site for historical resources and, if necessary, implementation of mitigation measures to reduce impacts to a level that is less than significant. Mitigation Measure CUL-2 would ensure that future ground disturbing projects would be required to conduct a technical cultural resources assessment by a qualified archaeologist meeting Secretary of the Interior Standards, or agree to full-time monitoring by an archaeologist and a Native American monitor. If resources are known or reasonably anticipated, the assessment must take appropriate measures to protect or preserve them for study. Compliance with existing Federal, State, and local regulations, including the General Plan and implementation of Mitigation Measures CUL-1 and CUL-2, would reduce potential impacts to historical and archeological resources to a level that is less than significant.

Although no conditions exist that suggest human remains are likely to be found in the Project Area, future construction activities could have the potential to disturb or destroy buried Native American human remains as well as other human remains. As required by State law, the requirements and procedures set forth in PRC Section 5097.98 would be implemented during future development activities, including notification of the County Coroner, notification of the NAHC and consultation with the individual identified by the NAHC to be the “most likely descendant (MLD).” Additionally, the Gardena Municipal Code Section 18.42.210, *Post-permit Requirements*, contains protections pertaining to human remains. Specifically, Section 18.42.210(D)(2) requires, in compliance with State law, that if human remains are unearthed, the project developer, pursuant to State Health and Safety Code Section 7050.5, will contact the County coroner and ensure no further disturbance occurs until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the Native American Heritage Commission (NAHC) must be notified within twenty-four hours. Thus, compliance with



the Gardena Municipal Code, Health and Safety Code Sections 7050.5 to 7055, and PRC Section 5097.98 would ensure that in the event human remains are discovered, the remains would be handled in accordance with applicable laws, and impacts would be less than significant.

Similar to the Project, Alternative 2 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of residential development potential would be reduced. As with the proposed Project, there is potential that future development allowed under Alternative 2 could cause a substantial adverse change in the significance of known historic resources, and unknown historic and archaeological resources. However, as with the Project, Alternative 2 would be required to implement Mitigation Measures CUL-1 and CUL-2 and comply with the existing regulatory environment, which would reduce potential impacts to historical resources and archaeological resources to less than significant. The impact under Alternative 2 would remain the same compared to the proposed Project. As such, Alternative 2 is considered neither environmentally superior nor inferior to the Project.

Energy

As described in Section 5.5, Energy, Project implementation would use energy resources for the operation of new residential buildings (e.g., electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel fuel) generated by the Project (both during project construction and operation), and from off-road construction activities (e.g., diesel fuel) associated with implementation of the Project. Future development projects associated with implementation of the proposed Project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. Therefore, energy use impacts associated with the implementation of the Project would be less than significant.

Similar to the Project, Alternative 2 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of residential development potential would be reduced. While land uses and development under Alternative 2 would be required to adhere to the same local, State, and regional measures regulating energy usage as the Project, the net decrease in residential units, and the corresponding reduction in electricity and gas for the operation of buildings, diesel fuel for off-road construction activities, and potential reductions in gasoline due to a decrease in the overall traffic volumes would result in reductions in energy usage under Alternative 2 when compared to the proposed Project. As such, Alternative 2 would be considered environmentally superior to the Project.

Geology and Soils

The Project would result in less than significant impacts involving the exposure of additional people or structures to potential adverse effects associated with seismic hazards (i.e., strong



seismic ground shaking, and seismically induced liquefaction, lateral spreading, landsliding, and settlement), geologic hazards (i.e., subsidence, shallow groundwater) and soil erosion.

As described in Section 5.6, Geology and Soils, the Planning Area contains areas with low and moderate potential for fossils. It is possible that undiscovered paleontological resources could be encountered during future ground-disturbing activities within the Project Area. In compliance with the City's Municipal Code Section 18.42.210, prior to ground-disturbance activities, a qualified vertebrate paleontologist would be required to provide WEAP Training for construction personnel. If fossils or fossil bearing deposits are encountered during future ground disturbing activities, work would halt and a professional vertebrate paleontologist would be contacted to assess and evaluate the find pursuant to State CEQA Guidelines. Compliance with the City's Municipal Code requirements would reduce potential impacts to unanticipated paleontological resources associated with ground disturbance activities within areas identified as having a low potential for fossils.

In order to reduce potentially significant impacts to paleontological resources associated with future site-specific development in undisturbed sediments ranked moderate or above, project applicants would be required to implement Mitigation Measure GEO-1, which would require either a technical paleontological assessment consisting of a record search, survey, background context, and project specific recommendations or an agreement to conduct monitoring of all excavations below five feet. If resources are known or reasonably anticipated, recommendations would be required to include a detailed mitigation plan requiring monitoring during grading and other earthmoving activities in undisturbed sediments. The recommendations would provide a fossil recovery protocol that includes data to be collected; professional identification, radiocarbon dates and other special studies as appropriate; curation at local curation facility for fossils meeting significance criteria; a comprehensive final mitigation compliance report including a catalog of fossil specimens with museum numbers; and an appendix containing a letter from the museum stating that they are in possession of the fossils. With implementation of Mitigation Measure GEO-1, potential impacts to paleontological resources within undisturbed sediments ranked moderate or above would be reduced to a less than significant level.

Similar to the Project, Alternative 2 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of residential development potential would be reduced. Since the Project Area contains the same geologic setting, similar physical constraints related to geology and soils exist. However, the potential for new development to expose people or structures to adverse effects associated with seismic ground shaking and geologic instabilities would be reduced under Alternative 2, as less residential development and resulting population would occur. As with the proposed Project, compliance with Gardena Municipal Code Section 18.42.210 and incorporation of Mitigation Measure GEO-1 would reduce potential impacts to paleontological resources to less than significant. Further, new development would be required to comply with the California Building



Code and other applicable Municipal Code requirements. However, since Alternative 2 would expose fewer people to potential geologic impacts, such as strong seismic ground shaking, Alternative 2 would be considered environmentally superior to the Project.

Greenhouse Gas Emissions

As described in Section 5.7, Greenhouse Gas Emissions, although potential future development associated with implementation of the Project would generate GHGs during the construction and operational phases, the Project would not generate GHG emissions that would have a significant impact on the environment or conflict with any applicable plans, policies, or regulations, including GHG reduction actions/strategies in the City's CAP, the 2022 Scoping Plan and the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS). The Project's operational GHG emissions would result in a net decrease when compared to existing conditions. The Project's incremental contribution to GHG emissions and climate change would be less than significant. Thus, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs, and impacts would be less than significant.

Similar to the proposed Project, potential future development associated with implementation of the Alternative 2 would generate GHGs during the construction and operational phases. Like the proposed Project, Alternative 2 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of residential development potential would be reduced. Alternative 2 would result in reduced emissions associated with construction activity due to the Project Area including fewer parcels anticipated for redevelopment. However, operational emissions would likely be greater when compared to the Project, as Alternative 2 would not provide for existing commercial and industrial uses to be removed and replaced with residential uses to the extent of the proposed Project. Similar to the Project, Alternative 2 would be consistent with the City's CAP, the 2022 Scoping Plan and the 2020-2045 RTP/SCS. Since long-term operational GHG emissions under Alternative 2 would be greater when compared to the proposed Project, Alternative 2 would be considered environmentally inferior to the Project.

Hazards and Hazardous Materials

As described in Section 5.8, Hazards and Hazardous Materials, the Project does not include any specific development proposals; however, future development has the potential to expose people or structures to adverse effects associated with hazardous materials. Future residential development associated with implementation of the Project would be required to comply with Federal and State standards, including but not limited to, California *Health and Safety Code* Sections 17920.10 and 105256 and California Code of Regulations Title 8, Section 1532.1, which would ensure a less than significant impact with regards to hazards and hazardous materials.



Similar to the Project, Alternative 2 would result in additional residential uses within the Planning Area when compared to existing conditions. As with the proposed Project, compliance with Federal, State, and local regulations would reduce potential impacts from hazards and hazardous materials to less than significant. The potential for new residential development to expose people or structures to adverse effects associated with hazards and hazardous materials would be similar under Alternative 2 and the Project. However, under Alternative 2, removal of existing non-residential uses, including industrial uses with the potential to use and generate hazardous materials and redevelopment of the sites with residential uses would not occur to the extent proposed by the Project. Thus, potential hazards associated with historic and existing operations within the Project Area would not be removed and/or remediated under Alternative 2 to the extent that could occur with the Project. Additionally, existing operations with the potential to use and generate hazards and hazardous materials would continue to occur to a greater extent under Alternative 2. As such, Alternative 2 is considered environmentally inferior to the Project.

Hydrology and Water Quality

As described in Section 5.9, Hydrology and Water Quality, implementation of the Project would result in less than significant impacts related to Hydrology and Water Quality.

While Alternative 2 would result in the development of fewer residential units when compared to the Project, all new development would be subject to applicable stormwater and water quality requirements per the Los Angeles RWQCB. This variation in development sites would not substantially alter impacts from or to flooding, water quality, or on groundwater supplies because existing Federal, State, and local regulations would apply to guard against flood hazards, water quality contamination, or impact on groundwater supplies. Potential hydrology and water quality impacts associated with Alternative 2, like the proposed Project, would be less than significant.

