



MEMORIAL PARK REDEVELOPMENT AND EXPANSION PROJECT

Draft Environmental Impact Report

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ACRONYMNS AND ABBREVIATIONS

°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
AADT	annual average daily trips
AB	Assembly Bill
ACM	asbestos-containing material
ADA	Americans with Disabilities Act
AFY	acre-feet per year
APCD	Air Pollution Control District
APE	Area of Potential Effect
APN	Tax Assessor's Parcel Number
APN	Assessor Parcel Number
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ASHRAE	American Society of Heating and Air Conditioning Engineers
AST	above ground storage tank
BERD	Built Environment Resource Directory
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, xylene
C ₂ H ₃ Cl	vinyl chloride
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAAP	Climate Action & Adaptation Plan
CAAQS	California Ambient Air Quality Standards
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalGreen	California Green Building Standards
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCE	Community Choice Energy
CCR	California Code of Regulations
CDC	Centers for Disease Control and Prevention
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act

Acronyms and Abbreviations

CEN	European Committee for Standardization
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CERS HAZ WASTE	California Environmental Report System Hazardous Waste
CFC	chloroflourocarbons
CFR	Code of Federal Regulations
CH ₄	methane
CHP	California Highway Patrol
CHRIS	California Historical Resources Inventory System
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPA	Clean Power Alliance
CRC	Community Recreation Center
CREC	controlled recognized environmental condition
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
DCP	Downtown Community Plan
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EDR	Environmental Data Resources, Inc.
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EO	Executive Order
ESA	Environmental Site Assessment
EV	electric vehicle
FTOH	fluoropolymers, precursor fluorotelomer alcohol
g/bhp-hr	grams per brake horsepower hour
GHG	greenhouse gas
H ₂ S	hydrogen sulfide
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
HAZWOPER	Hazardous Waste Operations and Emergency Response
HMBP	Hazardous Materials Business Plan
HRA	Health Risk Assessment
HRI	Historical Resources Inventory
HSWA	Hazardous and Solid Waste Act
HVAC	heating, ventilation, and air conditioning
HWTS	Hazardous Waste Tracking System

Acronymns and Abbreviations

I-	Interstate
ILRP	Irrigated Lands Regulatory Program
kg/m ²	kilograms per square meter
LBP	lead-based paint
lbs/day	pounds per day
lbs/ft ²	pounds per square foot
LCI	Land Use and Climate Innovation
LHMP	Local Hazard Mitigation Plan
LOS	Level of Service
LRT	Light Rail Transit
LST	Localized Significance Threshold
LUCE	Land Use and Circulation Element
LUST	leaking underground storage tank
mg/kg	milligrams per kilogram
MLD	Most Likely Descendant
MMRP	Mitigation Monitoring or Reporting Program
MMT	million metric tons
MND	Mitigated Negative Declaration
mpg	miles per gallon
mph	miles per hour
MT	metric tons
MUBL	Mixed-Use Boulevard
N ₂	nitrogen
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NC	Neighborhood Commercial
ND	Negative Declaration
NFA	no further action
NHMRR	National Hazardous Materials Route Registry
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO ₂	nitrogen dioxide
NOA	Notice of Availability
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPL	National Priorities List
NPS	National Park Service
NRHP	National Register of Historic Places
NTP	National Toxicology Program

Acronymns and Abbreviations

O ₂	oxygen
O ₃	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OEM	Office of Emergency Management
OHP	Office of Historic Preservation
OSHA	Occupational Safety and Health Administration
OVA	organic vapor analyzer
PAL	Police Activities League
Pb	lead
PCB	polychlorinated biphenyl
PCE	perchloroethylene
PE	Professional Engineer
PE	Pacific Electric
PFAS	Per- and Poly-Fluoroalkyl Substances
PG	Professional Geologist
PID	photoionization detector
PLD	Public Landscape Division
PM	particulate matter
PM ₁₀	particulate matter than 10 microns in diameter
PM _{2.5}	Particulate matter less than 2.5 microns in diameter
PMI	Point of Maximum Impact
ppm	parts per million
PRC	Public Resources Code
PV	photovoltaic
PVC	polyvinyl chloride
RCRA	Resources Conservation and Recovery Act
RCRA NONGEN/NLR	Resource Conservation and Recovery Act Non Generators
REC	recognized environmental condition
ROG	reactive organic gasses
RPA	Registered Professional Archaeologist
RPS	Renewable Portfolio Strategy
RTP/SCS	Regional Transportation Plan / Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCH	State Clearing House
sf	square foot

Acronymns and Abbreviations

SHBC	State Historical Building Code
SHMP	State of California Multi-Hazard Mitigation Plan
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SLF	Sacred Lands File
SLIC	Spills, Leaks, Investigations, and Cleanups
SMC	Santa Monica College
SMFD	Santa Monica Fire Department
SMMC	Santa Monica Municipal Code
SMMUSD	Santa Monica-Malibu Unified School District
SMO	Santa Monica Municipal Airport
SMPD	Santa Monica Police Department
SMURRF	Santa Monica Urban Runoff Recycling Facility
SO ₂	sulfur dioxide
SP	Southern Pacific
SR-	State Route
SRA	Source receptor area
STC	Synthetic Turf Council
SVE	soil vapor extraction
SWIP	Sustainable Water Infrastructure Project
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TAC	Toxic Air Contaminants
TDM	Transportation Demand Management
TSCA	Toxic Substances Control Act
UCSB	University of California Santa Barbara
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UST	underground storage tank
UV	ultraviolet
V/C	volume-to-capacity ratio
VMT	vehicle miles traveled
VMT	vehicle mile traveled
VOC	Volatile Organic Compound
VOC	volatile organic compounds
WHO	World Health Organization
WRCC	Western Regional Climate Center
X-SO ₄ 2-	sulfates

EXECUTIVE SUMMARY

This Environmental Impact Report (EIR) evaluates the potential environmental impacts resulting from the implementation of the proposed Memorial Park (Park) Redevelopment and Expansion Project (Project). WSP prepared this EIR on behalf of, and pursuant to direction from, City of Santa Monica (City) staff. The purpose of the Project is to renovate and expand the existing Park located at 1401 Olympic Boulevard to meet an increasing demand for recreational activities. The proposed Project is based on direction provided during an extensive community outreach process that the City conducted during the development of a master plan for the Park. With the City's focus on better serving the community's demands, the proposed Project would involve the development of modernized public recreational facilities, improved accessibility to park amenities, and enhanced community gathering spaces.

Key components of the proposed Project include the following, which will be developed in phases:

- Two synthetic turf combo fields (two playing fields per combo field);
- Three natural grass youth fields (one fast-pitch softball and two baseball fields);
- Four rooftop tennis/pickleball courts;
- A new Community Hub Building and the replacement of the children's playground with a new universally accessible playground;
- Renovation and expansion of the skate park;
- Replacement of the existing community recreation center with a new Community Recreation Center; and a
- New covered parking lot and passenger loading zone.

The Project site is comprised of two parcels: the existing 10.3-acre Memorial Park (Assessor Parcel Number [APN] 4283-010-901); and the 2.9-acre former Fisher Lumber (currently the City's Public Landscape Division [PLD] Colorado Yards) site (APN 4283-010-902). The proposed Project involves combining the existing 10.3-acre Memorial Park with the 2.9-acre former Fisher Lumber site to create a 13.2-acre park. The Project site is centrally located within the City's Pico Neighborhood and bound by Colorado Avenue to the north, 14th Street to the west, Olympic Boulevard to the south, and 16th Street to the east.

The Project site has a Parks and Open Space land use / zoning designation pursuant to the City's Land Use and Circulation Element (LUCE) and Zoning Ordinance. The Parks and Open Space designation allows for parks and green open space and supporting uses such as recreation centers, gymnasiums, community meeting facilities, and small-scale retail uses that support outdoor recreation (e.g., restaurants, refreshment stands, or sporting equipment and rental vendors). The Project site also is subject to the Memorial Park Activity Center Low Overlay. The area subject to this Overlay includes Memorial Park and the Expo

Light Rail Transit (LRT) Station at 17th Street. The Overlay capitalizes on the attributes of these two key resources to create an active mixed-use neighborhood. The Overlay provides the opportunity for a joint-development program incorporating City, Metro, Santa Monica-Malibu Unified School District (SMMUSD) and perhaps private land to construct new school district offices and educational facilities, other offices, a range of residential units, and local-serving retail and services. Most significantly, there is an opportunity to extend the park open space across the freeway between 14th Street and 17th Street by decking over the freeway (LUCE, 2.5-5).

Project Objectives

California Environmental Quality Act (CEQA) Guidelines Section 15124(b) requires a project description to contain a statement of the project's objectives and purpose. The City has identified the following objectives for the proposed Project:

- **Improve Park and Recreational Amenities:** Enhance the City of Santa Monica's park system by providing safe, accessible, and high-quality recreational amenities for residents of all ages and abilities;
- **Address Community Needs:** Provide recreational uses that would meet the highest priority needs of the community, including the need for flexible and year-round space for diamond field sports;
- **Ensure Neighborhood Compatibility:** Design Memorial Park to be compatible with, and sensitive to, the surrounding land uses and environment;
- **Strengthen Community Programs:** Maintain and expand community programs, such as the Police Activities League (PAL), gymnasium, and fitness facilities;
- **Integrate Components from Active Transportation Plans:** Implement actions identified in the LUCE, Pedestrian Action Plan, and Bicycle Action Plan, which promote active transportation, connectivity, accessibility, and safety; and
- **Promote Sustainability:** Build new and modern energy-efficient amenities and water saving features that are sustainable and meet the latest building and energy codes.

Environmental Impact Analysis

This EIR examines potential impacts of the proposed Project. These impacts were determined through a rigorous process mandated by CEQA in which existing conditions are compared and contrasted with conditions that would exist following the implementation of the proposed Project. For each impact topic, thresholds for identifying impact significance are identified based on City and CEQA Guidelines, along with descriptions of methodologies used for conducting the impact analysis. For some topics, such as air quality, the analyses of impacts involve quantitative methodologies and involve the comparison of effects against

a numerical threshold. For other topics, such as cultural and tribal cultural resources, the analyses of impacts involve qualitative methodologies and consideration of a variety of factors such as adopted City regulations and project design features.

The EIR impact discussions classify impact significance levels as:

1. **Significant and Unavoidable** – a significant impact to the environment that remains significant even after feasible mitigation measures are applied;
2. **Less Than Significant with Mitigation** – a significant impact that can be avoided or reduced to a less than significant level with mitigation;
3. **Less Than Significant** – a potential impact that would not meet or exceed the identified thresholds of significance for the topic area; and
4. **No Impact/Beneficial Impact** – no impact would occur for the topic area or a beneficial effect would result.

Determinations of significance levels in the EIR are made based on impact significance criteria and applicable CEQA Guidelines for each topic area.

Pursuant to CEQA Guidelines Section 15126.4, where potentially significant environmental impacts have been identified in the EIR, feasible mitigation measures that would avoid or minimize the severity of those impacts are also identified. Pursuant to CEQA, feasible mitigation measures must be implemented for all significant impacts.

Notice of Preparation/Scoping

Pursuant to CEQA Guidelines Section 15063, the City prepared an Initial Study that determined the proposed Project would result in potentially significant impacts requiring evaluation in this EIR pertaining to air quality; cultural and tribal cultural resources; greenhouse gases and climate change; and hazards and hazardous materials (see Appendix A).

Following completion of the Initial Study, the City performed a public scoping process consistent with CEQA Guidelines Section 15083. On February 27, 2025, the City published the Notice of Preparation (NOP) to provide the public an opportunity to comment on the scope of the EIR. The City also provided the NOP to Federal, State, and local agencies, neighborhood groups, and all occupants and owners within the vicinity of the Project site. The NOP comment period ran from February 27, 2025 through April 1, 2025. Additionally, the City conducted a Public Scoping Meeting for the EIR on March 12, 2025, to describe the Project and the environmental review process, and to receive public comments on the scope and content of the EIR. The scoping process assisted the City in determining potentially significant environmental impacts of the proposed Project, thereby narrowing the focus (or scope) of the environmental analysis in this EIR. The analysis in this EIR considered the comments received during the scoping process, which are included in Appendix B, along with the NOP.

Summary of Project Impacts

The significance of each impact resulting from implementation of the proposed Project has been determined based on the CEQA Guidelines impact significance criteria established in this EIR. Table ES-1 presents a summary of the impacts, mitigation measures, and residual impacts from implementation of the proposed Project, which were evaluated in-depth in this EIR based on the findings of the Initial Study.

In summary, the proposed Project would result in less than significant impacts, as well as potentially significant impacts that can be mitigated to a less than significant level, regarding hazards and hazardous materials and cultural and tribal cultural resources. The proposed Project would result in insignificant impacts regarding air quality and greenhouse gases and climate change. The proposed Project would not create any significant and unavoidable impacts.

Summary of Cumulative Impacts

CEQA Guidelines Section 15130(a) states (in pertinent part), “[a]n EIR shall discuss the cumulative impacts of a project when the project’s incremental effect is cumulatively considerable...” “Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in combination with the effects of past projects, the effects of other current projects, and/or the effects of probable future projects (CEQA Guidelines Section 21083[b][2]).

The proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact regarding any of the environmental topics evaluated in this EIR, with the adoption of the mitigation measures set forth in Table ES-1.

Alternatives Analysis

The CEQA Guidelines Section 15126.6 states, “[a]n EIR shall describe a range of reasonable alternatives to the proposed 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.” Pursuant to this requirement, the EIR evaluates the following three alternatives:

- Alternative 1: No-Project Alternative (CEQA Guidelines Section 15126.6[e]);
- Alternative 2: Use of Real Grass Turf Fields and No Plastic Playground Equipment; and
- Alternative 3: Reduced Development Alternative

Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires identification of the environmentally superior alternative among the alternatives evaluated in the EIR. In general, the environmentally superior alternative as defined by CEQA should minimize adverse impacts to the project site and its surrounding environment.

As discussed in Chapter 5.0, *Project Alternatives*, the No Project Alternative does not create new impacts (e.g., impacts from construction activities or increased hazards due to the use of artificial turf fields); therefore, it is the environmentally superior alternative when compared to the proposed Project and other alternatives. However, the No Project Alternative would not fulfill the City's Project Objectives regarding improvements to park and recreational amenities, addressing community needs, strengthening community programs, integrating active transportation components into the design of the Park, or promoting sustainability (e.g., by replacing older facilities with more energy efficient contemporary facilities).

CEQA Guidelines Section 15126.6 states that if the environmentally superior alternative is the No Project Alternative, an EIR shall also identify an environmentally superior alternative from among the other alternatives. Of the other alternatives considered, Alternative 2 (Use of Natural Grass Turf and Non-Plastic Playground Equipment) is considered to be the environmentally superior alternative.

Alternative 2 would replace the two artificial turf combo fields and plastic playground equipment with two real grass combo fields and "eco-friendly" playground equipment, respectively. As such, this alternative would avoid significant impacts regarding the potential for artificial turf and/or plastic playground equipment to produce PFAS and/or microplastics, contaminate water and soil, and adversely affect human health. The implementation of **MM HAZ-1** through **MM HAZ-7** would no longer be required.

Alternative 2 would also meet the primary Project Objectives except for the community's need for year-round field space. For example, the use of natural grass likely would periodically prevent the use of the fields during the rainy season, as saturated grass fields can lead to muddy and unsafe playing conditions. However, these conditions would be similar to existing conditions with the existing natural grass fields at Memorial Park.