Alternative 2 would result in a reduction of housing units when compared to the Project; however, potential water quality impacts related to operation would be greater. As described in Section 5.9, implementation of the Project would not result in construction, or long-term impacts to surface water quality from urban stormwater runoff. Although future development projects under all alternatives would be required to comply with the existing regulatory framework, including preparation of a SWPPP and identification of project-specific BMPs designed to control drainage and erosion if a project proposes to disturb one acre or more, the Project would provide opportunity for more sites to be redeveloped, resulting in implementation of more current water quality requirements and improved water quality conditions overall. As the Project would provide for improved water quality conditions associated with the potential redevelopment of more sites and implementation of current standards and conditions related to water quality when compared to Alternative 2, Alternative 2 would be considered environmentally inferior to the Project.



Land Use and Planning

As described in Section 5.10, Land Use and Planning, all impacts related to land use and planning were found to be less than significant under the Project. The proposed Project and Alternative 2 would amend the Land Use Plan of the Community Development Element of the General Plan with the addition of new land use designations and other technical updates to reflect changes that have occurred since 2006 and amend the General Plan Land Use Policy Map to apply the new land use designations, including rescinding the ACSP and apply the proposed Housing Overlay designations to numerous sites designated for non-residential uses. Additionally, new zones and development standards would be created to provide consistency with the Land Use Plan update. Several other changes to the Zoning Code would also occur including providing new objective Residential Design Standards and adding a new chapter of Design Review for residential development.

Alternative 2 would implement all components of the Project, but without applying the Housing Overlays to the Non-inventory sites. The land use designations and zoning for the Non-inventory sites would remain unchanged from existing conditions. Alternative 2 would continue to implement the Housing Element through changes to the land use designations and zoning for the 122 Inventory Sites, consistent with the proposed Project; all density assumptions remain the same. The proposed amendments to the Land Use Plan of the Community Development Element with the addition of new land use designations and technical updates, proposed Zoning Code amendments, including new zoning designations with development standards, and Zoning Map amendments to apply the new zones and to eliminate split-zoned properties and rezone other properties to match the existing uses, densities or intensities that already occur on the property, and to rescind the ACSP would also occur under Alternative 2. However, the amount of residential development potential would be reduced. Similar to the Project, Alternative 2 would provide for consistency with applicable State and regional plans. Also similar to the Project, the parcels identified for proposed land use and zone changes under Alternative 2 are not located within established residential communities and do not extend into areas with the potential to physically divide an established community. The proposed land use and zoning changes under both the Project and Alternative 2 would further support integration of mixed-use development, infill housing, and infrastructure improvements to further connect uses within the Project Area, and would not introduce new roadways or new or significantly expanded infrastructure that would divide an established community. As such, Alternative 2 would be considered neither environmentally superior nor inferior to the Project.

Mineral Resources

As described in Section 8.0, the Project would result in no impacts relating to mineral resources. The State Division of Mines and Geology has not designated any lands within the City as a State classified mineral resources deposit area, and no areas within the City are designated for mineral resources extraction. Given that no mineral resources would be impacted by the proposed



Project, impacts associated with Alternative 2 would be the same and would remain less than significant. As such, Alternative 2 would be neither environmentally superior nor inferior to the Project.

Noise

As described in Section 5.11, Noise, while the Project does not directly propose site-specific development, future development associated with implementation of the Project could generate additional transportation noise, stationary noise, and construction noise. With regards to transportation noise, implementation of the proposed Project would result in inaudible increases in ambient noise and would result in a less than significant impact to roadway noise level. Further, the Project would not result in substantial increases in ambient noise along analyzed roadways and would result in less than significant impacts related to exceedances of the land use compatibility criteria.

With regards to stationary noise, while no specific development projects are proposed under the Project, changes in land use may allow for more intensive noise-generating uses in closer proximity to noise-sensitive uses; however, future development projects would be required to comply with Gardena General Plan policies, including Policy N-2.5 which requires new commercial/industrial operations located in proximity to existing or proposed residential areas to incorporate noise mitigation into the project design, and Policy N-3.2, which requires compliance with noise regulations, and compliance with Gardena Municipal Code Section 8.36.040 exterior and interior noise standards. Following conformance with the existing regulatory framework, potential noises impacts would be less than significant in this regard. With regards to construction noise, the Project would result in on- and off-site short-term noise impacts; however, these impacts would be reduced to less than significant with the implementation of Section 18.42.200 of the Municipal Code and Mitigation Measure NOI-1, which requires applicants of future development projects within 500 feet of a sensitive use to prepare a noise study that addresses the potential impacts upon off-site sensitive uses due to construction. Further, future construction activities in the Project Area have the potential to result in significant impacts related to groundborne vibration. However, project applicants would be required to implement Mitigation Measure NOI-2, which would require vibration impact studies when construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. The vibration impact studies would be required to include a detailed mitigation plan to avoid any potential significant impacts to existing structures due to groundborne vibrations, and potential vibration impacts related to construction vibration would be less than significant.

Alternative 2 would result in less development when compared to the proposed Project, resulting in a corresponding reduction in construction and operational noise. Additionally, Alternative 2 would result in the development of fewer residential units when compared to the proposed Project and a corresponding decrease in population. Both the Project and Alternative 2 would be



required to comply with Gardena General Plan policies, the Municipal Code, and implement Mitigation Measures NOI-1 and NOI-2. Similar to the proposed Project, Alternative 2 would not result in substantial noise or vibration impacts. As such, Alternative 2 is considered neither environmentally superior nor inferior to the Project.

Population and Housing

As described in Section 5.12, Population and Housing, the General Plan Land Use Plan as it existed in March 2021 anticipates a total of 23,617 dwelling units, a population of 64,492, and a non-residential development capacity of 16,879,240 square feet. The proposed Project would accommodate future residential growth in Gardena primarily by amending the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development and densities when compared to existing conditions. As shown in Table 7-1 Project implementation could yield a net change over existing conditions of 12,167 additional multi-family residential units and 7,544,381 fewer square feet of non-residential uses. The Project has the potential to yield an additional 33,338 residents over existing conditions and would exceed the population projections anticipated by the Southern California Association of Governments' (SCAG) growth forecasts and the City's General Plan. However, the proposed Project is intended to accommodate the City's 2021-2029 Regional Housing Needs Allocation (RHNA); SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs and revised General Plan growth projections associated with implementation of the Project will be included as part of SCAG's future growth forecasts. With implementation of General Plan policies and Municipal Code requirements intended to guide growth and provide services necessary to accommodate growth, including reducing potential environmental impacts related to growth, impacts associated with the unplanned population growth would be less than significant. Additionally, as the Project does not propose any site-specific development and would increase the overall number of dwelling units in the Project Area by approximately 12,167 additional units over existing conditions, no existing residents would be displaced. Therefore, the Project would result in less than significant impacts related to population and housing.

As shown in Table 7-4, Alternative 2 would result in the removal of 4,413,275 existing square feet of non-residential uses when compared to the removal of 7,544,381 existing square feet assumed with the Project, and the development of 4,731 more multi-family residential units when compared to the Project. Similar to the proposed Project, Alternative 2 would result in less than significant impacts related to population and housing. However, as Alternative 2 would be more consistent with the population and housing growth anticipated by SCAG and the City's General Plan and continue to provide the Inventory Sites to meet the City's RHNA, Alternative 2 would be considered environmentally superior to the Project.



Public Services and Recreation

As described in Section 5.13, Public Services, the Project would result in less than significant impacts relating to public services with the exception of parks and recreation facilities. New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services; however, the specific impacts of providing new and expanded facilities would be speculative and cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded public facilities. Project implementation would 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. This is a significant and unavoidable impact.

Under Alternative 2, there would be fewer multi-family residential units and population when compared to the Project. However, similar to the proposed Project, due to the existing parkland deficiency, the additional park acreage that would be needed to serve the potential increase in residents, and the lack of available land to expand or construct new parks, Alternative 2 would likely increase the use of existing neighborhood and regional parks or other recreational facilities. This increased use of existing facilities could result in substantial physical deterioration of the facilities to occur or be accelerated, resulting in a significant impact. Similar to the Project, potential impacts could be reduced through the payment of park fees, as established in Municipal Code Chapter 17.20, payment of construction and development fees, as established in Municipal Code Chapter 15.48, and payment for the rental/use of recreation and parks facilities established in Municipal Code Chapter 11.08, and adherence to local regulations established in the Municipal Code and General Plan General Plan policies. Additionally, new residential development under Alternative 2 would be required to meet the development standards associated with the specific zone for the site, which typically includes the provision of usable open space. Although impacts could be reduced, it is not anticipated that potential impacts under Alternative 2 would be reduced to a less than significant level due to the limited land area and ability to construct new parks. The increased use and accelerated deterioration of existing facilities would result in a significant and unavoidable impact. Since overall impacts to public services (the demand for police, fire and other public services), including to park and recreation facilities, would be reduced when compared to the Project, Alternative 2 would be considered environmentally superior to the Project.

Transportation

As described in Section 5.14, Transportation, transportation impacts associated with implementation of the Project would be less than significant. The proposed Project would not conflict with policies, plans, or programs regarding roadways, bicycle, pedestrian, or transit facilities. While the proposed Project would be expected to increase demand for travel given the proposed development and expected increase in residents, the Project proposes to increase



housing development and density in areas which are served by high-quality transit in accordance with the SCAG 2020 RTP/SCS. Thus, the Project is not expected to cause roadway segment volumes to exceed capacity or negatively affect multi-modal transit options. Similarly, Alternative 2 would provide for increased residential development within the Project Area and would not conflict with policies, plans, or programs regarding roadways, bicycle, pedestrian, or transit facilities.

The Project does not propose changes to the Citywide roadway network and configuration. Any temporary road closure due to project-specific development would be required to receive permission from the traffic authority in accordance with Gardena Municipal Code Section 13.56.430 and would be required to maintain temporary and emergency access to the site and surrounding area. Similar to the Project, Alternative 2 would not increase hazards related to geometric design and incompatible use hazards or result in inadequate emergency access.

With implementation of the Land Use Plan and Zoning Amendment Project, the City's VMT per capita would not exceed 15 percent below the SCAG regional average. Therefore, the Project's impacts related to VMT would be considered less than significant. In addition, the Project would increase the local and regional housing supply to meet regional housing needs and locating housing in a transit-rich area, and is consistent with the SCAG 2020 RTP/SCS. The City's existing VMT per capita is approximately 25 percent below the regional average, and Project implementation would result in a VMT per capita of approximately 23 percent below the SCAG regional average. Although Alternative 2 would result in less residential development, similar to the Project, Alternative 2 would result in a VMT per capita that would not exceed 15 percent below the SCAG regional average; therefore, impacts related to VMT under Alternative 2 would be considered less than significant. As such, Alternative 2 would be considered neither environmentally superior nor inferior to the Project.

Tribal Cultural Resources

As described in Section 5.15, Tribal Cultural Resources, although the Project Area is primarily urbanized and has experienced extensive ground-disturbance, there is the potential that tribal cultural resources could occur below the surface; therefore, future development allowed under the proposed Project could cause a substantial adverse change in the significance of unknown tribal cultural resources which have not yet been identified. Future development within the Project area would be required to comply with the existing regulatory environment protecting tribal cultural resources, including General Plan Community Resources Element, Conservation Plan Policy CN 5.3, which protects and preserves cultural resources of the Gabrielino Native American Tribe found or uncovered during construction. Gardena Municipal Code Section 18.42.210, *Post-permit Requirements*, contains protections pertaining to tribal cultural resources. Section 18.42.210(D)(1) requires, if Native American or tribal cultural resources are found on a proposed development site, that the applicant enter into a cultural resources treatment agreement with a local Native American tribe traditionally and culturally affiliated with



Gardena that is acknowledged by the Native American Heritage Commission. The agreement is required to address the following: treatment and disposition of cultural resources; designation, responsibilities, and participation of professional tribal monitors during grading, excavation and ground disturbing activities; project grading and development scheduling; terms of compensation for the tribal monitors; treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on site; the tribal monitor's authority to stop and redirect grading in order to evaluate the significance of any potential resources discovered on the property, and to make recommendations as to treatment; the applicant's agreement to relinquish ownership of all cultural resources, including all archaeological artifacts that are found on the project area, to the tribe for proper treatment and disposition; and the applicant's agreement that all tribal sacred sites are to be avoided and preserved. With regards to human remains, Section 18.42.210(D)(2) requires, in compliance with State law, that if human remains are unearthed, the project developer, pursuant to State Health and Safety Code Section 7050.5, will contact the County coroner and ensure no further disturbance occurs until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the Native American Heritage Commission (NAHC) must be notified within twenty-four hours. Therefore, compliance with existing Federal, State, and local regulations, including the General Plan and Municipal Code, would reduce potential impacts to tribal cultural resources to less than significant.

Similar to the Project, Alternative 2 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of residential development potential would be reduced. As with the proposed Project, there is the potential that future development allowed under Alternative 2 could result in the discovery of currently unknown tribal cultural resources. Existing Federal, State, and local regulations, including the General Plan and Municipal Code, would reduce potential impacts to tribal cultural resources to a level that is less than significant. The potential impact to tribal cultural resources under Alternative 2 would remain relatively similar compared to the proposed Project. As such, Alternative 2 is considered neither environmentally superior nor inferior to the Project.

Utilities and Service Systems

As described in Section 5.16, Utilities and Service Systems, the Project would result in less than significant impacts relating to utilities and service systems. New development under either Alternative 2 or the proposed Project would place increased demands on utilities. Similar to the Project, Alternative 2 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of residential development potential would be reduced. Therefore, overall demand on utilities and service systems would be less when compared to the proposed Project. However,



both Alternative 2 and the proposed Project would likely require the construction or expansion of new utilities to serve the site-specific development that is being proposed. The potential environmental effects associated with infrastructure projects would likely be reduced under Alternative 2 compared to the proposed Project. Since demand for utilities would be less under Alternative 2 due to the lower associated residential development potential, Alternative 2 would be considered environmentally superior to the Project.

Wildfire

As described in Section 8.0, Effects Found Not To Be Significant, the Project area is not located within a State Responsibility Area, nor is the City located within a Very High Fire Hazard Severity Zone within a Local Responsibility Area; therefore, the Project would result in no impacts related to wildfire. Like the Project, Alternative 2 would accommodate development generally in the same areas, and these areas are, for the most part, already urbanized. Given that the Project Area is not located in an area of high wildfire hazard potential, impacts associated with Alternative 2 would be the same and no impacts would occur. As such, Alternative 2 would be neither environmentally superior nor inferior to the Project.

Ability To Meet The Project Objectives

Alternative 2 would attain the Project's fundamental objectives, although potentially to a lesser extent, including: implementing Housing Element programs; providing opportunities for a mix of housing at varying densities; and providing opportunities to align housing production with State and local sustainability goals.

ALTERNATIVE 3 – PROPOSED PROJECT WITH FEWER NON-INVENTORY SITES

As described above, Alternative 3 would implement all components of the Project, but fewer Non-inventory Sites would be included within the Project Area. Table 7-5, *Alternative 3: Proposed Project With Fewer Non-inventory Sites Buildout Potential*, identifies the number of residential units that could occur within each land use designation based on the density assumptions and acreages provided. This Alternative was developed to reduce the severity of potential impacts related to air quality, as overall development of residential uses associated with Alternative 3 would be less than what is projected under the proposed Project.

Overall, the number of parcels within the Project Area proposed for General Plan and Zoning Code amendments would be reduced. This would result in a decrease in net residential development potential and an associated decrease in the Project Area's population when compared to the proposed Project. Table 7-6, *Alternative 3: Proposed Project With Fewer Non-inventory Sites Net Development Compared to the Proposed Project*, compares the assumed net development potential associated with Alternative 3 and the proposed Project. As shown in Table 7-6, Alternative 3 would result in the removal of 6,087,399 existing square feet of non-residential uses when compared to the removal of 7,544,381 existing square feet assumed with the Project, and the development of 1,796 fewer multi-family residential units when compared to the Project.



Table 7-5
Alternative 3: Proposed Project With Fewer Non-inventory Sites Buildout Potential

Proposed Land Use Designations	Density Assumption (du/ac)	Total Acres	Total Units
Medium Density Residential	17	3.1	52.7
High Density Residential	23	1.15	26.45
Very High Density Residential	51	7.61	388.11
Home Business/Medium-Density Overlay	17	17.63	299.71
Home Business/High-Density Overlay 50	31	1.82	56.42
Commercial/Medium-Density Overlay	17	14.4	244.8
Commercial/High-Density Overlay 30	23	15.28	351.44
Commercial/High-Density Overlay 50	31	69.38	2150.78
Commercial/Very High-Density Overlay 70	51	49.99	2549.49
Neighborhood Commercial/High-Density Overlay 50	31	10.93	338.83
Industrial/Medium-Density Overlay	17	11.9	202.3
Industrial/High Density Overlay 30	23	47.33	1088.59
Industrial/High-Density Overlay 50	31	43.46	1347.26
Industrial/Very High-Density Overlay 70	51	31.74	1618.74
Public/Institutional/High-Density Overlay 50	31	1.44	44.64
Religious Institution Overlay ²	--	--	200
Total Buildout Potential			10,960¹
Source: City of Gardena, November 22, 2022. Notes: du/ac = dwelling unit per acre 1. Number does not equate due to rounding. 2. A Religious Institution Overlay is not currently being proposed; however the analysis considers the potential for a future overlay and assumes 50 sites could receive the overlay with an average of 4 DU/site.			



Table 7-6
Alternative 3: Proposed Project With Fewer Non-inventory Sites Net Development
Compared to the Proposed Project

Alternative	Single Family Dwelling Units	Multiple Family Dwelling Units	Non-Residential Development Building Square Feet
Alternative 3: Proposed Project With Fewer Non-inventory Sites	-146	+10,371	-4,413,275
Proposed Project	-154	+12,167	-6,087,399
Source: City of Gardena, November 22, 2022.			

[Aesthetics](#)

As described in Section 5.1, Aesthetics, impacts related to Aesthetics were found be less than significant. Both the Project and Alternative 3 would provide for increased development within the Project Area that would allow for new residential development or increased residential development and densities when compared to existing conditions. However, Alternative 3 would reduce the number of parcels within the Project Area proposed for General Plan and Zoning Code amendments when compared to the Project. Although buildout of Alternative 3 would result in a decrease in net multi-family residential development potential when compared to the proposed Project, overall the Project Area would experience significant development compared to existing conditions which would change the character and image of the area under both Alternative 3 and the proposed Project.