Table ES-1. Impact Comparison of Project Alternatives to the Proposed Project

Environmental Topic	Project	Impact Level Compared to Project		
		No Project	Alternative 2 - Use of Natural Grass Turf Fields and Non-Plastic Playground Equipment	Alternative 3 - Reduced Development Alternative
Air Quality	Less than Significant	No Impact	Similar	Less
Cultural and Tribal Cultural Resources	Less than Significant with Mitigation	No Impact	Similar	Less
Greenhouse Gases and Climate Change	Less than Significant	No Impact	Similar	Less
Hazards and Hazardous Materials	Less than Significant with Mitigation	No Impact	Less	Similar
Project Objectives Met?	Yes	No	Yes	Yes

Table ES-2. Proposed Project Impacts, Mitigation Measures, and Residual Impacts

Impacts	Mitigation Measures	Residual Impacts
Air Quality		
AQ-1 Implementation of the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. This would be a <i>less than significant</i> impact.	No mitigation required	Less Than Significant
AQ-2 Implementation of the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable Federal or State ambient air quality standard. This would be a <i>less than significant</i> impact.	No mitigation required	Less Than Significant
AQ-3 The proposed Project would not expose sensitive receptors to substantial pollutant concentrations. This impact would be <i>less than significant</i> .	No mitigation required	Less Than Significant
AQ-4 The proposed Project would not result in emissions that are not addressed in the other thresholds that are used to evaluate air quality impacts in this EIR. This impact would be <i>less than significant</i> .	No mitigation required	Less Than Significant
Cultural and Tribal Cultural Resources		
CR-1 Construction activities associated with the proposed Project would not adversely affect potential historical resources and would result in <i>less than significant</i> impacts.	No mitigation required	Less Than Significant
CR-2 Ground disturbing activities associated with construction of the proposed Project could uncover significant prehistoric or historic-period archaeological deposits that qualify as cultural resources as defined in Section 15064.5 of the CEQA Guidelines. Damage or destruction of such resources would result in a potentially significant impact. This impact would be <i>less than significant with mitigation</i> .	MM CR-1 Cultural Resource Awareness Training. As part of the required Worker Environmental Awareness Program training, all construction personnel will be trained by a qualified, on-site cultural resources representative regarding the identification, recognition, and protection of possible buried cultural resources during construction, prior to the initiation of construction or ground-disturbing activities. Training will inform construction personnel of the	Less Than Significant

Impacts	Mitigation Measures	Residual Impacts
	<p>procedures to be followed upon the discovery of cultural materials. These procedures include notifying a cultural resources monitor upon an accidental discovery and cessation of all work activities within the area of discovery until the monitor provides written approval to proceed. All personnel will be instructed that unauthorized collection or disturbance of cultural resources is unlawful.</p> <p>MM CR-2 Historical and Archaeological Construction Monitoring. A qualified professional archaeologist familiar with the types of prehistoric and historic-period archaeological resources that could be encountered within the Project site, shall monitor the Project site for the presence of historic and/or archaeological resources. All grading, excavation, trenching, and site preparation including vegetation removal within native, in-tact soils shall be monitored. Following the completion of ground disturbance within native, in-tact soils, monitoring shall no longer be required. A monitoring program shall be developed and implemented prior to the commencement of construction activities to ensure the effectiveness of monitoring.</p> <p>MM CR-3 Inadvertent Discoveries. In the event of any inadvertent discovery of prehistoric, historic-period archaeological, or tribal cultural resources or human remains during construction, all construction activity shall immediately cease within 50 feet of the discovery. The construction manager shall immediately notify the City of Santa Monica Planning and Community Development Department and shall retain a Registered Professional Archaeologist (RPA) to evaluate the significance of the discovery and/or inspect the remains.</p>	

Impacts	Mitigation Measures	Residual Impacts
	<p><u>Prehistoric, Historic-Period Archaeological, and Tribal Cultural Resources:</u> In the event of the discovery of prehistoric, historic-period archaeological, and/or tribal cultural resources, the investigation shall be subject to a Treatment Plan that sets forth explicit criteria for evaluating the significance of the resource and identifies appropriate data recovery methods and procedures to mitigate Project effects on the significant resources. An RPA who is familiar with both prehistoric and historic-period archaeological resources shall prepare the Treatment Plan, prior to further excavation or site investigation. The Treatment Plan shall also provide for a final technical report on all cultural resource studies and for the curation of artifacts and other recovered remains at a qualified curation facility. If the archaeologist determines that the find may qualify for listing in the California Register of Historical Resources, the site shall be avoided, or a data recovery plan shall be developed. Any required testing or data recovery shall be directed by an RPA prior to construction being resumed in the affected area. Work shall not resume until the City provides authorization.</p> <p><u>Human Remains:</u> In the event of the discovery of human remains, the investigation shall be subject to the process and requirements set forth in California Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5, and Public Resources Code (PRC) Section 5097.98. An RPA shall inspect the remains and confirm that they are human and, if so, shall immediately notify the City of Santa Monica Planning Division and contact the County coroner. If the coroner determines the remains are Native American, the coroner shall contact the Native American Heritage Commission (NAHC). The NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent shall make recommendations for the means of treating or disposing of, with appropriate dignity, the human remains</p>	

Impacts	Mitigation Measures	Residual Impacts
	and any associated grave goods as provided in PRC Section 5097.98.	
<p>CR-3 Ground disturbing activities associated with construction of the proposed Project could potentially uncover and disturb buried human remains. The impact would be <i>less than significant with mitigation</i></p>	Refer to MM CR-3 (Inadvertent Discoveries) , above.	Less Than Significant
<p>CR-4 Tribal cultural resources, as defined in PRC Section 21074, may be inadvertently uncovered during ground disturbing activities associated with construction of the proposed Project. Damage or destruction of such tribal cultural resources would be a potentially significant impact. However, with the implementation of Native American monitoring, impacts would be reduced to <i>less than significant with mitigation</i>.</p>	<p>Refer to MM CR-1 (Cultural Resource Awareness Training) and MM CR-3 (Inadvertent Discoveries), above.</p> <p>MM CR-4 Native American Construction Monitoring. Prior to the commencement of ground disturbance activities, the City shall retain a Native American tribal monitor. The Native American tribal monitor shall be present during all grading, excavation, trenching, and site preparation including vegetation removal within native, in-tact soils. Following the completion of ground disturbance within native, in-tact soils, monitoring shall no longer be required.</p>	Less Than Significant
<p>Greenhouse Gases and Climate Change</p>		
<p>GHG-1 The proposed Project would not generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment. This impact would be <i>less than significant</i>.</p>	No mitigation required	Less Than Significant
<p>GHG-2 The proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be <i>less than significant</i>.</p>	No mitigation required	Less Than Significant
<p>Hazards and Hazardous Materials</p>		
<p>HAZ-1 The proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be <i>less than significant with mitigation</i>.</p>	<p>MM HAZ-1 Voluntary Compliance with Per- and Poly-Fluoroalkyl Substances (PFAS) Concentration Limitations. The City, or its designated design and/or construction team, shall ensure that PFAS concentrations in all artificial turf materials and playground materials voluntarily comply with the California Assembly Bill (AB)</p>	Less Than Significant

Impacts	Mitigation Measures	Residual Impacts
	<p>1817 regulatory threshold of 50 parts per million (ppm) for organic fluorine content. Compliance shall be ensured through a requirement for a manufacturer(s) guarantee(s) that their product(s) meet this threshold concentration, backed by product testing for both individual PFAS and total organic fluorine for each batch of materials purchased.</p> <p>MM HAZ-2 Use of Alternative Infill Materials. The City, or its designated design and/or construction team, shall identify and use alternative infill materials that do not contain PFAS or microplastic components and the reduce the heat island effect of artificial turf. These alternative infill materials could include, but shall not be limited to, walnut shell, olive pits, coconut, woodchips, cork, or other certified organic/plant-based alternatives, which shall be used in place of traditional crumb rubber or other plastic-based infill.</p> <p>MM HAZ-3 Voluntary Compliance with the Synthetic Turf Council Guidelines. All artificial turf installations shall voluntarily meet the requirements set forth in the Guidelines for Designers and Procurement Specialists (KIMO and Fidra 2019) as well as the Suggested Guidelines for the Essential Elements of Synthetic Turf Systems issued by the Synthetic Turf Council (2011), as they relate to construction and installation, maintenance, and performance for the purposes of maximizing drainage and minimizing shedding of artificial grass blades.</p> <p>MM HAZ-4 Containment and Drainage Controls. The City, or its designated design and/or construction team, shall incorporate an engineered containment barrier and subdrain filtration system designed to capture and prevent the migration of infill and/or synthetic fibers into adjacent</p>	

Impacts	Mitigation Measures	Residual Impacts
	<p>stormwater systems. The drainage system shall meet the standards set out in the European Committee for Standardization (CEN) Report (DS/CEN/TR 17519). To ensure any infill and/or synthetic fiber being carried by rainwater following through a drainage system is captured before the water leaves boundaries of the field perimeter drain include silt traps to capture it. These drainage systems typically comprise a filter bucket that provides primary filtration of heavier silts and a secondary micro-filter that captures any remaining small particles. Both the filter buck and secondary micro-filter should be easily removal for maintenance.</p> <p>MM HAZ-5 Shoe Cleaning Grates and Scrapper Mats. Consistent with the standards set out in the CEN Report (DS/CEN/TR 17519) shoe cleaning grates/scrapper mats shall be installed along the entrances to the artificial turf fields. The grates/mats should be set in recessed bases that will retain any infill or synthetic fibers. To prevent the bases filling with water, they shall contain a drain fitted with a silt trap to capture infill. Shoe cleaning stations, with signage encouraging athletes to use them (see MM HAZ-7), should be positioned at the main points of egress from the field. If mounted outside the artificial turf field, they should be positioned on a recessed-paved area that is designed to retain the infill and synthetic fibers.</p> <p>MM HAZ-6 Long-Term Maintenance and Monitoring. The City shall prepare and implement a long-term maintenance and monitoring plan to minimize wear and tear of artificial turf consistent with the standards set for in the Guidelines for Designers and Procurement Specialists (KIMO and Fidra 2019) as well as the Guidelines for the Maintenance of Infilled Synthetic Turf Sports Fields (2013) issued by the</p>	

Impacts	Mitigation Measures	Residual Impacts
	<p>Synthetic Turf Council. At a minimum this plan shall require:</p> <ul style="list-style-type: none"> • Routine maintenance including regular inspections and minor repairs, maintenance of proper infill levels, and grooming of the surface; • Semi-Annual Comprehensive Maintenance, including professional field inspection and corrective action, decompaction of infill, redistribution and level of the infill, deep cleaning, metal removal, weed and pest treatment, and/or partial removal and reinstallation of infill material; and • Record-keeping of maintenance activities and inspections, available upon request. <p>MM HAZ-7 Educational Signage. The City shall install educational signage at the artificial turf field to inform users about the potential direct and indirect environmental impacts of microplastics and proper use of the artificial turf fields necessary to prevent shedding of synthetic fibers and/or displacement of infill and synthetic fibers.</p>	
<p>HAZ-2 Construction of the proposed Project has the potential to create a hazard to the public or the environment through reasonably foreseeable upset and accidental conditions involving the release of hazardous materials during excavation, trenching, and grading. Impacts would be <i>less than significant with mitigation</i>.</p>	<p>MM HAZ-8 Asbestos-Containing Materials (ACM), Lead-Based Paint (LBP), Polychlorinated Biphenyls (PCBs), and Molds. Prior to the issuance of a demolition permit, the City shall conduct a comprehensive survey of ACM, LBP, PCBs, and molds. If such hazardous materials are found to be present, the City shall follow all applicable local, State, and Federal codes and regulations, as well as applicable best management practices, related to the treatment, handling, and disposal of ACM, LBP, PCBs, and molds to ensure public safety.</p>	<p>Less than Significant</p>

Impacts	Mitigation Measures	Residual Impacts
	<p>MM HAZ-9 Inadvertent Discovery. If previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction at a development site, construction activities in the vicinity of the contamination shall cease immediately. A qualified environmental specialist (e.g., a licensed Professional Geologist [PG], a licensed Professional Engineer [PE] or similarly qualified individual) shall conduct an investigation to identify and determine the level of soil and/or groundwater contamination. If contamination is encountered, a Human Health Risk Management Plan shall be prepared and implemented that: (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development; and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures could include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the type of contamination, appropriate oversight agencies (e.g., Santa Monica Fire Department [SMFD]) shall be notified. If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration (OSHA) requirements shall be prepared and in place prior to commencement of work in any contaminated area.</p> <p>MM HAZ-10 Soils Management Plan: For project sites with onsite soil contamination, prior to approval of the first grading plan or issuance of the first demolition permit, whichever occurs first, the City shall submit a soils management plan and a transportation plan to the</p>	

Impacts	Mitigation Measures	Residual Impacts
	<p>appropriate cleanup agency (e.g., Los Angeles Regional Water Quality Control Board [RWQCB], Department of Toxic Substances Control [DTSC], or SMFD) for review and approval. The soils management plan and transportation plan shall include the following tasks.</p> <p><u>Soils Management Plan</u></p> <p>Affected soils shall be either directly loaded into awaiting trucks for immediate offsite disposal or temporarily stockpiled on plastic sheeting prior to load-out and offsite disposal. If temporarily stockpiled, soil removed from the excavations shall be placed next, or as close as possible, to the area of excavation from which it came.</p> <p>Prior to load-out, the construction contractor shall prepare waste profiles and example waste manifests for approval by the receiving facilities. Soil and material segregation, stockpile handling, truck loading, and storm water management practices shall be followed during the remedial action according to the following.</p> <p><u>Soil and Material Segregation</u></p> <p>Overburden soils shall be screened with an organic vapor analyzer (OVA) in accordance with South Coast Air Quality Management District (SCAQMD) Rule 1166. Any significant quantities of construction debris encountered during excavation shall be segregated and disposed in accordance with Federal, State, and local regulations. Soil cuttings during the installation of soldier piles shall be disposed offsite with any affected soils from the deep excavation.</p> <p><u>Stockpile Management</u></p> <p>The stockpiled soils for load-out shall be segregated by waste classification:</p> <ul style="list-style-type: none"> • Nonhazardous waste. 	

Impacts	Mitigation Measures	Residual Impacts
	<ul style="list-style-type: none"> • Volatile Organic Compound (VOC)-contaminated nonhazardous waste with OVA readings greater than 50 ppm but less than 1,000 ppm. • VOC-contaminated nonhazardous waste with OVA readings of 1,000 ppm or greater. These soils shall be immediately sprayed with water or suppressant and placed in a sealed container (roll-off bin) or directly loaded into a suitable transport truck, moistened with water, and covered with a tarp for offsite transportation to the appropriate disposal facility, as specified in the SCAQMD Rule 1166 Mitigation Plan. <p>The temporary stockpiles containing affected soils shall be managed as follows:</p> <ul style="list-style-type: none"> • The temporary stockpiles for non-VOC contaminants shall be placed on plastic sheeting and kept moist during working hours and covered with plastic sheeting at the end of the day to control dust. • The VOC-contaminated stockpiles shall be placed on plastic sheeting and immediately covered with plastic sheeting. The edges of the plastic shall have an overlap of at least 24 inches. The plastic shall be secured at the base of the stockpile and along the seams of overlapping plastic sheeting with sandbags or equivalent means. The stockpiles shall remain covered until load-out. • Daily inspections of the stockpiles shall be conducted to verify the integrity of the stockpile covers. Any gaps, tears, or other deficiencies shall be corrected immediately. Daily records shall be kept of stockpile inspections and any repairs made. • If necessary, commercial vapor suppressants and sealants shall be prepared and applied to VOC- 	

Impacts	Mitigation Measures	Residual Impacts
	<p>contaminated soil in accordance with the manufacturer’s recommendations.</p> <ul style="list-style-type: none"> • During stockpile generation and removal, only the working face of the stockpile shall be uncovered. <p><u>Decontamination Methods and Procedures</u></p> <p>Each piece of equipment used for the excavation of affected soils shall have a clean-out bucket or continuous edge across the cutting face of its bucket. No excavation of affected soil shall be permitted with equipment utilizing teeth across the cutting edge of its bucket.</p> <p>Entry to the contaminated areas (i.e., work exclusion zones) shall be limited to avoid unnecessary exposure and related transfer of contaminants. In unavoidable circumstances, any equipment or truck(s) that come into direct contact with affected soil shall be decontaminated to prevent the onsite and offsite distribution of contaminated soil. The decontamination shall be conducted within a designated area by brushing off equipment surfaces onto plastic sheeting. Trucks shall be visually inspected before leaving the site, and any dirt adhering to the exterior surfaces shall be brushed off and collected on plastic sheeting. The storage bins or beds of the trucks shall be inspected to ensure the loads are properly covered and secured. Excavation equipment surfaces shall also be brushed off prior to removing the equipment from contaminated areas.</p> <p>Movement of affected soils from the excavation area to temporary stockpiles shall be conducted using enclosed transfer trucks, if possible. If affected soils must be moved within an open receptacle (e.g., loader bucket), the travel path for the loader shall be scraped following this activity, with scraped soils placed in the temporary stockpile for load-out.</p>	

Impacts	Mitigation Measures	Residual Impacts
	<p>Sampling equipment that comes into direct contact with potentially contaminated soil or water shall be decontaminated to assure the quality of samples collected and/or to avoid cross-contamination. Disposable sampling equipment intended for one-time use shall not be decontaminated, but shall be packaged for appropriate offsite disposal. Decontamination shall occur prior to and after each designated use of a piece of sampling equipment, using the following procedures:</p> <ul style="list-style-type: none"> • Nonphosphate detergent and tap-water wash, using a brush if necessary. • Tap-water rinse. • Initial deionized/distilled water rinse. • Final deionized/distilled water rinse. <p><u>Truck Loading</u></p> <p>Trucks may be loaded directly from the excavation or temporary stockpile based on truck availability and excavation logistics. Trucks shall be routed, and stockpile areas shall be located to avoid having trucks pass through impacted areas. The truckloads shall be wetted and tarped prior to exiting the site. All soil hauled from the site shall comply with the following:</p> <ul style="list-style-type: none"> • Materials shall be transported to an approved treatment/disposal facility. • No excavated material shall extend above the sides or rear of the truck/trailer. • Trucks/trailers carrying affected soils shall be completely tarped/covered to prevent particulate emissions to the atmosphere. Prior to covering/tarped, the surface of the loaded soil shall be moistened. 	