Future development associated with Alternative 3 and the proposed Project could result in new residential development at higher densities within the Project Area; however, scenic vistas and resources do not readily occur within the City and long-range views are limited due to the existing topography and urbanized nature of the area. Additionally, there are no scenic highways officially designated by Caltrans within or adjacent to the Project Area, and no roadways within the Project Area are currently eligible for scenic highway designation.

Development under either Alternative 3 or the proposed Project would be guided by Gardena Municipal Code Title 18 (i.e., the Zoning Code), which contains land use zoning regulations and design guidelines for development within the City. Section 18.42.095, *Residential Design Criteria*, establishes various design criteria for all new and expanded single-family residential developments, including standards for scale and massing; street-facing entries; architectural detailing; rooflines; garages, driveways, and parking; walls and fences; and materials, color, and



texture. Section 18.42.120, *Residential Criteria*, establishes residential criteria for all multi-family and overlay zones, including multifamily site design in residential and commercial zones; massing and articulation; exterior surfaces; roofs; main entries; windows, trellises; lighting; and balconies, porches, and other projections. Applicable development projects would be subject to review under either Chapter 18.44, *Site Plan Review*, or Chapter 18.45, *Design Review*. Chapter 18.44, *Site Plan Review*, outlines requirements related to site plan review. Development projects requiring site plan review are subject to specific findings that the project is consistent with applicable standards, including the physical location, size, massing, setbacks, pedestrian orientation, and placement of proposed structures on the site and the location of proposed uses within the project; compatibility with surrounding sites and neighborhoods; and other factors, including but not limited to, location, amount, and nature of landscaping; placement, height, and direction of illumination of light standards; the location, number, size and height of signs; location, height and materials of walls, fences, or hedges; and the location and method of screening of refuse and storage areas and building equipment. Chapter 18.45, *Design Review*, ensures that a project meets the applicable objective standards while also encouraging affordable housing. A project's design is reviewed pursuant to the provisions of Chapter 18.45, all applicable and objective standards contained in Chapter 18.42, and all applicable and objective development standards in the zone in which the development occurs. Individual projects would be reviewed under both Alternative 3 and the proposed Project to ensure the development being proposed at the time is consistent with the applicable development standards.

Under both Alternative 3 and the proposed Project, the Zoning Code provides for project-specific design review of future development proposals within the City, which would ensure that development is consistent with the General Plan goals, policies, and actions and the specific zoning district development standards. Neither Alternative 3 nor the proposed Project would conflict with applicable zoning and other regulations governing scenic quality. As such, Alternative 3 would be neither environmentally superior nor inferior to the Project.

[Agriculture and Forestry Resources](#)

As described in Section 8.0, Effects Found Not To Be Significant, the Project would result in no impacts to agriculture and forestry resources. Given that no agriculture and forestry resources would be impacted by the proposed Project, impacts associated with Alternative 3 would be the same and no impacts would occur. As such, Alternative 3 would be neither environmentally superior nor inferior to the Project.

[Air Quality](#)

As described in Section 5.2, Air Quality, construction and operation of future developments would occur within close proximity to sensitive receptors, and there is the potential for



construction emissions to exceed regulatory levels. The following significant impacts related to air quality have been identified:

- The Project would not be consistent with AQMP Consistency Criteria No. 1 and No. 2 and would therefore conflict with or obstruct implementation of the applicable air quality plan resulting in a significant project and cumulative project impact.
- Project implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts during construction activities.

As discussed, although the Project's operational impacts would be below the applicable SCAQMD's regional thresholds for operational emissions, the Project's construction impacts as a whole would exceed SCAQMD's thresholds for construction emissions. Therefore, the Project would violate air quality standards during Project construction and would not be consistent with the first criterion of the SCAQMD's AQMP, and therefore would generate a significant and unavoidable impact. Additionally, the Project would allow for the development that could result in an approximate 56 percent increase in population over existing conditions and an approximate 42 percent increase in population over SCAG's projected future conditions (2045). Since Project implementation accommodates residential development opportunities that exceed the City's 2021-2029 RHNA and would likely exceed the AQMP's growth assumptions since they are based on SCAG's forecast data, the Project would not be consistent with the second criterion, and therefore would generate a significant and unavoidable impact relative to this topic.

In order to reduce impacts associated with construction activities, future development would be required to comply with Mitigation Measures AQ-1 through AQ-7, which would require construction activities to utilize "Super-Compliant" low VOC paints that have no more than 10 g/L of VOC, which exceeds the regulatory VOC limits put forth by SCAQMD's Rule 1113; require all construction equipment greater than 150 horsepower (>150 HP) to be CARB certified tier 4 or higher; and require construction activities to use electrical and alternative fueled equipment, and other similar measures. Additionally, future development would be subject to compliance with SCAQMD Rules 402, 403, and 1113, which would reduce specific construction-related emissions. With implementation of Mitigation Measures AQ-1 through AQ-7, emissions of ROG, NO_x, CO, and PM from construction activities would be reduced and emissions from most individual developments projects within the Project Area would be reduced to below the SCAQMD significance thresholds for construction. However, due to the unknown detail about future development projects and the potential overlap of construction activities, it cannot be assured that the mitigation measures would reduce emissions below the SCAQMD significance thresholds. Therefore, impacts related to construction emissions would remain significant and unavoidable.

In regards to operational emissions, area source emissions, energy source emissions, and mobile source emissions, emission calculations demonstrate that Project operations would not exceed the SCAQMD thresholds for any criteria air pollutants, when compared to the existing conditions,



and the Project would generate a net benefit in these areas since the existing scenario generates greater emissions than the proposed Project.

The localized construction emissions analysis concludes the Project would not result in significant concentrations of pollutants at nearby sensitive receptors. In addition, specific development projects would be subject to compliance with SCAQMD Rules 402, 403, and 1113, which would further reduce specific construction-related emissions. Therefore, the proposed Project would result in a less than significant impact concerning LSTs during construction activities. Additionally, future residential developments associated with implementation of the proposed Project would not result in significant concentrations of pollutants at nearby sensitive receptors, and impacts associated with the release of toxic air contaminants would be less than significant. Further, Project-related emissions would not exceed the ambient air quality standards or cause an increase in the frequency or severity of existing violations of air quality standards; would not generate CO hotspots; would not expose sensitive receptors to substantial amounts of air toxins due to construction-related diesel particulate matter; and would not create objectionable odors.

Although the Project's operational impacts would be below the applicable SCAQMD's regional thresholds for operational emissions, the Project's construction impacts as a whole would exceed SCAQMD's thresholds for construction emissions. Therefore, the Project would violate air quality standards during Project construction and would not be consistent with the first criterion of the SCAQMD's AQMP, and therefore would generate a significant and unavoidable impact.

Future development under both Alternative 3 and the proposed Project would be required to adhere to the same policy guidance and local, State, and regional air quality measures, including implementation of Mitigation Measures AQ-1 through AQ-7. Alternative 3 would result in a reduction in residential development when compared to the proposed Project, resulting in fewer construction emissions, operational emissions, and potential reductions in overall traffic volumes resulting in reductions to air emissions. However, similar to the Project, overall construction-related emissions would continue to be significant under Alternative 3 and development opportunities under Alternative 3 would exceed the AQMP's growth assumptions. Therefore, as with the Project, Alternative 3 would not be consistent with AQMP Consistency Criteria No. 1 and No. 2 and as a result would conflict with or obstruct implementation of the applicable air quality plan, resulting in a significant and unavoidable impact.

Both Alternative 3 and the Project provide opportunities for infill residential and mixed-use development at higher densities in proximity to areas served by transit, jobs, and services. While land uses and development under Alternative 3 would be required to adhere to the same policy guidance and local, State, and regional air quality measures as the Project, the decrease in residential units, and corresponding reduction in construction emissions, operational emissions, and potential reductions in overall traffic volumes would result in reductions in air emissions



under Alternative 3 when compared to the proposed Project. As such, Alternative 3 would be considered environmentally superior to the Project.

Biological Resources

The Project Area is highly urbanized and developed with residential and non-residential uses. As described in Section 5.3, Biological Resources, the City is not known to support any significant wildlife or native planning communities or species. Further, the proposed Project does not include any specific development proposals and would not result in significant direct impacts to existing biological resources. The parcels identified for land use and zone changes under both Alternative 3 and the proposed Project are located within urbanized areas and are primarily developed or paved and any landscaping consists primarily of ornamental and/or nonnative plant species. Future development of the sites with residential uses would not occur within Open-Space-designated land or within the Willows Wetland Preserve. However, it is possible that specific properties proposed for future development could include trees with the potential to support nesting migratory birds that are protected by the Migratory Bird Treaty Act and California Fish and Game Code. Future construction activities or removal of the trees could potentially impact nesting migratory birds. To address potential impacts to migratory birds, future development that would result in construction activities or removal of trees with the potential to support nesting migratory birds would be required to comply with Municipal Code Section 18.42.210, which requires construction activities to occur outside of the State identified nesting season for migratory birds (typically March 15 through September 1), if possible. If construction is conducted during nesting season, a Pre-construction Nesting Bird Survey would be conducted by a qualified professional biologist no more than seven days prior to the beginning of any project-related physical activity that is likely to impact migratory birds. If active nests are found during the Pre-Construction Nesting Bird Survey, a Nesting Bird Plan (NBP) would be prepared by a qualified biologist and implemented during construction. At a minimum, the NBP would be required to include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. Compliance with the Municipal Code requirements for migratory bird protection would reduce potential impacts to nesting migratory birds under both Alternative 3 and the proposed Project to a less than significant level.

Similar to the Project, Alternative 3 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the amount of multi-family residential development potential would be reduced. The parcels identified for land use and zone changes are located within urbanized areas and are primarily developed or paved, and the Project Area does not provide for habitat linkages. Thus, neither Alternative 3 nor the Project would 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. Further, the Project Area is urbanized and is not located within the



boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

As with the proposed Project, future development accommodated under Alternative 3 would be subject to all applicable Federal, State, regional, and local policies and regulations related to the protection of biological resources, including Gardena Municipal Code Chapter 13.60, which establishes requirements for the preservation and proper maintenance of existing trees located on public property, as well as certain trees located on private property. Neither Alternative 3 nor the Project would alter or conflict with the Plan for the Gardena Willows Wetland, and any future development near the Willows Wetland Preserve would be required to comply with the General Plan goal and policies to preserve and enhance the Willows Wetlands and to protect its natural resources, including implementation of the Plan for the Gardena Willows Wetland. Therefore, the impact to biological resources under the Project and Alternative 3 would remain the same. As such, Alternative 3 would be neither environmentally superior nor inferior to the Project.

Cultural Resources

As described in Section 5.4, Cultural Resources, while the proposed Project does not involve site-specific development and does not directly propose any changes to any historic resources, future development allowed under the proposed Project could cause a substantial adverse change in the significance of known historical resources or unknown historical resources which have not yet been identified. Additionally, future development allowed under the proposed Project could cause a substantial adverse change in the significance of unknown archaeological resources which have not yet been identified. Mitigation Measure CUL-1 would ensure evaluation of a project site for historical resources and, if necessary, implementation of mitigation measures to reduce impacts to a level that is less than significant. Mitigation Measure CUL-2 would ensure that future ground disturbing projects would be required to conduct a technical cultural resources assessment by a qualified archaeologist meeting Secretary of the Interior Standards, or agree to full-time monitoring by an archaeologist and a Native American monitor. If resources are known or reasonably anticipated, the assessment must take appropriate measures to protect or preserve them for study. Compliance with existing Federal, State, and local regulations, including the General Plan and implementation of Mitigation Measures CUL-1 and CUL-2, would reduce potential impacts to historical and archeological resources to a level that is less than significant.

Although no conditions exist that suggest human remains are likely to be found in the Project Area, future construction activities could have the potential to disturb or destroy buried Native American human remains as well as other human remains. As required by State law, the requirements and procedures set forth in PRC Section 5097.98 would be implemented during future development activities, including notification of the County Coroner, notification of the NAHC and consultation with the individual identified by the NAHC to be the “most likely descendant (MLD).” Additionally, the Gardena Municipal Code Section 18.42.210, *Post-permit*



Requirements, contains protections pertaining to human remains. Specifically, Section 18.42.210(D)(2) requires, in compliance with State law, that if human remains are unearthed, the project developer, pursuant to State Health and Safety Code Section 7050.5, will contact the County coroner and ensure no further disturbance occurs until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the NAHC must be notified within twenty-four hours. Thus, compliance with the Gardena Municipal Code, Health and Safety Code Sections 7050.5 to 7055, and PRC Section 5097.98 would ensure that in the event human remains are discovered, the remains would be handled in accordance with applicable laws, and impacts would be less than significant.

Similar to the Project, Alternative 3 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of residential development potential would be reduced. As with the proposed Project, there is potential that future development allowed under Alternative 3 could cause a substantial adverse change in the significance of known historic resources, and unknown historic and archaeological resources. However, as with the Project, Alternative 3 would be required to implement Mitigation Measures CUL-1 and CUL-2 and comply with the existing regulatory environment, which would reduce potential impacts to historical resources and archaeological resources to less than significant. The impact under Alternative 3 would remain the same compared to the proposed Project. As such, Alternative 3 is considered neither environmentally superior nor inferior to the Project.

Energy

As described in Section 5.5, Energy, Project implementation would use energy resources for the operation of new residential buildings (e.g., electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel fuel) generated by the Project (both during project construction and operation), and from off-road construction activities (e.g., diesel fuel) associated with implementation of the Project. Future development projects associated with implementation of the proposed Project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. Therefore, energy use impacts associated with the implementation of the Project would be less than significant.

Similar to the Project, Alternative 3 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of residential development potential would be reduced. While land uses and development under Alternative 3 would be required to adhere to the same local, State, and regional measures regulating energy usage as the Project, the net decrease in residential units, and the corresponding reduction in electricity and gas for the operation of buildings, diesel fuel for off-road construction activities, and potential reductions in gasoline due to a decrease in the overall traffic volumes would result in reductions in energy usage under Alternative 3 when



compared to the proposed Project. As such, Alternative 3 would be considered environmentally superior to the Project.

Geology and Soils

The Project would result in less than significant impacts involving the exposure of additional people or structures to potential adverse effects associated with seismic hazards (i.e., strong seismic ground shaking, and seismically induced liquefaction, lateral spreading, landsliding, and settlement), geologic hazards (i.e., subsidence, shallow groundwater) and soil erosion.

As described in Section 5.6, Geology and Soils, the Planning Area contains areas with low and moderate potential for fossils. It is possible that undiscovered paleontological resources could be encountered during future ground-disturbing activities within the Project Area. In compliance with the City's Municipal Code Section 18.42.210, prior to ground-disturbance activities, a qualified vertebrate paleontologist would be required to provide WEAP Training for construction personnel. If fossils or fossil bearing deposits are encountered during future ground disturbing activities, work would halt and a professional vertebrate paleontologist would be contacted to assess and evaluate the find pursuant to State CEQA Guidelines. Compliance with the City's Municipal Code requirements would reduce potential impacts to unanticipated paleontological resources associated with ground disturbance activities within areas identified as having a low potential for fossils.

In order to reduce potentially significant impacts to paleontological resources associated with future site-specific development in undisturbed sediments ranked moderate or above, project applicants would be required to implement Mitigation Measure GEO-1, which would require either a technical paleontological assessment consisting of a record search, survey, background context, and project specific recommendations or an agreement to conduct monitoring of all excavations below five feet. If resources are known or reasonably anticipated, recommendations would be required to include a detailed mitigation plan requiring monitoring during grading and other earthmoving activities in undisturbed sediments. The recommendations would provide a fossil recovery protocol that includes data to be collected; professional identification, radiocarbon dates and other special studies as appropriate; curation at local curation facility for fossils meeting significance criteria; a comprehensive final mitigation compliance report including a catalog of fossil specimens with museum numbers; and an appendix containing a letter from the museum stating that they are in possession of the fossils. With implementation of Mitigation Measure GEO-1, potential impacts to paleontological resources within undisturbed sediments ranked moderate or above would be reduced to a less than significant level.

Similar to the Project, Alternative 3 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of multi-family residential development potential would be reduced.



Since the Project Area contains the same geologic setting, similar physical constraints related to geology and soils exist. However, the potential for new development to expose people or structures to adverse effects associated with seismic ground shaking and geologic instabilities would be reduced under Alternative 3, as less residential development and resulting population would occur. As with the proposed Project, compliance with Gardena Municipal Code Section 18.42.210 and incorporation of Mitigation Measure GEO-1 would reduce potential impacts to paleontological resources to less than significant. Further, new development would be required to comply with the California Building Code and other applicable Municipal Code requirements. However, since Alternative 3 would expose fewer people to potential geologic impacts, such as strong seismic ground shaking, Alternative 3 would be considered environmentally superior to the Project.

Greenhouse Gas Emissions

As described in Section 5.7, Greenhouse Gas Emissions, although potential future development associated with implementation of the Project would generate GHGs during the construction and operational phases, the Project would not generate GHG emissions that would have a significant impact on the environment or conflict with any applicable plans, policies, or regulations, including GHG reduction actions/strategies in the City's CAP, the 2022 Scoping Plan and the 2020-2045 RTP/SCS. The Project's operational GHG emissions would result in a net decrease when compared to existing conditions. The Project's incremental contribution to GHG emissions and climate change would be less than significant. Thus, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs, and impacts would be less than significant.

Similar to the proposed Project, potential future development associated with implementation of the Alternative 3 would generate GHGs during the construction and operational phases. Like the proposed Project, Alternative 3 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of residential development potential would be reduced. Alternative 3 would result in reduced emissions associated with construction activity due to the Project Area including fewer parcels anticipated for redevelopment. However, operational emissions would likely be greater when compared to the Project, as Alternative 3 would not provide for existing commercial and industrial uses to be removed and replaced with residential uses to the extent of the proposed Project. Similar to the Project, Alternative 3 would be consistent with the City's CAP, the 2022 Scoping Plan and the 2020-2045 RTP/SCS. Since long-term operational GHG emissions under Alternative 3 would be greater when compared to the proposed Project, Alternative 3 would be considered environmentally inferior to the Project.