Impacts	Mitigation Measures	Residual Impacts
	<ul style="list-style-type: none"> The exterior of the trucks/trailers shall be cleaned off prior to leaving the site to eliminate tracking of material offsite. <p><u>Storm Water Management</u></p> <p>The good housekeeping practices prescribed in the City’s Urban Runoff Mitigation Plan (Santa Monica Municipal Code [SMMC] Section 7.10.060) shall be implemented during soil excavation activities to contain and control storm water runoff that might convey contaminated or excessive sediments. If rainfall is expected, the areas around open excavations shall be graded and bermed to prevent storm water from flowing into the area of excavation. Any standing water that collects in the bottom of excavated areas shall be removed and handled in accordance with Federal, State, and local regulations. The water shall be sampled and analyzed either as standing water in the excavation or following containment in a temporary above-ground storage tank. Depending on the volume of water and the sampling results, options for handling the standing water could include:</p> <ul style="list-style-type: none"> Pumping the standing water into temporary above-ground storage tanks for reuse onsite for dust suppression. Pumping the standing water through filters and a carbon adsorption filter (if required based on analytical results) prior to discharge to a storm drain, subject to approval by the City of Santa Monica Water Resources Protection Programs Division. Pumping the standing water into vacuum trucks for transport and disposal at a recycling facility. <p><u>Transportation Plan</u></p> <p>All affected soils shall be transported offsite for lawful management and disposal. Prior to load-out, the</p>	

Impacts	Mitigation Measures	Residual Impacts
	<p>construction contractor shall prepare waste profiles for the receiving facility using analytical data from the previous environmental site assessment.</p> <p>MM HAZ-11 Soil Vapor Monitoring. During soil disturbance activities with the potential to disturb PCE-contaminated soil, soil vapor monitoring shall be conducted by the construction contractor using a photoionization detector (PID) 10.6 or 11.7 eV lamp. Use of the PID shall ensure employee exposure to PCE and other VOCs are within the exposure limits set forth by California Code of Regulations (CCR) Title 8 §5155. Airborne Contaminants. In the event that the OSHA exposure limits are exceeded, work within the confined space would be temporarily stopped until the use of a soil vapor extraction (SVE) vacuum blower reduces it to below this limit (see MM HAZ-2c).</p> <p>MM HAZ-12 SVE Equipment. Use of an SVE vacuum blower (e.g., regenerative blowers, rotary lobe blowers, rotary claw blowers, or centrifugal fan blowers) shall be implemented during construction within confined spaces, as necessary, to ensure employee exposure to PCE and other VOCs are within the exposure limits set forth by CCR Title 8 §5155. Airborne Contaminants.</p>	
<p>HAZ-3 The proposed Project could emit hazardous emissions or result in the handling of hazardous or acutely hazardous materials, substances, or waste within a 0.25-mile radius of an existing or proposed school. However, compliance with Federal, State, and local regulations would ensure that any such impact would be <i>less than significant</i>.</p>	<p>No mitigation required</p>	<p>Less than Significant</p>
<p>HAZ-4 The proposed Project is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, which could create a significant hazard to the public and</p>	<p>Refer to MM HAZ-9 (Inadvertent Discovery), MM HAZ-10 (Soil Management Plan), MM HAZ-11 (Soil Vapor Management), and MM HAZ-12 (SVE Equipment), above.</p>	<p>Less than Significant</p>

Impacts	Mitigation Measures	Residual Impacts
environment. However, impact of feasible mitigation measures would ensure the impact is less than significant with mitigation.		

1.0 INTRODUCTION

1.1 Overview

This Environmental Impact Report (EIR) evaluates the potential environmental impacts resulting from the implementation of the proposed Memorial Park (Park) Redevelopment and Expansion Project (Project). WSP prepared this EIR on behalf of, and pursuant to direction from, City of Santa Monica (City) staff. The purpose of the proposed Project is to renovate and expand the existing Park located at 1401 Olympic Boulevard better meet the existing need for recreational activities. The proposed Project is based on direction provided during an extensive community outreach process that the City conducted during the development of a Conceptual Master Plan for the Park. With the City's focus on better serving the community's demands, the proposed Project would involve the development of modernized public recreation facilities, improved accessibility to park amenities, and enhanced community gathering spaces.

Key components of the proposed Project include the following, which will be developed in phases:

- Two synthetic turf combo fields (two playing fields per combo field);
- Three natural grass youth fields (one fast-pitch softball and two baseball fields);
- Four rooftop tennis/pickleball courts;
- A new Community Hub Building and the replacement of the children's playground with a new universally accessible playground;
- Renovation and expansion of the skate park;
- Replacement of the existing community recreation center with a new Community Recreation Center; and a
- New covered parking lot and passenger loading zone.

The Project site is comprised of two parcels: the existing 10.3-acre Memorial Park (Assessor Parcel Number [APN] 4283-010-901); and the 2.9-acre former Fisher Lumber (currently the City's Public Landscape Division [PLD] Colorado Yards) site (APN 4283-010-902). The proposed Project involves combining the existing 10.3-acre Memorial Park with the 2.9-acre former Fisher Lumber site to create a 13.2-acre park. The Project site is centrally located within the City's Pico Neighborhood and bound by Colorado Avenue to the north, 14th Street to the west, Olympic Boulevard to the south, and 16th Street to the east.

1.2 Project Proponent/Lead Agency

City of Santa Monica
City Planning Division
1685 Main Street, Room 212
Santa Monica, CA 90401

1.3 Project Background

The original facilities at Memorial Park were constructed in the 1930s, at which time it served as the location of the Santa Monica Municipal Stadium that the Santa Monica Tigers baseball team used. Memorial Park also was used for early- to mid-century motorbiking and midget car racing and was home to the Riviera Kennel Club dog show of 1941. Memorial Park was re-established as a City park in the 1950s, providing important community facilities in a geographically central location of the City. Memorial Park continued to be important to the overall park system as it serves as the primary park for baseball and softball, as well as being the home for the City's only public gymnasium, skate park, and pickleball courts.

In 1997, the City's Parks and Recreation Master Plan identified the need to expand and redevelop Memorial Park to better serve the community, as stated below:

“Redefine the role of Memorial Park. Memorial Park does not currently live up to its potential as a central focal point of park activities within the City. It is necessary to consider the redefinition and expansion of its role to better serve the community and be more accessible by pathway improvements in both the east/west and north/south directions” (Parks and Recreation Master Plan, Page 17).

In October 2004, City Council authorized the City Manager to negotiate and execute a purchase of sale agreement for the former Fisher Lumber property, located at 1607 14th Street. The acquisition would preserve the possibility of expanding Memorial Park, as outlined in the 1997 Master Plan. The 2.9-acre former Fisher Lumber site was the original retail location for Fisher Lumber and Hardware, one of the oldest commercial retail businesses in the city, as it was originally founded in 1923. In 2005, the business relocated to a new location on Lincoln Boulevard and Colorado Avenue. The former Fisher Lumber site was sold to KC Riverstone in early 2003, but shortly afterward purchased by the City in 2004, as stated above. At the time, the City's PLD operations were headquartered at the Santa Monica Airport but were displaced by the construction of Airport Park. In 2005, the City Council approved the relocation of PLD operations from the Airport to the former Fisher Lumber site on an interim basis. Since that time, PLD has occupied the former Fisher Lumber site.

In January 2018, City Council awarded an agreement to AHBE Landscape Architects to provide professional design services for the development of a feasibility study and master plan layout for an expanded and redeveloped park. The master planning process included a site analysis of existing conditions and the completion of an extensive community outreach effort to identify long-standing issues, including, but not limited to, inadequate field functionality, poor connections to the surrounding neighborhood, restrictive perimeter and edge conditions, and misuse of public amenities.

As described in detail in Chapter 2.0, *Project Description*, the adopted Memorial Park Master Plan reflects the inclusion of many and varied park program elements, including sports fields, parking, tennis/pickleball courts, a community recreation center, and other amenities highly-desired by the community.

1.4 Regulatory Framework

The Land Use and Circulation Element (LUCE), adopted on July 6, 2010, and amended in May 2023, is the City's guiding land use and transportation plan that encompasses the community's vision for Santa Monica's future. The LUCE is designed to preserve the City's character, protect neighborhoods, manage the City's transportation systems, and encourage additional housing in a sustainable manner that ensures a high quality of life for all residents through the horizon year of 2030. The LUCE sets forth the land use designations for the Project site and surroundings to actualize the planning goals described in the LUCE.

The City's Municipal Code, Article 9, Planning and Zoning (Zoning Ordinance), complements and implements the LUCE to protect and promote public health, safety, peace, comfort, convenience, prosperity, and general welfare by regulating the location and use of buildings, structures, and land for residential, commercial, industrial, recreational, and other specified uses.

The Project site has a Parks and Open Space land use / zoning designation pursuant to the City's LUCE and Zoning Ordinance. The Parks and Open Space designation allows for parks and green open space and supporting uses such as recreation centers, gymnasiums, community meeting facilities, and small-scale retail uses that support outdoor recreation (e.g., restaurants, refreshment stands, or sporting equipment and rental vendors). The Project site also is subject to the Memorial Park Activity Center Low Overlay. The area subject to this Overlay includes Memorial Park and the Expo Light Rail Transit (LRT) Station at 17th Street. The Overlay capitalizes on the attributes of these two key resources to create an active mixed-use neighborhood. The Overlay provides the opportunity for a joint-development program incorporating City, Metro, Santa Monica-Malibu Unified School District (SMMUSD) and perhaps private land to construct new school district offices and educational facilities, other offices, a range of residential units, and local-serving retail and services. Most significantly, there is an opportunity to extend the park open space across the freeway between 14th Street and 17th Street by decking over the freeway (LUCE, 2.5-5).

1.5 EIR Purpose and Legal Authority

This EIR was prepared in accordance with the Guidelines for Implementation of the California Environmental Quality Act (CEQA), published by the Resources Agency of the State of California (Title 14, California Code of Regulations [CCR] 15000 et seq.), and the City's procedures for implementing CEQA.

Pursuant to CEQA Guidelines Sections 21067, 15367, and 15050 through 15053, the City is the Lead Agency under whose authority this document has been prepared. This EIR is intended to provide information to public agencies, regulatory agencies, decision-makers, and the public regarding the environmental impacts that would potentially result from implementation of the proposed Project. Under the provisions of CEQA, "the purpose of the environmental impact report is to identify the significant effects of a project on the environment, to identify alternatives to the project, and to indicate the manner in which significant effects can be mitigated or avoided" (Public Resources Code [PRC] Section 21002.1[a]). In a practical sense, this EIR functions as a tool for fact-finding, allowing the public and the City an opportunity to collectively review and evaluate baseline existing conditions and the potential of the proposed Project to result in environmental impacts through a full disclosure process. Additionally, this EIR provides the primary source of environmental information for the City to consider when exercising any permitting or approval authority related to the proposed Project.

The CEQA process was established to enable public agencies to evaluate a project's environmental impacts, to examine and implement mitigation measures for eliminating or reducing potentially adverse impacts, and to analyze and consider alternatives to a project. While CEQA Guidelines Section 150201(a) requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, considering economic, legal, social, and technological factors.

1.6 Environmental Review Process

Pursuant to CEQA Guidelines Section 15063, the City prepared an Initial Study that determined the proposed Project would result in potentially significant impacts requiring evaluation in this EIR pertaining to air quality, cultural and tribal cultural resources, greenhouse gases and climate change, and hazards and hazardous materials (see Appendix A). The City also performed a public scoping process consistent with CEQA Guidelines Section 15083. On February 27, 2025, the City published the Notice of Preparation (NOP) to provide the public an opportunity to comment on the scope of the EIR. The City also provided the NOP to Federal, State, and local agencies, neighborhood groups, and all occupants and owners within the vicinity of the Project site. The NOP comment period ran from February 27, 2025 through April 1, 2025. Additionally, the City conducted a

Public Scoping Meeting for the EIR on March 12, 2025 to describe the proposed Project and the environmental review process, and to receive public comments on the scope and content of the EIR. The scoping process assisted the City in determining potentially significant environmental impacts of the proposed Project, thereby narrowing the focus (or scope) of the environmental analysis in this EIR. The analysis in this EIR considered the comments received during the scoping process, which are included in Appendix B, along with the NOP.

The City distributed a Notice of Availability (NOA) of the Draft EIR to Federal, State, local agencies, neighborhood groups, all occupants and owners within the vicinity of the Project site, and NOP commenters, which started a 45-day public comment period from September 19 to November 3, 2025.

This EIR is available for review online at the City's Planning and Community Development Department website at:

<https://www.santamonica.gov/environmental-review/>

Hardcopies of this EIR are available for review at City Hall, as well as the City's Main Library (601 Santa Monica Boulevard) and the Pico Branch Library (2201 Pico Boulevard).

1.7 Scope of the EIR

This EIR assesses potential environmental impacts that could occur with implementation of the proposed Project. The scope of the EIR includes evaluation of potentially significant environmental impacts identified in the Initial Study prepared for the proposed Project and raised in response to the NOP and during scoping discussions. As previously described, the NOP and comment letters received during the NOP comment period are included in Appendix B. The scoping process determined that construction and/or operation of the proposed Project may result in potentially significant impacts with respect to the following issue areas, which are addressed in detail in this EIR:

- Air Quality;
- Cultural and Tribal Cultural Resources;
- Greenhouse Gases and Climate Change; and
- Hazards and Hazardous Materials

This EIR addresses the issues referenced above and identifies potential environmental impacts, including potential cumulative effects of the proposed Project, pursuant to the provisions set forth in the CEQA Guidelines. In addition, the EIR identifies feasible mitigation measures, where necessary, that would reduce or eliminate adverse environmental effects.

Pursuant to CEQA Guidelines Section 15128 (Effects Not Found to Be Significant), the following environmental topics would not involve any potentially significant impacts. These topics are summarized in Chapter 4.0, *Other CEQA Considerations*, and discussed in depth in the Initial Study for the proposed Project, which is included in Appendix A:

- Aesthetics/Shadows
- Agriculture and Forestry Resources
- Biological Resources
- Construction Effects
- Energy
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Neighborhood Effects
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Wildfire

A summary of cumulative impacts that considers other projects that will contribute to environmental impacts of the proposed Project is presented in each resource area analysis section of this EIR. Other projects included in the analysis of cumulative impacts include past, present, and reasonably foreseeable projects capable of producing related or cumulative impacts.

Consistent with CEQA Guidelines Section 15126.6(d), Chapter 5.0, *Project Alternatives*, includes the assessment of a reasonable range of alternatives to the proposed Project that could feasibly attain the Project Objectives while avoiding or substantially lessening any of the significant effects of the proposed Project.

1.8 Areas of Known Public Controversy

CEQA Guidelines Section 15123 states that an EIR shall identify areas of controversy known to the Lead Agency, including issues that agencies and the public raise. Based on public meetings regarding the proposed Project, as well as letters received from the public in response to the NOP, areas of public controversy include the following:

- Several public comments set forth concerns regarding potential adverse effects to human health, biodiversity, greenhouse gas emissions, and air, water, and soil media, regarding contamination from Per- and Polyfluoroalkyl Substances (PFAS) and other chemicals that can be found in synthetic turf and plastic playground

equipment. See Sections 3.1, *Air Quality*, and 3.4, *Hazards and Hazardous Materials*, for the analysis of environmental impacts regarding this topic.