Hazards and Hazardous Materials

As described in Section 5.8, Hazards and Hazardous Materials, the Project does not include any specific development proposals; however, future development has the potential to expose people or structures to adverse effects associated with hazardous materials. Future residential development associated with implementation of the Project would be required to comply with Federal and State standards, including but not limited to, California *Health and Safety Code* Sections 17920.10 and 105256 and California Code of Regulations Title 8, Section 1532.1, which would ensure a less than significant impact with regards to hazards and hazardous materials.

Similar to the Project, Alternative 3 would result in additional residential uses within the Planning Area when compared to existing conditions. As with the proposed Project, compliance with Federal, State, and local regulations would reduce potential impacts from hazards and hazardous materials to less than significant. The potential for new residential development to expose people or structures to adverse effects associated with hazards and hazardous materials would be similar under Alternative 3 and the Project. However, under Alternative 3, removal of existing non-residential uses, including industrial uses with the potential to use and generate hazardous materials and redevelopment of the sites with residential uses would not occur to the extent proposed by the Project. Thus, potential hazards associated with historic and existing operations within the Project Area would not be removed and/or remediated under Alternative 3 to the extent that could occur with the Project. Additionally, existing operations with the potential to use and generate hazards and hazardous materials would continue to occur to a greater extent under Alternative 3. As such, Alternative 3 is considered environmentally inferior to the Project.

Hydrology and Water Quality

As described in Section 5.9, Hydrology and Water Quality, implementation of the Project would result in less than significant impacts related to Hydrology and Water Quality.

While Alternative 3 would result in the development of fewer residential units when compared to the Project, all new development would be subject to applicable stormwater and water quality requirements per the Los Angeles RWQCB. This variation in development sites would not substantially alter impacts from or to flooding, water quality, or on groundwater supplies because existing Federal, State, and local regulations would apply to guard against flood hazards, water quality contamination, or impact on groundwater supplies. Potential hydrology and water quality impacts associated with Alternative 3, like the proposed Project, would be less than significant.

Alternative 3 would result in a reduction of housing units when compared to the Project; however, potential water quality impacts related to operation would be greater. As described in Section 5.9, implementation of the Project would not result in construction, or long-term impacts to surface water quality from urban stormwater runoff. Although future development projects under all alternatives would be required to comply with the existing regulatory framework, including preparation of a SWPPP and identification of project-specific BMPs designed to control



drainage and erosion if a project proposes to disturb one acre or more, the Project would provide opportunity for more sites to be redeveloped, resulting in implementation of more current water quality requirements and improved water quality conditions overall. As the Project would provide for improved water quality conditions associated with the potential redevelopment of more sites and implementation of current standards and conditions related to water quality when compared to Alternative 3, Alternative 3 would be considered environmentally inferior to the Project.

Land Use and Planning

As described in Section 5.10, Land Use and Planning, all impacts related to land use and planning were found to be less than significant under the Project. The proposed Project and Alternative 3 would amend the Land Use Plan of the Community Development Element of the General Plan with the addition of new land use designations and other technical updates to reflect changes that have occurred since 2006 and amend the General Plan Land Use Policy Map to apply the new land use designations, including rescinding the ACSP and apply the proposed Housing Overlay designations to numerous sites designated for non-residential uses. Additionally, new zones and development standards would be created to provide consistency with the Land Use Plan update. Several other changes to the Zoning Code would also occur including providing new objective Residential Design Standards and adding a new chapter of Design Review for residential development.

Alternative 3 would implement all components of the Project, but fewer Non-inventory Sites would be within the Project Area, resulting in fewer sites receiving a Housing Overlay when compared to the Project. Alternative 3 would continue to implement the Housing Element through changes to the land use designations and zoning for the 122 Inventory Sites, consistent with the proposed Project; all density assumptions remain the same. The proposed amendments to the Land Use Plan of the Community Development Element with the addition of new land use designations and technical updates, proposed Zoning Code amendments, including new zoning designations with development standards, and Zoning Map amendments to apply the new zones and to eliminate split-zoned properties and rezone other properties to match the existing uses, densities or intensities that already occur on the property, and to rescind the ACSP would also occur under Alternative 3. However, the amount of residential development potential would be reduced. Similar to the Project, Alternative 3 would provide for consistency with applicable State and regional plans. Also similar to the Project, the parcels identified for proposed land use and zone changes under Alternative 3 are not located within established residential communities and do not extend into areas with the potential to physically divide an established community. The proposed land use and zoning changes under both the Project and Alternative 3 would further support integration of mixed-use development, infill housing, and infrastructure improvements to further connect uses within the Project Area, and would not introduce new roadways or new



or significantly expanded infrastructure that would divide an established community. As such, Alternative 3 would be considered neither environmentally superior nor inferior to the Project.

Mineral Resources

As described in Section 8.0, the Project would result in no impacts relating to mineral resources. The State Division of Mines and Geology has not designated any lands within the City as a State classified mineral resources deposit area, and no areas within the City are designated for mineral resources extraction. Given that no mineral resources would be impacted by the proposed Project, impacts associated with Alternative 3 would be the same and would remain less than significant. As such, Alternative 3 would be neither environmentally superior nor inferior to the Project.

Noise

As described in Section 5.11, Noise, while the Project does not directly propose site-specific development, future development associated with implementation of the Project could generate additional transportation noise, stationary noise, and construction noise. With regards to transportation noise, implementation of the proposed Project would result in inaudible increases in ambient noise and would result in a less than significant impact to roadway noise level. Further, the Project would not result in substantial increases in ambient noise along analyzed roadways and would result in less than significant impacts related to exceedances of the land use compatibility criteria. With regards to stationary noise, while no specific development projects are proposed under the Project, changes in land use may allow for more intensive noise-generating uses in closer proximity to noise-sensitive uses; however, future development projects would be required to comply with Gardena General Plan policies, including Policy N-2.5 which requires new commercial/industrial operations located in proximity to existing or proposed residential areas to incorporate noise mitigation into the project design, and Policy N-3.2, which requires compliance with noise regulations, and compliance with Gardena Municipal Code Section 8.36.040 exterior and interior noise standards. Following conformance with the existing regulatory framework, potential noise impacts would be less than significant in this regard. With regards to construction noise, the Project would result in on- and off-site short-term noise impacts; however, these impacts would be reduced to less than significant with the implementation of Section 18.42.200 of the Municipal Code and Mitigation Measure NOI-1, which requires applicants of future development projects within 500 feet of a sensitive use to prepare a noise study that addresses the potential impacts upon off-site sensitive uses due to construction. Further, future construction activities in the Project Area have the potential to result in significant impacts related to groundborne vibration. However, project applicants would be required to implement Mitigation Measure NOI-2, which would require vibration impact studies when construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. The vibration impact studies would be required to include a detailed mitigation plan to avoid any potential significant impacts to existing structures



due to groundborne vibrations, and potential vibration impacts related to construction vibration would be less than significant.

Alternative 3 would result in less development when compared to the proposed Project, resulting in a corresponding reduction in construction and operational noise. Additionally, Alternative 3 would result in the development of fewer multi-family residential units when compared to the proposed Project and a corresponding decrease in population. Both the Project and Alternative 3 would be required to comply with Gardena General Plan policies, the Municipal Code, and implement Mitigation Measures NOI-1 and NOI-2. Similar to the proposed Project, Alternative 3 would not result in substantial noise or vibration impacts. As such, Alternative 3 is considered neither environmentally superior nor inferior to the Project.

Population and Housing

As described in Section 5.12, Population and Housing, the General Plan Land Use Plan as it existed in March 2021 anticipates a total of 23,617 dwelling units, a population of 64,492, and a non-residential development capacity of 16,879,240 square feet. The proposed Project would accommodate future residential growth in Gardena primarily by amending the Gardena Land Use Policy Map and Zoning map to apply new land use designations and zones to specific parcels. For a majority of the parcels the proposed amendments allow for new residential development or increased residential development and densities when compared to existing conditions. As shown in Table 7-1 Project implementation could yield a net change over existing conditions of 12,167 additional multi-family residential units and 7,544,381 fewer square feet of non-residential uses. The Project has the potential to yield an additional 33,338 residents over existing conditions and would exceed the population projections anticipated by SCAG's growth forecasts and the City's General Plan. However, the proposed Project is intended to accommodate the City's 2021-2029 RHNA; SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs and revised General Plan growth projections associated with implementation of the Project will be included as part of SCAG's future growth forecasts. With implementation of General Plan policies and Municipal Code requirements intended to guide growth and provide services necessary to accommodate growth, including reducing potential environmental impacts related to growth, impacts associated with the unplanned population growth would be less than significant. Additionally, as the Project does not propose any site-specific development and would increase the overall number of dwelling units in the Project Area by approximately 12,167 additional units over existing conditions, no existing residents would be displaced. Therefore, the Project would result in less than significant impacts related to population and housing.

As shown in Table 7-7, Alternative 3 would result in the removal of 6,087,399 existing square feet of non-residential uses when compared to the Project, and the development of 2,168 fewer residential units when compared to the removal of 7,544,381 existing square feet assumed with



the Project, and the development of 1,796 fewer multi-family residential units when compared to the Project. Similar to the proposed Project, Alternative 3 would result in less than significant impacts related to population and housing. However, as Alternative 3 would be more consistent with the population and housing growth anticipated by SCAG and the City's General Plan and continue to provide the Inventory Sites to meet the City's RHNA, Alternative 3 would be considered environmentally superior to the Project.