1.9 Organization of the EIR

This EIR is organized into the following seven chapters:

- Chapter 1.0, *Introduction*, summarizes the background of the proposed Project and explains the environmental review process;
- Chapter 2.0, *Project Description*, provides a detailed description of the proposed Project and the existing setting;
- Chapter 3.0, *Environmental Impact Analysis and Mitigation Measures*, provides an analysis of existing environmental conditions, environmental impacts associated with the proposed Project, mitigation measures, cumulative impacts, and residual impacts involving the environmental topics identified in the Initial Study for the proposed Project which warrant further evaluation in this EIR (see Appendix A);
- Chapter 4.0, *Other CEQA Considerations*, identifies significant and irreversible, growth-inducing, and unavoidable effects, as well as resources areas that would not be significantly affected by the proposed Project;
- Chapter 5.0, *Project Alternatives*, describes alternatives to the proposed Project, and identifies the Environmentally Superior Alternative;
- Chapter 6.0, *List of Preparers*, identifies the team that prepared the EIR; and
- Chapter 7.0, *References and Persons or Organizations Contacted*, provides information about resources used in the preparation of the EIR.

Appendices to the EIR include the NOP and responses to the NOP, Initial Study, and supporting technical studies used as a basis of information and analyses in preparation of the EIR.

2.0 PROJECT DESCRIPTION

2.1 Introduction

The City of Santa Monica (City, Project Proponent, and Lead Agency) is proposing to expand and modernize the existing public recreation facilities at Memorial Park (Park) to better serve community demands, improve accessibility to park amenities, and provide an improved community hub.

2.2 Project Location, Surrounding Land Uses, and Land Use / Zoning Designations

As described in Section 1.1, *Overview*, the Project site is addressed as 1401 Olympic Boulevard, Santa Monica, CA 90401, and is centrally located within the City of Santa Monica's Pico Neighborhood (see Figure 1). The Project site is bound by Colorado Avenue to the north, 14th Street to the west, Olympic Boulevard to the south, and 16th Street to the east. Vehicle access is currently provided via the surface parking lots along 14th Street and a vehicular gate at 16th Street.



As described in Section 1.3, Project Background the existing Park has many long-standing issues, including, but not limited to, inadequate field functionality, poor connections to the surrounding neighborhood, restrictive perimeter and edge conditions, and misuse of public amenities.

The Project site is comprised of two parcels: the existing 10.3-acre Memorial Park (Assessor Parcel Number [APN] 4283-010-901); and the 2.9-acre former Fisher Lumber site (APN 4283-010-902). Together, these parcels total approximately 13.2 acres (County of Los Angeles Office of the Assessor 2025).

As described in Section 1.4, *Regulatory Framework*, the Project site has a Parks and Open Space land use / zoning designation pursuant to the City of Santa Monica's Land Use and Circulation Element (LUCE). The Parks and Open Space designation allows for parks and green open space and supporting uses such as recreation centers, gymnasiums, community meeting facilities, and small-scale retail uses that support outdoor recreation (e.g., restaurants, refreshment stands, or sporting equipment and rental vendors). The Project site also is subject to the Memorial Park Activity Center Low Overlay. The area subject to this Overlay includes Memorial Park and the Expo Light Rail Transit (LRT) Station at 17th Street. The Overlay capitalizes on the attributes of these two key resources to create an active mixed-use neighborhood. The Overlay provides the opportunity for a joint-development program incorporating City, Metro, Santa Monica-Malibu Unified School

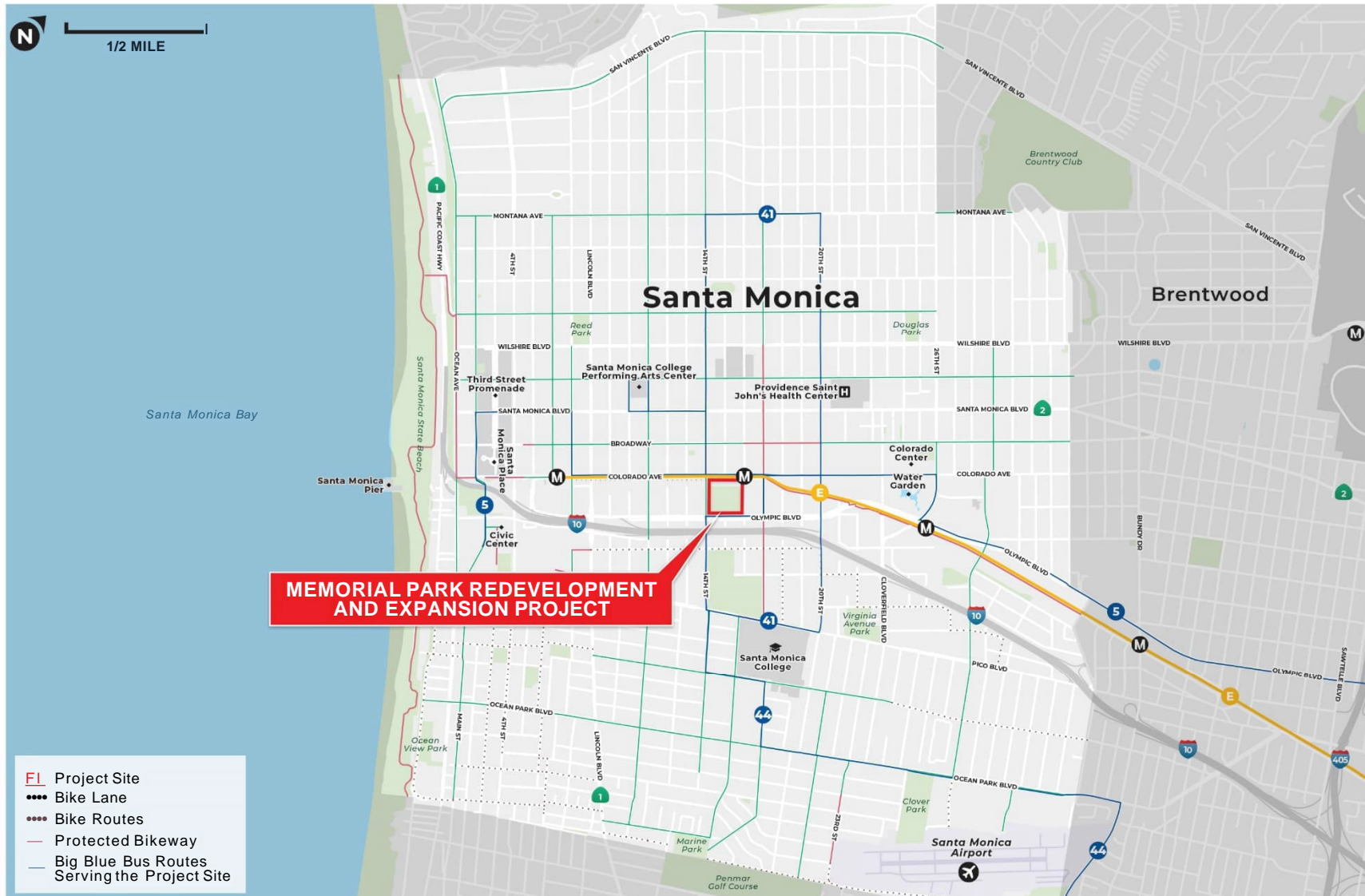
District (SMMUSD) and perhaps private land to construct new school district offices and educational facilities, other offices, and a range of residential units, and local-serving retail and services. Most significantly, there is an opportunity to extend the park open space across the freeway between 14th Street and 17th Street by decking over the freeway (LUCE, 2.5-5).

The properties to the north, east, and west of the Project site have a Mixed-Use Boulevard Low (MUBL) land use / zoning designation. The MUBL designation allows for a range of uses for sections of boulevards adjacent to low-density residential neighborhoods, where it is important that new development respects and relates to the scale of existing neighborhoods. At the ground floor, uses include active, local-serving retail, open spaces such as plazas and paseos, service-oriented commercial uses, and residential and hotel uses in limited areas. Exceptions include Colorado Avenue, where artist studios or small offices are also allowed. Above the ground floor, multi-family affordable, workforce and market-rate housing are the predominant uses. Accordingly, the Project site is surrounded by a range of land uses including restaurant, retail, commercial and office, educational, storage, and mixed-use residential uses. The specific uses to the north, east, and west of the Project site include the following:

- North Colorado Avenue, Expo LRT and 17th Street / Santa Monica College (SMC) Station, construction materials supplier, production studio, auto repair shop, manufacturing businesses, and residences (approximately 300 feet away).
- East 16th Street, SMMUSD office, office, video production service, and Crossroads Elementary School (private school, approximately 450 feet away).
- West 14th Street, auto service, self-storage, home improvement store, and materials distribution service.

Properties to the south of the Project site, across Olympic Boulevard, have a Neighborhood Commercial (NC) land use / zoning designation. The NC designation is intended to maintain existing commercial districts and allow for the creation of small neighborhood centers that provide daily goods and services easily accessible from surrounding residential neighborhoods. Allowable ground floor uses include active, local-serving retail and service commercial uses such as small restaurants, laundromats, dry cleaners, beauty/barber shops, and clothing and grocery stores. Uses above the ground floor include residential, commercial, and local-serving office uses. The specific uses to the south of the Project site include the following:

- South Olympic Boulevard, office, restaurant, Interstate (I-) 10 Freeway (approximately 275 feet away).



Memorial Park Redevelopment and Expansion Project Vicinity

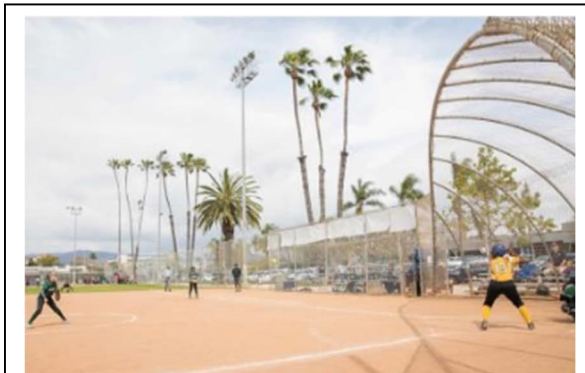
FIGURE 1

2.3 Existing Conditions

Memorial Park (APN 4283-010-901)

Existing recreational facilities at Memorial Park include baseball and softball fields, tennis/pickleball courts, a skatepark, the Community Recreation Center, and a small playground.

The Park currently has six sports fields used for baseball and softball. There is one large combo field consisting of four individual sports fields, arranged in a quadrant formation along 16th Street and the former Fisher Lumber site. Together this combo field spans approximately 162,000 square feet (sf) (3.7 acres); however, the configuration and size of the combo field presents scheduling and/or use constraints due to overlapping outfields. When not in use for softball and/or baseball, the grass area within the combo field also is used for soccer games. The area is accompanied by corner bleacher seating and is lined with an 8-foot-high chain link fence. The remaining two sports fields are located along Olympic Boulevard to the south of the combo field. These south-facing fields span approximately 38,000 sf (0.87 acres) each and accommodate youth baseball teams. An 8-foot-high chain link perimeter fence and a 16-foot-high ball-stopping net surround the south-facing fields. A restroom facility and concession stand are located between the combo field and the youth baseball fields (see Figure 2).



All six of the existing playing fields are comprised of natural grass and dirt infield skin.



The existing children's playground, situated between the parking lot and combo field, includes perimeter fencing for safety.

Four tennis/pickleball courts are located at the northwestern corner of the Park. A 10-foot-high perimeter fencing and light poles for nighttime use surround the tennis/pickleball courts. The tennis/pickleball courts are open daily for public use between the hours of 8:00 AM and 10:00 PM.

Between the tennis/pickleball courts and the former Fisher Lumber site is an off-leash dog run. A children’s playground is located south of the tennis/pickleball courts. The playground, which covers approximately 4,200 sf, includes a play structure and three benches. Approximately 4-foot-high perimeter fencing surrounds the playground that is adjacent to a small grass area with shade trees.

South of the children’s playground, “The Cove” provides a 20,000-sf skatepark for youth (6-17), residents (18+), and non-residents (18+). The skatepark is equipped with smooth concrete ramps, bowls, stairs, a pool with tile coping, over-vert bowl, and the Douglas Park rail. Two bleachers are provided for spectators outside of the approximately 8-foot-high perimeter fencing. Current hours of operation vary by day, opening at 12:00 PM or 1:00 PM and closing at 8:00 PM or 9:00 PM. Adult (18+) only hours are provided on Sundays between 6:00 PM and 9:00 PM and on Wednesdays between 4:30 PM and 9:00 PM. There are also BMX-only hours provided on Thursdays between 4:30 PM and 8:00 PM.

The Community Recreation Center is a collection of buildings, including the original Memorial Park Gymnasium Building (designed by local architect, James Mount), Police Activities League (PAL) Youth Center, and Community Activity Building. The Memorial Park Gymnasium Building is a gymnasium equipped for basketball and volleyball, including gym rentals, drop-in practice, and pick-up games for a fee. The gym is open for basketball and volleyball Monday through Friday from 12:00 PM to 3:00 PM and 5:00 PM to 7:00 PM; Saturdays from 12:00 PM to 5:00 PM; and for volleyball only on Sundays from 1:30 PM to 5:00 PM. The gymnasium also includes a public fitness room for ages 16 and older. The fitness room is open on Mondays, Tuesdays, and Thursdays from 9:00 AM to 7:00 PM; Wednesdays and Fridays from 9:00 AM to 9:00 PM; and weekends from 12 :00 PM to 5:00 PM. Finally, the Community Activity Building provides community meeting rooms that are available for rent.



The tennis/pickleball courts are available for adults only and require fee payment.



The Cove Skatepark is available to the public for a first-time registration fee and small daily rate, with discounted prices for Santa Monica residents.



Memorial Park Redevelopment and Expansion Existing Site Plan

FIGURE 2

A public parking lot fronts 14th Street on the western portion of the park. The surface parking lot provides 79 parking spaces, including three Americans with Disabilities Act (ADA) accessible spaces, two electric vehicle (EV) charging stations, and three reserved spaces. Metered parking spaces are located along the perimeter of the park: 22 spaces on west side 14th Street, 22 spaces on Olympic Boulevard, 42 spaces on 16th Street, and 19 spaces on Colorado Avenue.

The Park consists of a variety of landscape and vegetation types. The sidewalk along Olympic Boulevard is lined with grass and eight young palo verde (*Parkinsonia aculeata*) trees, and the pedestrian entry points are planted with mature palm trees and small ornamental bushes.

14th Street is lined with 10 magnolia trees and 16th Street is lined with western sycamore (*Platanus racemosa*), palm (e.g., Mexican fan palm [*Washingtonia robusta*]), and paperbark (*Melaleuca quinquenervia*) trees. The interior of the Park includes a variety of trees and hedges that surround the baseball fields, the Community Recreation Center, the parking lot, the playground, and the Cove Skatepark.



The original Memorial Park Gym is the City's only public gymnasium.



The fitness room is built inside the Memorial Park Gym and provides a variety of workout equipment and personal training opportunities.

Former Fisher Lumber/ Colorado Yards Site (APN 4283-010-902)

The former Fisher Lumber / Colorado Yards site borders the Park to the north, fronting Colorado Avenue. As previously described, since 2005, the City's Public Landscape Division (PLD) has occupied the 2.9-acre site that serves as the PLD's Parks Maintenance, Urban Forestry, and Administration headquarters. The western portion of the site is developed with a 22-foot-tall, 16,700-sf building and a 28-space surface parking lot. The eastern portion of the site is fenced off from the western portion of the site and is developed with a 23-foot-tall, 8,000-sf storage building and a 26-foot-tall, 7,000-sf warehouse. A surface parking lot at the northern edge of the site provides approximately 96 parking spaces for City vehicles and is not accessible to the public.

Site Access and Circulation

The Project site accommodates a variety of travel modes for visitors, including automobile, pedestrian, public transit, and bicycle.

As previously described, four streets surround Memorial Park: Colorado Avenue, 16th Street, Olympic Boulevard, and 14th Street. Colorado Avenue is an east-west boulevard with one lane in each direction.



Public parking at the Project site is centrally located and provides access to the Park's amenities.

Metered parallel parking is provided along the south (eastbound) side of Colorado Avenue. 16th Street provides one-way northbound connectivity from Olympic Boulevard to Colorado Avenue. Vehicles are restricted to right turns (eastbound) only onto Colorado Avenue. Metered diagonal street parking is provided on the western side of 16th Street and parallel parking is provided along the eastern side of the street. Olympic Boulevard is one of the City of Santa Monica's major east-west boulevards, with two lanes in each direction. An approximately 35-foot-long median, landscaped with trees, divides the eastbound from the westbound lanes. Lastly, 14th Street is a north-south street with one lane in each direction and a Class II (i.e., striped) bicycle lane exists in both directions between Colorado Avenue and Olympic Boulevard. Both sides of the street have metered parallel parking.

The existing surface parking lot at the Park can currently be accessed from 14th Street. As previously described, the existing surface parking lot provides 79 parking spaces, including five ADA-accessible spaces, two EV charging stations, and three reserved spaces.

The former Fisher Lumber site is accessed via curb cuts from 14th Street and 16th Street. Vehicles exiting onto 16th Street are restricted to a left turn only.

For visitors walking to the Park, each street edge is lined with 4-foot-wide sidewalks, with landscape buffers ranging from four to eight feet in width, with the exception for the sidewalk on 16th Street that is immediately adjacent to the metered diagonal street parking. Pedestrian access to the Park is afforded via two entry points along Olympic Boulevard, one entry point on 14th Street and one entry point on 16th Street. Walking paths from these entry points border the athletic fields and are lined with gravel.

Local transit, including the City of Santa Monica's Big Blue Bus system and Expo LRT, currently serves Memorial Park. Big Blue Bus Routes 5, 41, and 44, and Metro Line E provide service in the immediate vicinity of the Project site (Figure 2).

- Route 5 serves Downtown Santa Monica, Olympic Boulevard, and Century City. Nearby bus stops include Stop #1169 and Stop #1179 (Colorado Avenue & 14th Street) and Stop #1171 and Stop #2943 (Colorado Avenue EB & 17th Street NS).

- Route 41 serves Santa Monica College, 17th Street / SMC Station, and Montana Avenue. Nearby bus stops include Stop #1179 (Colorado Avenue WB & 14th Street NS) and Stop #3009 (Olympic Boulevard WB & 16th FS).
- Route 44 serves Santa Monica College, Ocean Park, and 17th Street / SMC Station. The bus stop closest to Memorial Park is located on Colorado Avenue & 17th Street.
- Metro Line E serves Downtown Santa Monica, Culver City, downtown Los Angeles, and East Los Angeles. The 17th Street / SMC Station is located at the northeastern corner of the Project site.

For those traveling by bicycle or other micromobility devices, Memorial Park is accessible via the Class II bicycle lane along 14th Street that spans the east-west extent of the city. The other streets adjacent to the park have Class III sharrows.

2.4 Project Objectives

CEQA Guidelines Section 15124(b) requires a project description to contain a statement of the project's objectives and the underlying purpose of the project. Consistent with the Conceptual Master Plan for the Park (refer to Section 1.3, *Project Background*), the City has identified the following objectives for the proposed Project:

- **Improve Park and Recreational Amenities:** Enhance the City of Santa Monica's park system by providing safe, accessible, and high-quality recreational amenities for residents of all ages and abilities;
- **Address Community Needs:** Provide recreational uses that would meet the highest priority needs of the community, including the need for flexible and year-round space for diamond field sports;
- **Ensure Neighborhood Compatibility:** Design Memorial Park to be compatible with, and sensitive to, the surrounding land uses and environment;
- **Strengthen Community Programs:** Maintain and expand community programs, such as PAL, the gymnasium, and fitness facilities;
- **Integrate Components from Active Transportation Plans:** Implement actions identified in the City of Santa Monica's Land Use and Circulation Element, Pedestrian Action Plan, and Bicycle Action Plan that promote active transportation, connectivity, accessibility, and safety; and
- **Promote Sustainability:** Build new and modern energy-efficient amenities and water saving features that are sustainable and meet the latest building and energy codes.

2.5 Project Description

The purpose of the proposed Project is to renovate and expand the existing Park to meet the increasing demand for recreational activities. The proposed Project is based on direction provided during an extensive community outreach process that the City conducted during the development of the master plan for the Park. The implementation of the proposed Project would combine the existing 10.3-acre Park with the 2.9-acre former Fisher Lumber (currently PLD's Colorado Yards) site to create a 13.2-acre park. With the City of Santa Monica's focus on better serving the community's demands, the proposed Project would involve the development of modernized public recreation facilities, improved accessibility to amenities, and enhanced community gathering spaces.

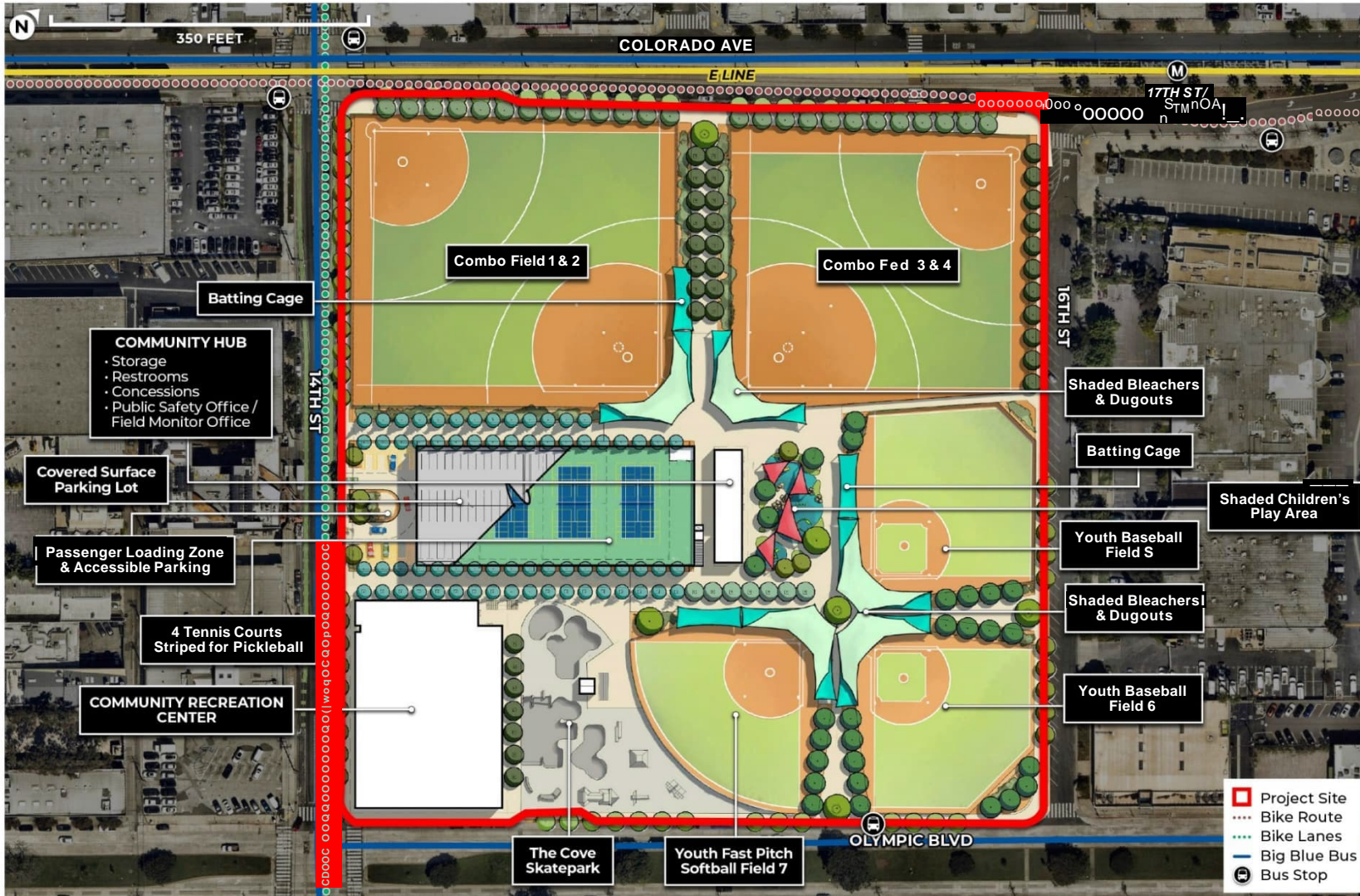
Key components of the proposed Project include the following, which will be developed in phases:

- Two synthetic turf combo fields (two playing fields per combo field);
- Three real grass youth fields (one fast-pitch softball and two baseball fields);
- Four rooftop tennis/pickleball courts;
- A new Community Hub Building and the replacement of the children's playground with a new universally accessible playground;
- Renovation and expansion of the skate park;
- Replacement of the existing community recreation center with a new Community Recreation Center; and a
- New covered parking lot and passenger loading zone.

These components of the proposed Project are described further below and depicted in Figure 3.

Tennis/Pickleball Courts

Tennis/pickleball courts would be provided on a rooftop located above the proposed surface parking lot and striped for four tennis courts/16 pickleball courts. A storage shed would be provided for tennis/pickleball equipment. The rooftop tennis/pickleball courts would be accessible via a staircase and an elevator. Perimeter fencing would border the perimeter of the tennis/pickleball courts. The proposed Project would include six LED lights affixed to approximately 55-foot-tall poles, including three lights along the northern perimeter and three along the southern perimeter of the courts.



Memorial Park Redevelopment and Expansion Proposed Site Plan

**FIGURE
3**

Community Hub Building and Children’s Playground

The proposed Community Hub Building and Children’s Playground would be located centrally within the Park in proximity to the sports fields, tennis/pickleball courts, skatepark, and surface parking lot. The approximately 3,000-sf Community Hub Building would include restrooms, concessions, a storage room for park and sports equipment, and a small office for field monitor staff. The playground would be universally accessible (e.g., ADA) and integrate sail shades.



The Community Hub Building and Children’s Playground location relative to the playing fields, tennis/pickleball courts, the Cove, and parking make it the active center of the Park.

The Cove Skatepark

The Cove Skatepark would be expanded and renovated to include modern skateboarding and BMX features, as well as seating and shade for spectators. The westward expansion of approximately 7,700 sf would relocate the grass perimeter and gravel entrance along Olympic Boulevard to the west side of the Cove Skatepark.

Sports Fields

The proposed Project would provide a total of seven baseball/softball playing fields, including two combo fields (two playing fields per combo field), two youth baseball fields, and one youth fast-pitch softball field. The proposed Project would add a field and would provide expanded fields that would reduce schedule and use constraints associated with the existing combo field.

The two combo fields (Fields 1, 2, 3, and 4) would be located side-by-side along the northern portion of the Project site, fronting Colorado Avenue. The combo fields would be comprised of 100 percent synthetic turf playing surface, including green turf for outfield and brown turf

for infield areas, for low maintenance and to allow playing year-round. The synthetic turf, a movable pitching mound, multiple base alignments, and portable outfield fencing would allow for maximum combinations of softball and baseball. The flexible design can accommodate a regulation high school baseball game, an adult softball game, or two youth baseball or fast-pitch softball games played simultaneously. The entire perimeter of each combo field would be fenced with 8-foot-high chain-link perimeter fencing and the exterior of the combo fields (along 14th Street, Colorado Avenue, and 16th Street) would also contain an approximately 30-foot-tall ball stop netting to prevent balls from landing in the adjacent streets. Fields 1 and 3 would have batting cages. Both combo fields would include covered dugouts and bleachers. The bleachers would provide seating for up to approximately 200 spectators. Playing fields would be lit during evening events with LED lights affixed to approximately 55-foot-tall poles. Eight pole lights would border each of the two combo fields, with two LED lights along each of the four field lines.

Two youth baseball fields (Fields 5 and 6) would be located along the eastern border of the Project site, south of Fields 3 and 4. The youth fast-pitch softball field (Field 7) would be immediately west of Field 6. These “showcase” fields would be the primary playfields for the City of Santa Monica’s youth baseball and softball teams, sized specifically for Little League and youth fast-pitch softball. Unlike the combo fields, these youth baseball/softball fields would be covered with natural grass with dirt infield skin. The youth baseball fields would also be equipped with electronic scoreboards. Similar to the combo fields, the perimeter of each youth field would be fenced with 8-foot-tall chain-link perimeter fencing and the exterior of the youth fields (along 16th Street and Olympic Boulevard) would also contain 30-foot-tall ball stop netting. Youth fields would include covered dugouts and bleachers. The bleachers would provide seating for up to 200 spectators per playing field. Each of the baseball/softball fields would be lit using LED lights affixed to four 55-foot-tall poles, including two lights along each of the field lines.

Community Recreation Center

The existing 35,000-sf Community Recreation Center would be demolished and replaced with a new two-story, 50,000-sf Community Recreation Center. The redevelopment of the Community Recreation Center would integrate the functions of the existing PAL, gymnasium, community rooms, and staff offices into one facility. It would be designed with a flexible floor plan to allow for a broad array of recreational and community programs and services.

Lighting, Landscaping, and Hardscape

Outdoor lighting would provide nighttime security and wayfinding around and through the Park. As previously described, the proposed Project would include LED lights affixed to approximately 55-foot-tall poles around the perimeter of each of the proposed playing fields and the proposed tennis/pickleball courts. Additional pedestrian-scale LED pole lights would be provided along the designated walking loop, around the Community Hub Building,

and at the Cove Skatepark. Up to seven LED scoreboards would be installed—one each at of the proposed fields. Outdoor lighting would be provided in accordance with the Santa Monica Municipal Code (SMMC) Section 9.21.080 so as not to produce obtrusive glare onto the public right-of-way or adjacent properties. Code-required lighting for passageways and recesses would be provided at sufficient levels for public safety. Interior lighting in the Community Recreation Center would be designed with occupancy sensors and dimmers, where feasible and appropriate, to minimize energy use.

Streetscape improvements would be included around all four sides of the Park. In addition to the sports fields' synthetic turf and natural grass, the landscape design includes mostly native trees, ornamental evergreen and deciduous trees, shade trees, and flowering trees. The remainder of the Project site would be predominantly covered with concrete, including the use of smooth concrete at the Cove Skatepark.

Access, Circulation, and Parking

Vehicular access to the site would be provided via one entry on 14th Street, midway between Colorado Avenue and Olympic Boulevard. The entry would provide a one-way passenger loading zone (i.e., pick-up/drop-off) and up to seven ADA-accessible parking spaces. The passenger loading zone would connect vehicles to a new 32,000-sf covered public parking lot that would provide up to 128 parking spaces. The new parking areas also would include spaces with charging stations that accommodate EVs.

Nearby local transit, including the City's Big Blue Bus system and the Expo LRT, would continue to serve Memorial Park. As previously described, Big Blue Bus Routes 5, 41, and 44 provide service in the immediate vicinity of the Project site; and 17th Street / SMC Station is located at the northeast corner of the Project site.

The proposed Project would include seven designated pedestrian entrances. Each side of the Park would include one or two entries. The pedestrian entrances are described below:

- 16th Street: A new pedestrian entrance between Combo Field 3 and Field 5 would be provided. The existing southern entrance would remain.
- Olympic Boulevard: The existing western entrance would be relocated to the west side of the Cove Skatepark to accommodate the skatepark expansion. The existing eastern entrance would remain.
- 14th Street: Two new pedestrian access points would be provided on each side of the parking entrance and exit roadways.
- Colorado Avenue: One new access point would be provided between the two proposed combo fields.

In addition to the pedestrian entry points, the proposed Project would include a 0.5-mile designated community walking loop. The path would be located around the perimeter of the Park along 14th Street, Colorado Avenue, and 16th Street, and traverse the Park's interior,

connecting to the centrally located Community Hub Building. The loop would include a series of interspersed or grouped exercise stations.

The proposed Project would include a Class I shared use path along Colorado Avenue to accommodate pedestrians and bicyclists. As previously described, there also are existing Class II bike lanes along 14th Street in both directions. Bicycle racks also would be provided throughout the Park.

Construction and Phasing

An average of 40 construction workers would be on-site at any time from 8:00 AM to 6:00 PM on Monday through Friday and 9:00 AM to 5:00 PM on Saturdays (permitted construction work hours per the City's Noise Ordinance, Chapter 4.12 of the SMMC) during construction.

Construction vehicles and equipment would include backhoes, forklifts, material-handling equipment, concrete trucks, hydraulic boom pumps, compressors, mixers, generators, portable welding machines, and miscellaneous small tools. Heavy haul traffic would vary throughout the construction of the proposed Project. For example, up to approximately 12 heavy haul truck trips would be required per day during the demolition of existing buildings and hardscape during Phase 1. Additional construction vehicle trips would include material/equipment deliveries as well as light duty trucks and passenger vehicle trips for construction worker commutes to the Project site.

Construction staging for equipment storage and material stockpiling would occur within secured construction areas on-site. Construction areas would be screened from public view using temporary barriers. Based on the flow of goods and services to the site, traffic control may be modified but would not change significantly once construction areas are established and secured.

The proposed Project would be constructed in phases depending on funding, entitlements, and approvals. Each phase would require certain Park facilities to be temporarily closed in order to accommodate construction, demolition, and staging activities. Unaffected Park facilities would remain open and operational during such time. The phasing schedule, therefore, allows for the Park to retain some usability throughout the construction schedule and prevent all Park facilities to be closed at the same time. However, given the uncertainty in the timing of implementation, the environmental analysis in this EIR conservatively considers and describes the implementation of the proposed Project in a single phase spanning a period of up to three years. This approach contemplates the greatest possible temporary construction-related impacts and long-term operational impacts associated with the proposed Project. The construction phases are as follows.