Public Services and Recreation

As described in Section 5.13, Public Services, the Project would result in less than significant impacts relating to public services and recreation with the exception of parks and recreation facilities. New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services; however, the specific impacts of providing new and expanded facilities would be speculative and cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded public facilities. Project implementation would 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. This is a significant and unavoidable impact.

Under Alternative 3, there would be fewer residential dwelling units and population when compared to the Project. However, similar to the proposed Project, due to the existing parkland deficiency, the additional park acreage that would be needed to serve the potential increase in residents, and the lack of available land to expand or construct new parks, Alternative 3 would likely increase the use of existing neighborhood and regional parks or other recreational facilities. This increased use of existing facilities could result in substantial physical deterioration of the facilities to occur or be accelerated, resulting in a significant impact. Similar to the Project, potential impacts could be reduced through the payment of park fees, as established in Municipal Code Chapter 17.20, payment of construction and development fees, as established in Municipal Code Chapter 15.48, and payment for the rental/use of recreation and parks facilities established in Municipal Code Chapter 11.08, and adherence to local regulations established in the Municipal Code and General Plan General Plan policies. Additionally, new residential development under Alternative 3 would be required to meet the development standards associated with the specific zone for the site, which typically includes the provision of usable open space. Although impacts could be reduced, it is not anticipated that potential impacts under Alternative 3 would be reduced to a less than significant level due to the limited land area and ability to construct new parks. The increased use and accelerated deterioration of existing facilities would result in a significant and unavoidable impact. Since overall impacts to public services (the demand for police, fire and other public services), including to park and recreation facilities, would be reduced when compared to the Project, Alternative 3 would be considered environmentally superior to the Project.



Transportation

As described in Section 5.14, Transportation, transportation impacts associated with implementation of the Project would be less than significant. The proposed Project would not conflict with policies, plans, or programs regarding roadways, bicycle, pedestrian, or transit facilities. While the proposed Project would be expected to increase demand for travel given the proposed development and expected increase in residents, the Project proposes to increase housing development and density in areas which are served by high-quality transit in accordance with the SCAG 2020 RTP/SCS. Thus, the Project is not expected to cause roadway segment volumes to exceed capacity or negatively affect multi-modal transit options. Similarly, Alternative 3 would provide for increased residential development within the Project Area and would not conflict with policies, plans, or programs regarding roadways, bicycle, pedestrian, or transit facilities.

The Project does not propose changes to the Citywide roadway network and configuration. Any temporary road closure due to project-specific development would be required to receive permission from the traffic authority in accordance with Gardena Municipal Code Section 13.56.430 and would be required to maintain temporary and emergency access to the site and surrounding area. Similar to the Project, Alternative 3 would not increase hazards related to geometric design and incompatible use hazards or result in inadequate emergency access.

With implementation of the Land Use Plan and Zoning Amendment Project, the City's VMT per capita would not exceed 15 percent below the SCAG regional average. Therefore, the Project's impacts related to VMT would be considered less than significant. In addition, the Project would increase the local and regional housing supply to meet regional housing needs and locating housing in a transit-rich area, and is consistent with the SCAG 2020 RTP/SCS. The City's existing VMT per capita is approximately 25 percent below the regional average, and Project implementation would result in a VMT per capita of approximately 23 percent below the SCAG regional average. Although Alternative 3 would result in less residential development, similar to the Project, Alternative 3 would result in a VMT per capita that would not exceed 15 percent below the SCAG regional average; therefore, impacts related to VMT under Alternative 3 would be considered less than significant. As such, Alternative 3 would be considered neither environmentally superior nor inferior to the Project.

Tribal Cultural Resources

As described in Section 5.15, Tribal Cultural Resources, although the Project Area is primarily urbanized and has experienced extensive ground-disturbance, there is the potential that tribal cultural resources could occur below the surface; therefore, future development allowed under the proposed Project could cause a substantial adverse change in the significance of unknown tribal cultural resources which have not yet been identified. Future development within the Project area would be required to comply with the existing regulatory environment protecting



tribal cultural resources, including General Plan Community Resources Element, Conservation Plan Policy CN 5.3, which protects and preserves cultural resources of the Gabrielino Native American Tribe found or uncovered during construction. Gardena Municipal Code Section 18.42.210, *Post-permit Requirements*, contains protections pertaining to tribal cultural resources. Section 18.42.210(D)(1) requires, if Native American or tribal cultural resources are found on a proposed development site, that the applicant enter into a cultural resources treatment agreement with a local Native American tribe traditionally and culturally affiliated with Gardena that is acknowledged by the Native American Heritage Commission. The agreement is required to address the following: treatment and disposition of cultural resources; designation, responsibilities, and participation of professional tribal monitors during grading, excavation and ground disturbing activities; project grading and development scheduling; terms of compensation for the tribal monitors; treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on site; the tribal monitor's authority to stop and redirect grading in order to evaluate the significance of any potential resources discovered on the property, and to make recommendations as to treatment; the applicant's agreement to relinquish ownership of all cultural resources, including all archaeological artifacts that are found on the project area, to the tribe for proper treatment and disposition; and the applicant's agreement that all tribal sacred sites are to be avoided and preserved. With regards to human remains, Section 18.42.210(D)(2) requires, in compliance with State law, that if human remains are unearthed, the project developer, pursuant to State Health and Safety Code Section 7050.5, will contact the County coroner and ensure no further disturbance occurs until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the Native American Heritage Commission (NAHC) must be notified within twenty-four hours. Therefore, compliance with existing Federal, State, and local regulations, including the General Plan and Municipal Code, would reduce potential impacts to tribal cultural resources to less than significant.

Similar to the Project, Alternative 3 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of residential development potential would be reduced. As with the proposed Project, there is the potential that future development allowed under Alternative 3 could result in the discovery of currently unknown tribal cultural resources. Existing Federal, State, and local regulations, including the General Plan and Municipal Code, would reduce potential impacts to tribal cultural resources to a level that is less than significant. The potential impact to tribal cultural resources under Alternative 3 would remain relatively similar compared to the proposed Project. As such, Alternative 3 is considered neither environmentally superior nor inferior to the Project.



Utilities and Service Systems

As described in Section 5.16, Utilities and Service Systems, the Project would result in less than significant impacts relating to utilities and service systems. New development under either Alternative 3 or the proposed Project would place increased demands on utilities. Similar to the Project, Alternative 3 would allow for residential development primarily through infill development and redevelopment of existing developed sites, but the number of sites and amount of residential development potential would be reduced. Therefore, overall demand on utilities and service systems would be less when compared to the proposed Project. However, both Alternative 3 and the proposed Project would likely require the construction or expansion of new utilities to serve the site-specific development that is being proposed. The potential environmental effects associated with infrastructure projects would likely be reduced under Alternative 3 compared to the proposed Project. Since demand for utilities would be less under Alternative 3 due to the lower associated multi-family residential development potential, Alternative 3 would be considered environmentally superior to the Project.

Wildfire

As described in Section 8.0, Effects Found Not To Be Significant, the Project area is not located within a State Responsibility Area, nor is the City located within a Very High Fire Hazard Severity Zone within a Local Responsibility Area; therefore, the Project would result in no impacts related to wildfire. Like the Project, Alternative 3 would accommodate development generally in the same areas, and these areas are, for the most part, already urbanized. Given that the Project Area is not located in an area of high wildfire hazard potential, impacts associated with Alternative 3 would be the same and no impacts would occur. As such, Alternative 3 would be neither environmentally superior nor inferior to the Project.

Ability To Meet The Project Objectives

Alternative 3 would attain the Project's fundamental objectives, although potentially to a lesser extent, including: implementing Housing Element programs; providing opportunities for a mix of housing at varying densities; and providing opportunities to align housing production with State and local sustainability goals.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed Project.



A comparative analysis of the proposed Project and each of the Project alternatives is provided in Table 7-7, Comparison of Alternatives, below. As shown in Table 7-7, while Alternative 1 (No Project/Existing General Plan) would result in less than significant impacts in regards to air quality, Alternative 1 would have a new significant and unavoidable impact in regards to Land Use and Planning and Population and Housing, including creating an inconsistency with the City's General Plan Land Use Plan and Housing Element. While Alternative 2 (Proposed Project With Inventory Sites Only) and Alternative 3 (Proposed Project With Fewer Non-inventory Sites) would not eliminate the Project's significant and unavoidable impacts, both alternatives would lessen the majority of the environmental impacts associated with the proposed Project. Thus, both Alternative 2 and Alternative 3 are environmentally superior to the Project. Additionally, Alternative 2 and Alternative 3 would meet the Project objectives. However, Alternative 3 would provide greater opportunities for a mix of housing at varying densities and greater opportunity to align housing production with state and local sustainability goals since it would allow for greater infill residential and mixed-use development at higher densities in proximity to areas served by transit, jobs, and services. It would also create better development patterns and opportunities by providing additional parcels adjacent to Inventory Sites for residential development. Thus, since Alternative 3 would lessen the majority of the environmental impacts associated with the Project, Alternative 3 is identified as the environmentally superior alternative when considering all potential environmental impacts and the ability for the Alternative to meet the Project objectives.