Phase 1

Phase 1 consists of the demolition and construction of the western portion of Memorial Park. Demolition activities would begin following the pending construction of the

underground stormwater harvesting tank, as part of the City’s Sustainable Water Infrastructure Project (SWIP), which was previously evaluated in [IS/MND for the Sustainable Water Infrastructure Project](#) and [Addendum \(State Clearinghouse Number 2016071056\)](#),¹ and would include the following:

- Clear former Fisher Lumber site; and
- Demolish existing tennis/pickleball courts, parking lot, and children’s playground.

Following demolition, construction of the proposed facilities would occur:

- Construct the first Combo Field (Fields 1 and 2);
- Construct a covered parking lot and loading/drop-off zone;
- Construct the tennis/pickleball courts on the parking lot rooftop; and
- Construct mobility and streetscape improvements along Colorado Avenue and a portion of 14th Street.

Throughout Phase 1, there would be a staging plan that allows for temporary parking on the former Fisher Lumber site, the continued use of the existing restroom and concession facility, and the potential continued use of the existing softball fields.

Phase 2

Phase 2 includes the expansion and redevelopment of Memorial Park along the remainder of Colorado Avenue and most of 16th Street. This phase would include the following components:

- Demolish the existing eastern youth baseball field;
- Expand Memorial Park east into a portion of 16th Street;
- Construct the second Combo Field (Fields 3 and 4);
- Construct the Community Hub Building;
- Construct the Children’s Playground; and
- Construct a temporary grass turf practice area.

¹ The City has developed a series of projects to achieve its goal of being water self-sufficient, ensuring water sustainability, and securing the long-term yield of groundwater resources. The Memorial Park Tank is one of two underground tanks that will be used to reduce the amount of stormwater water discharge to the Pico-Kenter outfall by harvesting up to approximately three million gallons of stormwater from a single precipitation event. Excavation associated with the Memorial Park Tank would encompass an area of approximately 0.53 acre (assuming a 172-foot-diameter circular and sloped excavation, including a 10-foot pre-stress leeway). The Memorial Park Tank would be connected to the City of Santa Monica’s existing storm drain system by micro tunneling beneath existing surface and buried infrastructure.

Phase 3

Phase 3 includes the redevelopment of the youth baseball/softball fields and the expansion and renovation of the Cove Skatepark. This phase would include the following:

- Expand Memorial Park east into a portion of 16th Street;
- Construct streetscape improvements, including street trees, planters, and buffer areas along portions of 16th Street and Olympic Boulevard;
- Construct the walking loop with exercise stations;
- Redevelop the temporary grass turf practice area into Field 5 for youth baseball;
- Redevelop the two youth fields along Olympic Boulevard into youth baseball (Field 6) and youth fast-pitch softball (Field 7) fields; and
- Expand and redevelop the Cove Skatepark.

Phase 4

Phase 4 would include the demolition and redevelopment of the Community Recreation Center, along with streetscape improvements along a portion of 14th Street.

Operations

Following the completion of the proposed Project, the new facilities and programs offered at Memorial Park would not generate any increase in employees. The new facilities would simply replace existing facilities where robust programming already exists.

Environmental Sustainability

The proposed Project would comply with the most recent California Green Building Standards (CalGreen), as amended by SMMC Chapter 8.106 (Green Building Standards Code). Sustainable building strategies that would be incorporated into the proposed Project to achieve this goal include energy-efficient building systems and water-smart landscaping/irrigation. For example, the proposed Project would include photovoltaic solar panels, where appropriate and feasible. In addition, all new plumbing fixtures would be low-flow in accordance with CalGreen Title 24 and SMMC requirements. Lastly, during construction, the proposed Project would divert at least 70 percent of demolition and construction debris from being disposed in landfills in accordance with SMMC regulations.

2.6 Project Approvals Required

Approvals required for the proposed Project include, but are not limited to, the following:

- City Council certification of an EIR (CEQA Guidelines 15090), adoption of environmental findings (CEQA Guidelines Section 15091), adoption of a Statement of Overriding Considerations (if required) (CEQA Guidelines Section 15093), and

adoption of a Mitigation Monitoring Reporting Program (MMRP) (CEQA Guidelines Section 15097);

- City Council approval of design plans and award of the construction contract for the proposed Project; and
- Any other incidental discretionary or administrative approvals needed for the construction and operation of the proposed Project including, but not limited to, a construction haul route, building permits, right-of-way permits, utility coordination, and Certificates of Occupancy.

3.0 ENVIRONMENTAL IMPACT ANALYSIS AND MITIGATION

3.0.1 Introduction

This section of the Environmental Impact Report (EIR) addresses the potential significant environmental impacts of the proposed Memorial Park (Park) Redevelopment and Expansion Project (Project). Each environmental impact topic is discussed under the following subsections: *Environmental Setting*, *Regulatory Setting*, *Impact Assessment Methodology*, *Analysis of Project Impacts*, *Mitigation Measures and Residual Impacts*, and *Cumulative Impacts*.

3.0.2 Impact Assessment Guidelines and Impact Classification

The California Environmental Quality Act (CEQA) requires an EIR analysis to “identify and focus on the significant environmental effects of a proposed project” (CEQA Guidelines Section 15126.2 [a]) and Public Resources Code [PRC] Section 21000 [a]), focusing on the potential “physical” adverse effects of a proposed project.

CEQA Guidelines Section 15360 defines “environment” as the physical conditions that exist within the area that will be affected by a proposed project including, but not limited to, land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The section further defines the area involved as the area in which significant effects would occur either directly or indirectly as a result of the project. The “environment” includes both natural and human-made conditions.

CEQA Guidelines Section 15382 further clarifies the definition of “significant effect on the environment” as a substantial, or potential substantial, adverse change in any of the *physical* conditions within the area affected by the project. An economic or social change by itself shall not be considered a significant effect on the environment. However, an economic or social change that may have a *physical* impact (such as urban decay) should be considered in an EIR (*Bakersfield Citizens for Local Control v. City of Bakersfield (2004) 124 Cal.App.4th 1184*).

For each impact topic, thresholds for identifying impact significance are identified based on City and CEQA Guidelines, along with descriptions of methodologies used for conducting the impact analysis. For some topics, such as air quality, the analyses of impacts involve quantitative methodologies and involve the comparison of effects against a numerical threshold. For other topics, such as cultural and tribal cultural resources, the analyses of impacts involve qualitative methodologies and consideration of a variety of factors such as adopted City regulations and project design features.

The EIR impact discussions classify impact significance levels as:

- **Significant and Unavoidable** – a significant impact to the environment that remains significant even after mitigation measures are applied;
- **Less Than Significant with Mitigation** – a significant impact that can be avoided or reduced to an insignificant level with mitigation;
- **Less Than Significant** – a potential impact that would not meet or exceed the identified thresholds of significance for the resource area; and
- **No Impact** – no impact would occur for the resource area.

Determinations of significance levels in the EIR are made based on impact significance criteria and CEQA Guidelines for each impact topic.

3.0.3 Mitigation Measures and Monitoring

Pursuant to the CEQA Guidelines Section 15126.4, if potentially significant environmental impacts are identified in the EIR, feasible mitigation measures that could avoid or minimize the severity of those impacts must also be identified. The mitigation measures are identified as part of the analysis of each impact topic in Sections 3.1 through 3.4 of this EIR.

Mitigation measures must be fully enforceable and may involve various means of implementation, such as:

- Measures incorporated directly into the proposed Project as new project features;
- Measures implemented in multi-year City operational programs, such as a capital improvements program or development impact fee program; and/or
- Measures incorporated as new or revised policies or development standards as conditions of approval.

Pursuant to the CEQA Guidelines Section 15364, feasible mitigation measures must be implemented for all significant impacts. Feasible means “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.” A lead agency must impose mitigation measures unless findings can be made that the mitigation measures are found to be infeasible or within the jurisdiction of another agency (*City of Marina v. Board of Trustees of the California State University (2006) 39 Cal.4th 341*).

CEQA requires that implementation of adopted mitigation measures or any revisions that the City makes to the proposed Project to mitigate or avoid significant environmental effects be monitored for compliance. Accordingly, the CEQA Guidelines Section 15097 requires that a public agency adopt a Mitigation Monitoring or Reporting Program (MMRP) for those adopted mitigation measures and project revisions.

3.0.4 Cumulative Impacts Analyses

CEQA Guidelines Section 15130(a) states that an EIR shall “discuss the cumulative impacts of a project when the project’s incremental effect is cumulatively considerable.” “Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (as defined by CEQA Guidelines Section 15130). The CEQA Guidelines Section 15355 defines cumulative impacts as “two or more individual effects that, when considered together, are considerable, or which compound or increase other environmental impacts.” The CEQA Guidelines allow for the use of two different methods to determine cumulative impacts:

- **List Method** – 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 (CEQA Guidelines Section 15130); and
- **General Plan Projection Method** – A summary of projections contained in an adopted General Plan or related planning document, or in a prior environmental document that has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact (CEQA Guidelines Section 15130).

The proposed Project involves a development project (rather than the adoption of a land use program, plan, or regulations) that the City would construct pursuant to the phases of development described in Chapter 2.0, *Project Description*. Further, the proposed Project involves a discrete location that has the potential to contribute to environmental impacts associated with other projects located within proximity to the Project site and will affect the same or similar resources that the proposed Project will affect. Therefore, this EIR analyzes the contribution of the proposed Project to cumulative impacts using the List Method. Table 3.0-1 and Figure 3.1 lists and graphically illustrates, respectively, the location of the projects that are included in the analysis of cumulative impacts.

Table 3.0-1. Cumulative Projects List (Pico Neighborhood)

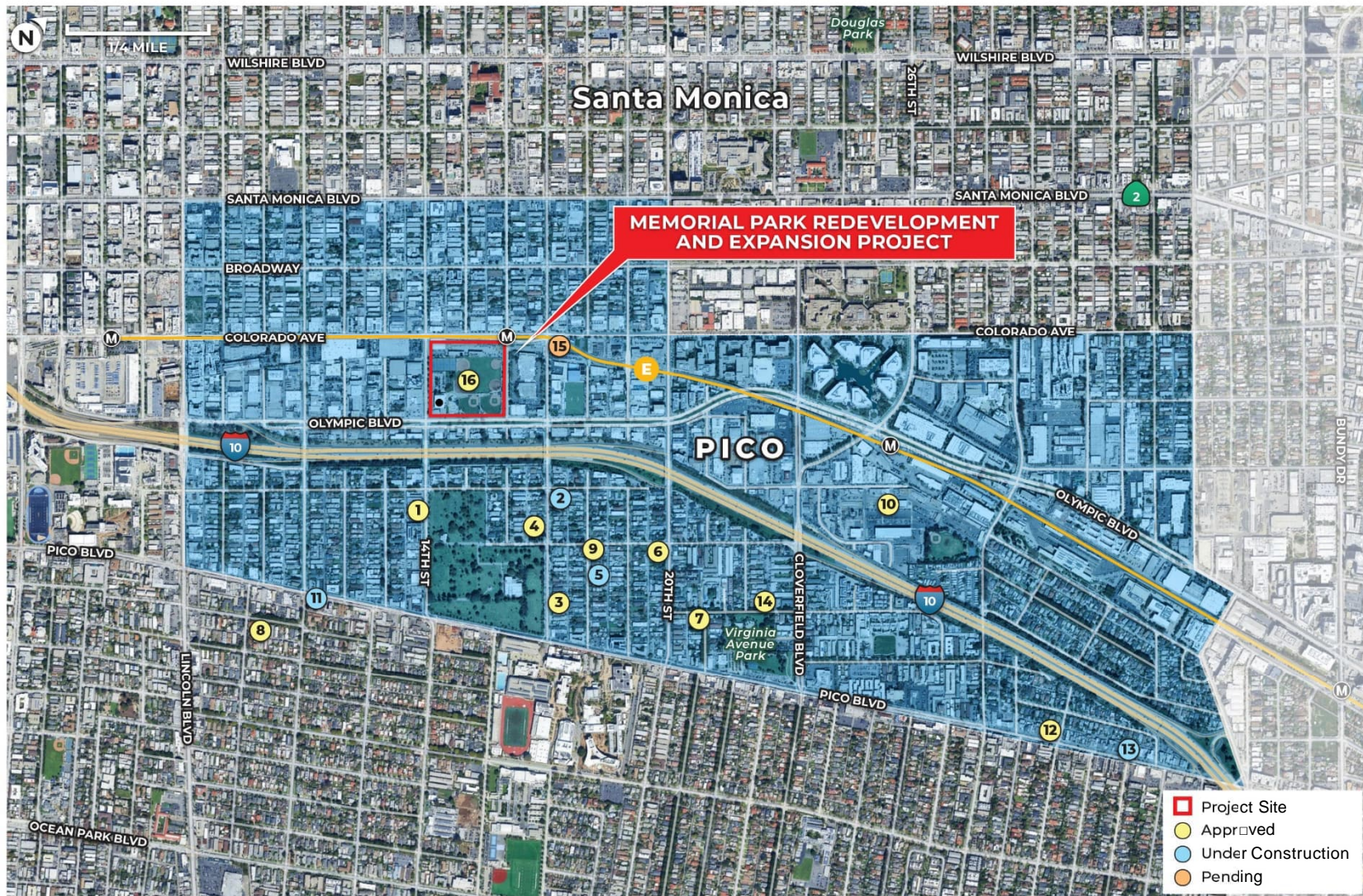
Map Key	Project Type	Address	Description	Status
1	100% Affordable Housing	1820-1826 14 th Street	Construction of 39 Dwelling Units (DU)	Approved
2	Residential (5 condos / 1 low income)	1807 17 th Street	Demolition of 2 DU and construction of 4 DU	Under Construction
3	5-Unit Condos	1949 17 th Street	Construction of 5 DU	Approved
4	5-Unit Condos	1840 17 th Street	Demolition of 1 DU and construction of 5 DU	Approved
5	3-Unit Condos	1927 18 th Street	Demolition of 1 DU and construction of 3 DU	Under Construction

3.0 Environmental Impact Analysis and Mitigation

Map Key	Project Type	Address	Description	Status
6	3-Unit Condos	1900 20 th Street	Construction of 3 DU	Approved
7	21-Unit Condominium/2020 Virginia	2002 21 st Street	Demolition of 15 DU and construction of 17 DU / 2 affordable housing units	Approved
8	3-Unit Condos	1014 Bay Street	Demolition of 1 DU and construction of 3 DU	Approved
9	3-Unit Condos	1802 Delaware Ave	Demolition of 5 DU and construction of 3 DU	Approved
10	City Yards Master Plan	2500 Michigan Ave	Construction of 79,000 sf	Approved
11	Residential	1112-1122 Pico Blvd	Construction of 28 DU / 4 affordable housing	Under Construction
12	Office	2929 Pico Blvd	Demolition of 1,224 sf of auto service space and construction of 12,066 sf of office space and 6,285 sf of retail space	Approved
13	Office	3205 Pico Blvd	Construction of 4,810 sf of office space	Under Construction
14	3-Unit Condos	2219 Virginia Ave	Demolition of 1 DU and construction of 3 DU	Approved
15	Metro 17 th Street / SMC Station Housing Project	17 th St & Colorado Avenue	182,000 sf of affordable housing	Pending
16	Sustainable Water Infrastructure Project (SWIP)	Memorial Park	Excavation of a 0.53-acre area for the installation of an underground tank with micro tunneling to connect to the existing storm drain system	Approved

CEQA Guidelines Section 15130(b)(2) further states that the EIR should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used. The geographic scope for the analysis of cumulative impacts in this EIR varies by each environmental impact topic (e.g., air basin). For most of the impact topics analyzed in this EIR, the geographic scope was determined to be limited to the City. However, impact topics such as air quality have a more regional geographic scope as shown below:

Environmental Topic Area	Geographic Context for Cumulative Analysis
Air Quality	South Coast Air Basin
Greenhouse Gases and Climate Change	South Coast Air Basin
Cultural Resources	City of Santa Monica (Pico Neighborhood)
Hazards and Hazardous Materials	City of Santa Monica (Pico Neighborhood)



Cumulative Project Locations

FIGURE 3.1

3.1 AIR QUALITY

This section of the Environmental Impact Report (EIR) analyzes the potential impacts of the Memorial Park Redevelopment and Expansion Project (Project) regarding air quality and air quality-related health hazards; for other potential health hazards associated with the proposed Project, see Section 3.4, *Hazards and Hazardous Materials*, of this EIR. The following analysis addresses short-term construction impacts, long-term operational impacts, and contributions to cumulative impacts.

3.1.1 Types of Pollutants

In the U.S., air quality is primarily characterized by ambient ground-level concentrations of seven specific pollutants identified by the U.S. Environmental Protection Agency (USEPA) to be of concern with respect to health and welfare of the public. These specific pollutants—known as “criteria air pollutants”—are pollutants for which the Federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The Federal ambient concentration criteria are known as the National Ambient Air Quality Standards (NAAQS), and the California ambient concentration criteria are referred to as the California Ambient Air Quality Standards (CAAQS). Federal criteria air pollutants include ground-level ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), respirable particulate matter 10 microns or less in diameter (PM₁₀), fine particulate matter 2.5 microns or less in diameter (PM_{2.5}), and lead (Pb). Table 3.1-1 shows the CAAQS and NAAQS concentrations for the criteria air pollutants with the corresponding averaging times.

Table 3.1-1. Criteria Air Pollutant Standards

Pollutant	Averaging Period	California (CAAQS)	Federal (NAAQS)	
			Primary	Secondary
Ozone (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	--	Same as Primary Standard
	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	
Respirable Particulate Matter (PM ₁₀)	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m ³	--	
Fine Particulate Matter (PM _{2.5})	24 Hour	--	35 µg/m ³	Same as Primary Standard

Pollutant	Averaging Period	California (CAAQS)	Federal (NAAQS)	
			Primary	Secondary
	Annual Arithmetic Mean	12 µg/m ³	9 µg/m ³	15 µg/m ³
Carbon Monoxide (CO)	1 Hour	20 ppm (23 µg/m ³)	35 ppm (40 µg/m ³)	--
	8 Hour	9 ppm (10 µg/m ³)	9 ppm (10 µg/m ³)	--
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/m ³)	0.10 ppm (188 µg/m ³)	--
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppb (100 µg/m ³)	Same as Primary Standard
Sulfur Dioxide (SO ₂)	1 Hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)	--
	3 Hour	--	--	0.5 ppm (1,300 µg/m ³)
	24 Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas)	--
	Annual Arithmetic Mean	--	0.030 ppm (for certain areas)	--
Lead	30 Day Average	1.5 µg/m ³	--	--
	Calendar Quarter	--	1.5 µg/m ³ (for certain areas)	Same as Primary Standard
	Rolling 3-Month Average	--	0.15 µg/m ³	
Visibility Reducing Particles	8 Hour	--	No National Standards	
Sulfates	24 Hour	25 µg/m ³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)		

3.1.2 Federal Criteria Air Pollutants

Ozone (O₃) is a colorless gas with a sharp odor, is a highly reactive form of oxygen. High O₃ concentrations exist naturally in the stratosphere. However, it is also formed in the atmosphere when volatile organic compounds (VOC) and nitrogen oxides (NO_x) react in the

presence of ultraviolet sunlight (also known as smog). The primary sources of VOC and NO_x, the components of O₃, are automobile exhaust and industrial sources. Some mixing of stratospheric O₃ downward through the troposphere to the earth's surface does occur; however, the extent of O₃ transport is limited.

The propensity of O₃ for reacting with organic materials causes it to be damaging to living cells, which can lead to health effects. O₃ enters the human body primarily through the respiratory tract and causes respiratory irritation and discomfort, makes breathing more difficult during exercise, and reduces the respiratory system's ability to remove inhaled particles and fight infection. 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 subgroups for O₃ effects.

Particulate matter (PM₁₀ and PM_{2.5}) refers to particles small enough to be inhaled into the deepest parts of the lung, which are of great concern to public health. Major sources of PM₁₀ include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Emissions of PM_{2.5} result from fuel combustion (e.g., motor vehicles, power generation and industrial facilities), residential fireplaces and wood stoves. In addition, PM_{2.5} can be formed in the atmosphere from gases such as SO₂, NO_x, and VOC.

Respirable particles (particles less than 10 microns in diameter, denoted as PM₁₀) can accumulate in the respiratory system and aggravate health problems such as asthma, bronchitis and other lung diseases. Children, the elderly, exercising adults, and those suffering from asthma are especially vulnerable to adverse health effects of PM. A consistent correlation between elevated ambient fine particulate matter (particles less than 2.5 microns in diameter, denoted as PM_{2.5}) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the U.S. and various areas around the world. Studies have reported an association between long-term exposure to air pollution dominated by PM_{2.5} and increased mortality, reduction in lifespan, and an increased mortality from lung cancer.

Daily fluctuations in PM_{2.5} concentration levels have also been related to hospital admissions for acute respiratory conditions, to school and kindergarten absences, to a decrease in respiratory function in normal children and to increased medication use in children and adults with asthma. Studies have also shown that lung function growth in children is reduced with long-term exposure to PM. In addition to children, the elderly and people with pre-existing respiratory and/or cardiovascular disease appear to be more susceptible to the effects of PM₁₀ and PM_{2.5}.

Carbon monoxide (CO) is a colorless, odorless, relatively inert gas. It is a trace constituent in the unpolluted troposphere and is produced by both natural processes and human activities. In remote areas far from human habitation, CO occurs in the atmosphere at an average background concentration of 0.04 parts per million (ppm), primarily as a result of natural processes such as forest fires and the oxidation of methane. Global atmospheric mixing of CO from urban and industrial sources creates higher background concentrations (up to 0.20 ppm) near urban areas. The major source of CO in urban areas is incomplete combustion of carbon-containing fuels, mainly gasoline.

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of worsening oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with oxygen transport by competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin. Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.

Nitrogen dioxide (NO₂) is a reddish-brown gas with a bleach-like odor and is responsible for the brownish tinge of polluted air. Nitric oxide (NO) is a colorless gas, formed from nitrogen (N₂) and oxygen (O₂) under conditions of high temperature and pressure which are generally present during combustion of fuels (e.g., motor vehicles). NO reacts rapidly with the oxygen in air to form NO₂. NO and NO₂ are referred to collectively as NO_x. In the presence of sunlight, atmospheric NO₂ reacts and splits to form a NO molecule and an oxygen atom. The oxygen atom can react further to form O₃, via a complex series of chemical reactions involving hydrocarbons.

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposures to NO₂ at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California (fewer or no stoves). In healthy subjects, an increase in resistance to air flow and airway contraction is observed after short-term exposure to NO₂. Larger decreases in lung functions are observed in individuals with asthma and/or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. More recent studies have found associations between NO₂ exposures and cardiopulmonary mortality, decreased lung function, respiratory symptoms and emergency room asthma visits.

Sulfur dioxide (SO₂) is a colorless gas with a sharp odor. It reacts in air to form sulfuric acid, which contributes to acid precipitation, and sulfates, which are components of particulate matter. Main sources of SO₂ include coal and oil used in power plants and industries. Exposure of a few minutes to low levels of SO₂ can result in airway constriction in some asthmatics. All asthmatics are sensitive to the effects of SO₂. In asthmatics, an increase in

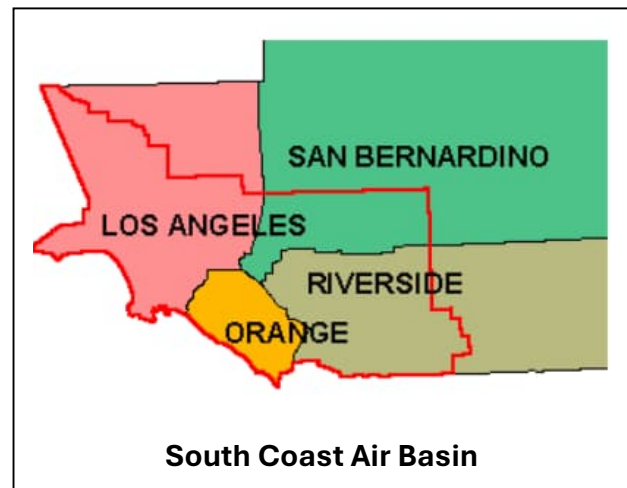
resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, is observed after acute higher exposure to SO₂. In contrast, healthy individuals do not exhibit similar acute responses, even after exposure to higher concentrations of SO₂.

Lead (Pb) in the atmosphere is present as a mixture of a number of lead compounds. Leaded gasoline and lead smelters have been the main sources of lead emitted into the air. Due to the phasing out of leaded gasoline, there was a dramatic reduction in atmospheric Pb over the past three decades. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death. There is no evidence to suggest that there are direct effects of Pb on the respiratory system.

3.1.3 California Criteria Pollutants

The California Environmental Protection Agency (CalEPA) establishes statewide standards and the California Air Resources Board (CARB) establishes local standards for the six common air pollutants identified above (CARB 2024a). In addition, CARB has established standards for the following four additional pollutants.

Visibility-reducing particles are a byproduct of various processes and activities involved in land use development. Deterioration of visibility is one of the most obvious manifestations of air pollution and plays a major role in the public's perception of air quality. Visibility reduction from air pollution is often due to the presence of sulfur and NO_x, as well as PM.



Sulfates (X-SO₄²⁻) are chemical compounds which contain the sulfate ion (SO₄²⁻) and are part of the mixture of solid materials that comprise PM₁₀. Most of SO_x in the atmosphere are produced by oxidation of SO₂. Oxidation of SO₂ yields sulfur trioxide that reacts with water to form sulfuric acid, which contributes to acid deposition. The reaction of sulfuric acid with basic substances such as ammonia yields SO₄²⁻, a component of PM₁₀ and PM_{2.5}. Both mortality and morbidity effects have been observed with an increase in ambient SO₄²⁻ concentrations. However, studies to separate the effects of SO₄²⁻ from the effects of other pollutants generally have been unsuccessful. Clinical studies of asthmatics exposed to

sulfuric acid suggest that adolescent asthmatics are possibly a subgroup susceptible to acid aerosol exposure.

Hydrogen sulfide (H₂S) is a colorless, flammable, poisonous compound having a characteristic rotten egg odor. It is used as a reagent and as an intermediate in the preparation of other reduced sulfur compounds. It is also a by-product of the desulfurization processes in the oil and gas industries and rayon production, sewage treatment, and leather tanning. Geothermal power plants, petroleum production and refining, and sewer gas are specific sources of H₂S in California. High H₂S exposure has been documented as a cause of sudden death in the workplace.

Vinyl chloride (C₂H₃Cl) is a colorless, flammable gas at ambient temperature and pressure. It is also highly toxic and is classified as a known carcinogen by the American Conference of Governmental Industrial Hygienists and the International Agency for Research on Cancer. At room temperature, vinyl chloride is a gas with a sickly-sweet odor that is easily condensed. However, it is stored at cooler temperatures as a liquid. Due to the hazards of vinyl chloride to human health, there are no end products that use vinyl chloride in its monomer form. Vinyl chloride is a chemical intermediate, not a final product.

Vinyl chloride is an important industrial chemical chiefly used to produce polyvinyl chloride (PVC). The process involves vinyl chloride liquid fed to polymerization reactors where it is converted from a monomer to a polymer PVC. The final product of the polymerization process is PVC in either a flake or pellet form. From its flake or pellet form, PVC is sold to companies that heat and mold the PVC into end products such as PVC pipe and bottles. Vinyl chloride is not only used to make PVC products, but it is also a natural degradation product of chlorinated industrial solvents (e.g., perchloroethylene or trichloroethene). Vinyl chloride emissions are historically associated primarily with landfills and sites contaminated with chlorinated solvents.

3.1.4 Existing Air Quality Conditions

Topographical Influence

The rate and location of pollutant emissions, and meteorological conditions that influence movement and dispersal of pollutants, affect air quality. Atmospheric conditions, such as wind speed, wind direction, and air temperature gradients, along with local topography, play an important part in how air pollutant emissions affect air quality.

The Project site is located in the South Coast Air Basin (SCAB or Basin), which includes the western portion of San Bernardino County and portions of what was previously known as the Southeast Desert Air Basin, all of Orange County, the non-desert portions of Los Angeles County, and most of Riverside County. The distinctive climate of the SCAB is determined by

its terrain and geographic location. The SCAB is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the southwest and high mountains around its remaining perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds.

The vertical dispersion of air pollutants in the SCAB is hampered by the presence of persistent temperature inversions. An upper layer of dry air that warms as it descends characterizes high-pressure systems, such as the semi-permanent high-pressure zone in which the SCAB is located. This upper layer restricts the mobility of cooler marine-influenced air near the ground surface and results in the formation of subsidence inversions. Such inversions restrict the vertical dispersion of air pollutants released into the marine layer and, together with strong sunlight, can produce worst-case conditions for the formation of photochemical smog.

The atmospheric pollution potential of an area is largely dependent on winds, atmospheric stability, solar radiation, and terrain. The combination of low wind speeds and low inversions produces the greatest concentration of air pollutants. On days without inversions, or on days of winds averaging over 15 miles per hour (mph), smog potential is greatly reduced (SCAQMD 1993).

Regional Attainment Status

Table 3.1-2 shows the area designation status of the SCAB for each criteria pollutant for both the NAAQS and CAAQS as of 2018.

Table 3.1-2. Federal and State Attainment Status

Pollutants	Federal Classification	State Classification
Ozone	1- and 8-Hour: Non-Attainment	1- and 8-Hour: Non-Attainment
Particulate Matter	Attainment (Maintenance)	Non-Attainment
Fine Particulate Matter	Non-Attainment	Non-Attainment
Carbon Monoxide	Attainment (Maintenance)	Attainment
Nitrogen Dioxide	Attainment (Maintenance)	Attainment
Sulfur Dioxide	Unclassified/Attainment	Attainment
Lead	Non-Attainment (Partial)	No State Standards
Sulfates	No Federal Standards	Attainment
Hydrogen Sulfide		Attainment
Vinyl Chloride		Attainment

Sources: SCAQMD 2018.

Local Air Monitoring Data

The SCAQMD has divided the Basin into source receptor areas (SRAs), based on similar meteorological and topographical features. The Project site is located in the SCAQMD's Northwest Coastal LA County SRA (SRA No. 2). The most representative station of the Project site is the West Los Angeles Station, which is located at Wilshire Boulevard and Sawtelle Boulevard, Los Angeles, CA 90025, approximately 2.6 miles northeast of the Project site. The West Los Angeles Station measures NO₂ and O₃. The nearest station that monitors CO, PM₁₀, PM_{2.5}, and SO₂ is the Los Angeles-North Main Street Station, which is located at 1630 North Main Street, Los Angeles, CA 90012, approximately 15 miles east of the Project site (SCAQMD 2024a).

Table 3.1-3 summarizes the air pollution monitoring results for 2022 for the Northwest Coastal LA County SRA.

Table 3.1-3. Air Quality Summary – Northwest Coastal LA County SRA

Criteria Pollutant	Year		
	2022	2023	2024
Ozone			
Maximum 1-Hour Concentration (ppm)	0.081	0.109	0.093
<i>Days > CAAQS (0.09 ppm)</i>	0	1	1
Maximum 8-Hour Concentration (ppm)	0.070	0.066	0.069
<i>Days > NAAQS (0.070 ppm)</i>	0	0	0
<i>Days > CAAQS (0.070 ppm)</i>	0	0	0
Carbon Monoxide			
Maximum 1-Hour Concentration (ppm)	1.672	1.430	1.624
<i>Days > NAAQS (35 ppm)</i>	0	0	0
<i>Days > CAAQS (20 ppm)</i>	0	0	0
Maximum 8-Hour Concentration (ppm)	1.063	0.912	0.903
<i>Days > NAAQS (9 ppm)</i>	0	0	0
<i>Days > CAAQS (9 ppm)</i>	0	0	0
Nitrogen Dioxide			
Maximum 1-Hour Concentration (ppm)	0.167	0.103	0.120
<i>Days > NAAQS (0.10 ppm)</i>	8	2	3
<i>Days > CAAQS (0.18 ppm)</i>	0	0	0
Respirable Particulate Matter			
Maximum 24-Hour Concentration (µg/m ³)	61.0	58.1	53.6
<i>Days > NAAQS (150 µg/m³)</i>	0	0	0
<i>Days > CAAQS (50 µg/m³)</i>	5	2	1
Fine Particulate Matter			
Maximum 24-Hour Concentration (µg/m ³)	38.1	32.1	62.4
<i>Days > NAAQS (35 µg/m³)</i>	1	0	5
Sulfur Dioxide			
Maximum 1-Hour Concentration (ppm)	0.007	0.008	0.002

Criteria Pollutant	Year		
	2022	2023	2024
<i>Days > NAAQS (0.075 ppm)</i>	0	0	0
<i>Days > CAAQS (0.25 ppm)</i>	0	0	0
Maximum 24-Hour Concentration (ppm)	0.001	0.002	0.001
<i>Days > NAAQS (0.14 ppm)</i>	0	0	0
<i>Days > CAAQS (0.04 ppm)</i>	0	0	0

Source: CARB 2025.