**Table 7-7
Comparison of Alternatives**

Environmental Issue	Project	Alternative 1 No Project/Existing General Plan	Alternative 2 Proposed Project With Inventory Sites Only	Alternative 3 Proposed Project With Fewer Non- inventory Sites
Aesthetics	LTS	▲	=	=
Agricultural Resources	No Impact	=	=	=
Air Quality	SU	▼	▼*	▼*
Biological Resources	LTS	=	=	=
Cultural Resources	LTS w/MM	=	=	=
Energy	LTS	▲	▼	▼
Geology and Soils	LTS w/MM	▲	▼	▼
Greenhouse Gas Emissions	LTS	▲	▲	▲
Hazards and Hazardous Materials	LTS	▲	▲	▲
Hydrology and Water Quality	LTS	▲	▲	▲
Land Use and Planning	LTS	▲*	=	=
Mineral Resources	No Impact	=	=	=
Noise	LTS w/MM	=	=	=
Population and Housing	LTS	▲*	▼	▼
Public Services and Recreation	SU	▼*	▼*	▼*
Transportation	LTS	▲	=	=
Tribal Cultural Resources	LTS	=	=	=
Utilities and Services Systems	LTS	=	▼	▼
Wildfire	No Impact	=	=	=
<p>Notes:</p> <p>LTS = Less Than Significant Impact.</p> <p>LTS w/MM = Less Than Significant Impact With Mitigation Measure(s) Incorporated.</p> <p>SU = Significant and Unavoidable Impact.</p> <p>▲ Indicates an impact that is greater than the Project (environmentally inferior).</p> <p>▼ Indicates an impact that is less than the Project (environmentally superior).</p> <p>= Indicates an impact that is equal to the Project (neither environmentally superior nor inferior).</p> <p>* Indicates a significant and unavoidable impact.</p>				



8.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

8.1 INTRODUCTION

An analysis of the proposed Project's effect on specific environmental topic areas, included as part of the Environmental Checklist form presented in the California Environmental Quality Act (CEQA) Guidelines Appendix G, was conducted as part of the preparation of this EIR. During this evaluation, certain impacts of the Project were found to have no impact or have a less than significant impact due to the inability of a project of this scope to create such impacts or the absence of Project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the Draft EIR. In accordance with CEQA Guidelines Section 15128, the following section provides a brief description of potential impacts found to have no impact or a less than significant impact.

AESTHETICS

- b) *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

No Impact. There are no scenic highways officially designated by Caltrans within or adjacent to the Project Area, and no roadways within the Project Area are currently eligible for scenic highway designation (Caltrans 2023). No impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

AGRICULTURAL & FORESTRY RESOURCES

- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

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

No Impact. The City of Gardena does not contain any mapped Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (DOC 2023). Further, the City of Gardena does not contain zones for agricultural use or properties under a Williamson Act contract. Thus, the Project would not involve the conversion of farmland to a non-agricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract. No impact will occur regarding agricultural land conversion and, as such, this topic will not be addressed in the Project EIR.

Mitigation Measures: No mitigation measures are required.



c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

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

No Impact. No forest land, timberland, or timberland zoned Timberland Production occurs within the City. Thus, the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. This topic will not be further discussed in the Project EIR.

Mitigation Measures: No mitigation measures are required.

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

No Impact. Refer to Responses 4.2 (a) through 4.2 (d), above.

Mitigation Measures: No mitigation measures are required.

BIOLOGICAL RESOURCES

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?

No Impact. The Project Area is urbanized and is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan (City of Gardena, 2006; California Department of Fish and Wildlife, 2019). Thus, the Project would not conflict with any of these plans and no impact would occur.

Mitigation Measures: No mitigation measures are required.

GEOLOGY AND SOILS

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

4) Landslides?

No Impact. The Project Area is relatively flat, as is the immediately surrounding area. Due to the predominant underlying geologic formations and generally flat topography within the City, the Project Area has a low susceptibility to landslides. There are no earthquake-induced landslide seismic hazard zones mapped within the Project Area (CGS, 2023). Therefore, the probability of seismically-induced landslides occurring within the Project Area is very low. No impact would occur.



Mitigation Measures: No mitigation measures are required.

- e) ***Would the project 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?***

No Impact. The City of Gardena, along with the County Sanitation Districts of Los Angeles County (Sanitation Districts), provide wastewater service to the residents of the City. Local wastewater produced in the City connect to sewer mains maintained by the Sanitation Districts (District No 5). The Sanitation Districts own, operate, and maintain sewer lines that form the backbone of the regional wastewater conveyance system. Future residential development would be required to connect to the City's existing sewer system and would not involve the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

Mitigation Measures: No mitigation measures are required.

HAZARDS AND HAZARDOUS MATERIALS

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

Less than Significant Impact. There are no airports within the Project Area. The closest airport to the Project Area is the Hawthorne Municipal Airport located less than one mile northwest of the City of Gardena. However, the Project Area is not located within the boundaries of the Hawthorne Municipal Airport Influence Area (AIA) (Coffman Associates 2021). While the Project Area is within two miles of a public use airport, it is not within the area identified in an airport land use plan as being adversely affected (the AIA). As such, impacts with regard to safety hazards to people residing or working in the Project Area would be less than significant.

Mitigation Measures: No mitigation measures are required.

- g) ***Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?***

No Impact. The City of Gardena is urbanized and is not within or located adjacent to any wildlands or areas identified as being at risk of wildland fires. Therefore, the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Mitigation Measures: No mitigation measures are required.



MINERAL RESOURCES

- a) ***Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***
- b) ***Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?***

No Impact. The Surface Mining and Reclamation Act of 1975 (SMARA) requires classification of land into mineral resource zones (MRZs) according to the area's known or inferred mineral potential. According to the Gardena General Plan, the State Division of Mines and Geology has not designated any lands within the City as a State classified mineral resources deposit area. In addition, no areas within the City are designated for mineral resources extraction. Therefore, the Project would not result in the loss of availability of a known mineral resource considered of value to the region. No impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

NOISE

- c) ***For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise?***

No Impact. Hawthorne Municipal Airport, also known as Jack Northrop Field, is an FAA-designated general aviation reliever airport owned by the City of Hawthorne. The airport is located approximately 0.5-mile north of the northwestern-most portion of the City of Gardena. The City of Hawthorne General Plan Noise Element provides noise contours (Figures 5A and 5B) for the City, which include the airport. The noise contours associated with the airport do not extend beyond the municipal boundaries of the City of Hawthorne. The City of Gardena is not located within any adopted airport land use plan, there are no private airstrips in the vicinity of the City, and there are no public airports located within two miles of the City. As such, there are no impacts related to private airports, public airports, airstrips, or adopted airport land use plans.

Mitigation Measures: No mitigation measures are required.

WILDFIRE

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

No Impact. According to the Cal Fire Hazard Severity Zone Map, the City of Gardena is not located within a State Responsibility Area (SRA), nor is the City located within a Very High Fire Hazard Severity Zone (VHFHSZ) within a Local Responsibility Area (LRA) (Cal Fire 2023). Any future development would be required to comply with all City and LACFD requirements for fire prevention and safety measures, including site access.



The proposed Project would allow for residential development at higher densities and within areas of the City developed primarily with non-residential uses. Most arterials and major collector streets serve as a primary evacuation and emergency access routes within and out of the City. Future development of residential units is not anticipated to result in the modification of roadways surrounding the specific development site or the placement of any permanent physical barriers on adjacent roadways. There is the potential that traffic lanes located immediately adjacent to a development site may be temporarily closed or controlled by construction personnel during construction activities. Any temporary closure would be required to receive permission from the traffic authority in accordance with Gardena Municipal Code Section 13.56.430, *Road closure or interference with highway use*. However, this would be temporary and emergency access to the site and surrounding area would be required to be maintained at all times. Additionally, all construction staging would be required to occur within the boundaries of the development site and would not interfere with circulation along adjacent or any other nearby roadways. Thus, the Project would not substantially impair an adopted emergency response plan or emergency evacuation plan and no impact would occur.

Mitigation Measures: No mitigation measures are required.

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

No Impact. As discussed above, the City is not located within an SRA and is not located within a VHFHSZ within an LRA. The City and surrounding area relatively flat and do not contain any slopes or features that would exacerbate wildfire risks. No impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.



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

No Impact. As discussed above, the City is not located within an SRA and is not located within a VHFHSZ within an LRA. The City of Gardena is an urbanized area and the sites identified for potential residential development are surrounded by existing development and associated infrastructure. Potential residential development would not require the installation or maintenance of infrastructure that may exacerbate fire risk or result in temporary or ongoing impacts to the environment.

Mitigation Measures: No mitigation measures are required.

- d) ***Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

No Impact. As discussed above, the City is not located within an SRA and is not located within a VHFHSZ within an LRA. Further, the City and surrounding area are relatively flat. The Project would not expose people or structures to significant risk associated with wildfires.

Mitigation Measures: No mitigation measures are required.

8.2 REFERENCES

California Department of Conservation (DOC), *California Important Farmland Finder*, <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed March 7, 2023.

Cal Fire, *Fire Hazard Severity Zones Maps*, <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/fire-hazard-severity-zones-map/?lang=zh-CN>, accessed March 7, 2023.

California Department of Fish and Wildlife, *California Natural Community Conservation Plans*, April 2019, <https://wildlife.ca.gov/Conservation/Planning/NCCP>, accessed February 23, 2023.

State of California Department of Transportation (Caltrans), *California State Scenic Highway System Map*, <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>, accessed April 26, 2023.



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