Notes: ppm = parts per million; ppb = parts per billion; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Toxic Air Contaminant Sources

Toxic air contaminants (TACs) can cause chronic and acute adverse effects on human health. These health impacts include an increased risk of cancer due to continual inhalation of TACs. Most of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (i.e., diesel particulate matter [DPM]). Based on the Multiple Air Toxics Exposure Study (MATES IV) conducted by SCAQMD in July 2012 and July 2013, DPM is attributable to approximately 68 percent of all airborne carcinogenic risk. According to CARB, DPM exposure may lead to the following adverse health effects: (1) aggravated asthma; (2) chronic bronchitis; (3) increased respiratory and cardiovascular hospitalizations; (4) decreased lung function in children; (5) lung cancer; and (6) premature deaths for people with heart or lung disease (CARB 2008, 2021). Approximately 22 percent is due to other TACs associated with mobile sources – including benzene, butadiene, and formaldehyde – and approximately 10 percent of the risk is attributed to stationary sources (including industries and other certain businesses, such as dry cleaners and chrome plating operations). The study also found lower ambient concentrations of most of the measured air toxics compared to the levels measured in the previous study conducted during 2004 and 2006.

As part of the MATES IV, the SCAQMD prepared maps that show regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps represent the estimated number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years). Although it is highly unlikely an individual would remain in an area for such a duration, the assumptions used in the MATES IV study are health protective estimates and use conservative parameters which can result in an overestimation of cancer risk. The background potential cancer risk per million people using the update the Office of Environmental Health Hazard Assessment (OEHHA) methodology is estimated at 837.62 per million (compared to an overall Basin-wide risk of 1,023 per million) (SCAQMD 2015).

CARB indicates that one of the highest public health priorities is the reduction of DPM generated by vehicles on California's freeways and highways, as it is one of the primary TACs with the most direct and common implications for respiratory health problems. Per CARB criteria, heavily traveled roadways where annual average daily trips (AADT) exceed 100,000

can be sources of particulate emissions, particularly from diesel-fueled engines such as those associated with heavy haul trucks and other heavy construction equipment. Other potential sources of TACs within the City are associated with specific types of facilities, such as gas stations, dry cleaners, and auto body repair shops, and are the focus of local control efforts.

CARB's Air Quality and Land Use Handbook: A Community Health Perspective (2005) makes specific recommendations with respect to considering existing sensitive uses when siting new TAC-emitting facilities or with respect to TAC-emitting sources when siting sensitive receptors. CARB recommends the following buffer distances be observed when locating these types of TAC emitters or sensitive land uses:

- Freeways or major roadways – 500 feet
- Dry cleaners – 500 feet
- Auto body repair services – 500 feet
- Gasoline dispensing stations with an annual throughput of less than 3.6 million gallons – 50 feet; gasoline dispensing stations with an annual throughput at or above 3.6 million gallons – 300 feet
- Gasoline dispensing stations with an annual throughput at or above 3.6 million gallons – 300 feet

Interstate (I-) 10 (Santa Monica Freeway), State Route (SR-) 1 (Pacific Coast Highway), and SR-2 (Santa Monica Boulevard) run through the City and carry relatively high volumes of vehicle traffic. I-10 is the only freeway within the City that generates high traffic levels that exceed 100,000 AADT. As of 2019, AADT along I-10 are approximately 194,000 AADT at Centinela Avenue / Pico Boulevard at the City's eastern boundary decreasing to 150,000 AADT at the junction with SR-1, and falling off substantial down to less than 40,000 AADT to the west along the coastal portions of this highway (California Department of Transportation [Caltrans] 2019). SR-1 does not carry more than 100,000 AADT; however, vehicle traffic reach as high as 79,000 AADT at the California Incline. I-405 runs through the vicinity of the City and generates high traffic levels that exceed 100,000 AADT, with approximately 331,000 AADT at the I-10 junction. However, I-405 is located approximately 1 mile east of the City's eastern boundary (Caltrans 2019). Other roadways within or in the immediate vicinity of the City boundaries do not carry sufficient volumes of traffic to be considered as potential TAC generators.

Carbon Monoxide Hot Spots

Passenger vehicles and trucks are the primary source of pollutants in the vicinity of the City. Traffic-congested streets and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed Federal and/or State standards for CO are termed "CO hotspots." CO hotspots occur largely from vehicle emissions from idling engines. The Federal 1-hour air quality standard for CO is 35 ppm and

the State 1-hour standard is 20 ppm. The 8-hour Federal and State air quality standard for CO is 9.0 ppm. Section 9.4 of the SCAQMD's CEQA Air Quality Handbook (1993) identifies CO as a localized problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots.

In the past, the SCAQMD recommended that a CO hotspot analysis should be conducted for intersections where the proposed project would have a significant traffic-related congestion impact causing the Level of Service (LOS) to change to E or F or when a project increases the volume-to-capacity ratio (V/C) increases by 2 percent and the LOS is D or worse. It should be noted that these recommendations were formulated several years ago when the Basin was a non-attainment area for Federal and State CO standards. As shown in Table 3.1-3, CO levels in the City are now substantially below the Federal and State standards. Maximum CO levels in recent years are 2.2 ppm (maximum 1-hour concentration) and 1.4 ppm (maximum 8-hour concentration) compared to the CAAQS of 20 ppm (maximum 1-hour concentration) and 9.0 ppm (maximum 8-hour concentration). As such, the Basin is currently designated as an attainment area for both the NAAQS and CAAQS (refer to Table 3.1-2).

Sensitive Receptors

Some people, such as individuals with respiratory illnesses or impaired lung function because of other illnesses, persons over 65 years of age, and children under 14, are particularly sensitive to certain pollutants. Facilities and structures where these sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses identified to be sensitive receptors by SCAQMD (1993) in its *California Environmental Quality Act (CEQA) Air Quality Handbook* include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors may be at risk of being affected by air emissions released from the construction of the proposed Project.

Table 3.1-4 identifies the sensitive receptors located within proximity to the Project site. The nearest sensitive receptors to the Project site include recreational users of Memorial Park itself. Additionally, residences are located within 500 to 600 feet to the north of the Project site. Crossroads Elementary School is located approximately 900 feet to the east of the Project site.

Table 3.1-4. Designated Sensitive Receptors

Program	Address	Distance from Project Site	Susceptible Population
Memorial Park (Project Site)	1401 Olympic Blvd	-	Active Recreational Use Park

Program	Address	Distance from Project Site	Susceptible Population
Crossroads Elementary School	1715 Olympic Blvd	900 feet	School-aged child education and recreation.
Beginnings Learning Center	1516 19th St	0.25 miles	Early Childhood Development Programs, and Recreation
Santa Monica Montessori School	1909 Colorado Ave	0.25 miles	School-aged child education and recreation.

Note: In addition to the receptors presented in this table, any residential use is also considered a sensitive receptor.

3.1.5 Regulatory Setting

Air quality within the Basin is addressed through various Federal, State, regional, and local regulations that governmental agencies enforce. These governmental agencies work individually and jointly to manage and improve air quality through legislation, regulations, planning, policymaking, education, and a variety of programs. The governmental agencies responsible for improving the air quality within the Basin are discussed below.

Federal Regulations

Federal Clean Air Act

The Federal Clean Air Act (CAA), passed in 1963, was the first comprehensive Federal law to regulate air emissions from stationary and mobile sources. Among other things, the law authorizes the USEPA to establish NAAQS, which help to ensure basic health and environmental protection from air pollution. The CAA also gives the USEPA the authority to limit emissions of air pollutants coming from sources like chemical plants, utilities, and steel mills.

Federal Clean Air Act Amendments

In 1990, the U.S. Congress adopted the Federal Clean Air Act Amendments (CAAA) that updated the nation's air pollution control program. The CAAA established several requirements, including new deadlines for achieving Federal clean air standards.

The USEPA is the Federal agency charged with administering the CAAA and other air quality-related legislation. As a regulatory agency, USEPA's principal functions include setting

NAAQS; establishing minimum national emission limits for major sources of pollution; and promulgating regulations.

The CAAA require USEPA to approve State Implementation Plans (SIPs) to meet and/or maintain the NAAQS. California's SIP is comprised of plans developed at the regional or local level.

State Regulations

California Clean Air Act

The California Clean Air Act (CCAA) was enacted in 1988 (California Health and Safety Code Section 39000 et seq.). California also has ambient air quality standards (i.e., CAAQS), which predate USEPA's formation in 1970 and the original NAAQS for pollutants considered harmful to public health and the environment, including the six criteria pollutants, as well as sulfates, hydrogen sulfide, vinyl chloride (chloroethene), and visibility reducing particles. The CAAQS currently in effect for each pollutant, as well as the attainment status of the SCAB, are shown in Table 3.1-2. In 1959, California enacted legislation requiring the California Department of Public Health (CDPH) to establish air quality standards and necessary controls for motor vehicle emissions. The CCAA requires all areas of the State to achieve and maintain the CAAQS by the earliest practicable date. California law continues to mandate CAAQS, although attainment of the NAAQS has precedence over attainment of the CAAQS. The CAAQS includes more stringent standards than the NAAQS. CARB ensures the implementation of the CCAA and responds to the Federal CAA. CARB is responsible for the control of vehicle emission sources, while local air districts are responsible for enforcing standards and regulating stationary sources.

California Air Resources Board

CARB, a part of 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, establishes CAAQS, compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. CARB is responsible for the control of vehicle emission sources, while local air districts are responsible for enforcing standards and regulating stationary sources.

Air Quality and Land Use Handbook: A Community Health Perspective

In April 2005, CARB issued *Air Quality and Land Use Handbook: A Community Health Perspective*, a guidance document regarding air quality and land use impacts to sensitive receptors from facilities that emit TACs. The recommendations provided in the handbook are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, (e.g., children, the elderly, acutely ill, and chronically ill persons) from exposure to TACs. The handbook recommends siting criteria for "sensitive land uses" near specific sources of air pollution. Specifically, CARB siting recommendations include the following: (1) avoid

siting sensitive receptors within 500 feet of freeways and high-traffic roads (i.e., roads within urbanized areas carrying more than 100,000 vehicles per day); (2) avoid siting sensitive receptors within 1,000 feet of a distribution center; and (3) avoid siting sensitive receptors within 300 feet of a dry cleaning facility that uses perchloroethylene. According to CARB, the additional noncancer health risk attributable to proximity to high-volume roadways was seen within 1,000 feet and was strongest within 300 feet. Particulate pollution levels are reduced by approximately 70 percent at 500 feet from freeways. However, these recommendations are advisory and should not be interpreted as required “buffer zones.” Rather, land use agencies are given discretion to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

California Air Toxics “Hot Spots” Information and Assessment Act

The Air Toxic “Hot Spots” Information and Assessment Act identifies TAC hot spots where emissions from specific stationary source facilities may expose individuals to an elevated risk of adverse health effects. It requires that a business or other establishment identified as a significant source of toxic emissions provide the affected population with information about the health risks posed by the emissions. Health Risk Assessments (HRAs) would: identify the hazard or hazardous material; assess the amount, duration, and pattern of exposure to the hazard or hazardous material; assess the amount it would take to cause negative health effects; and characterize the risk to the general population and sensitive receptors from the hazard or hazardous material. OEHHA provides *A Guide to Health Risk Assessment* and *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (2015) to aid in the assessment of California projects’ compliance with the Air Toxic “Hot Spots” Information and Assessment Act.

CARB Off-Road Mobile Sources Emission Reduction Programs

The CCAA mandates CARB to achieve the maximum degree of emission reductions from all off-road mobile sources to attain the CAAQS. Off-road mobile sources include heavy construction equipment. Tier 1, Tier 2, and Tier 3 standards for large compression-ignition engines used in off-road mobile sources went into effect in California for most engine classes in 1996, 2001, and 2006, respectively. Tier 4 or Tier 4 Interim (4i) standards apply to all off-road diesel engines model year 2012 or newer. In addition, equipment can be retrofitted to achieve lower emissions using retrofit technologies verified by CARB. The engine standards and ongoing rulemaking jointly address the products of diesel combustion, including emissions and toxic DPM. The California Emission Standards for Off-Road Compression-Ignition Engines are as specified in California Code of Regulations (CCR) Title 13, Division 3, Chapter 9, Article 4, Section 2423.

California Building Code

CCR, Title 24, is known as the California Building Code (CBC), which establishes the regulations for building construction and system design and installation to achieve energy efficiency and preserve outdoor and indoor environmental quality.

CCR, Title 24, Part 6 comprises the California Energy Code, which was first established in 1978 in response to a legislative mandate to reduce California’s energy consumption. The standards are updated periodically to increase the baseline energy efficiency requirements. The Title 24 standards were updated in 2021 and became effective on January 1, 2023. The updated standards apply to all buildings for which an applicable building permit application is submitted on or after January 1, 2023, and established new standards for electric-ready requirements, expanded solar photovoltaic and battery storage, and strengthened ventilation standards for improved air quality. The Title 24 standards also include efficiency improvements to the residential standards for attics, walls, water heating, and lighting; and efficiency improvements to the non-residential standards are in alignment with the American Society of Heating and Air-Conditioning Engineers (ASHRAE) 90.1-2013 National Standards. Although it was not originally intended to reduce criteria pollutant or TAC emissions, electricity production by fossil fuels results in O₃ precursor emissions and energy-efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased criteria pollutant and TAC emissions from residential and non-residential buildings.

CCR, Title 24, Part 11 comprises the California Green Building Standards (CalGreen), which establishes mandatory green building code requirements as well as voluntary measures (Tier 1 and Tier 2) for new buildings in California. The mandatory provisions in CALGreen will reduce the use of VOC-emitting materials, strengthen water efficiency conservation, increase construction waste recycling, and increase energy efficiency. Tier 1 and Tier 2 are intended to further encourage building practices that minimize the building’s impact on the environment and promote a more sustainable design.

Regional and Local Regulations

South Coast Air Quality Management District

The SCAQMD has jurisdiction over a total area of 10,743 square miles, consisting of the SCAB—comprised of 6,745 square miles, including Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties—and the Riverside County portion of the Salton Sea and Mojave Desert Air Basins.

The SCAQMD is required to produce plans to show how air quality will be improved in the region. The CCAA requires that these plans be updated triennially to incorporate the most recent available technical information. A multi-level partnership of governmental agencies at the Federal, State, regional, and local levels implement the programs contained in these plans. Agencies involved include the USEPA, CARB, local governments, Southern California Association of Governments (SCAG), and SCAQMD. The SCAQMD and the SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin.

The SCAQMD updates its AQMP every three years. The most recent of these is the AQMP that the Governing Board of SCAQMD adopted on December 2, 2022. The 2022 AQMP was prepared to comply with the CAA and CCAA, accommodate growth, reduce air pollutant levels in the Basin, meet Federal and State air quality standards, and minimize the fiscal impact that pollution control measures have on the local economy.

The 2022 AQMP focuses on attaining the 2015 8-hour O₃ standard, which is the most stringent standard to date. The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero 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 CAA measures to achieve the 2015 8-hour O₃ standard. Specifically, the AQMP projects that to meet this standard, NO_x emissions must be reduced by 67 percent by 2037.

The SCAQMD also has established various rules to manage and improve air quality in the SCAB. The Project proponent shall comply with all applicable SCAQMD Rules and Regulations pertaining to construction activities, including, but not limited to:

- **Rule 401 (Visible Emissions)** prohibits discharges of any pollutant into the atmosphere from any single source of emissions that is as dark or darker in shade as that designated No. 1 on the Ringelmann chart (opacity equal to or greater than 20 percent) for up to or more than three minutes in any one hour.
- **Rule 402 (Nuisance)** states that a person should not emit air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 403 (Fugitive Dust)** controls fugitive dust through various requirements including, but not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, limiting vehicle speeds on unpaved roads to 15 mph, and maintaining effective cover over exposed areas. Rule 403 also prohibits the release of fugitive dust emissions from any active operation, open storage piles, or disturbed surface area beyond the property line of the emission source and prohibits particulate matter deposits on public roadways.
- **Rule 1113 (Architectural Coatings)** establishes limits on the VOC content of specific architectural coating applications. Non-residential building envelope coatings are required to have VOC content of less than 50 grams per liter.

- **Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines)** specifies requirements for stationary diesel engines, including emergency standby generators. This rule requires owners or operators of emergency standby generators to keep monthly logs of usage, limits maintenance and testing to 20 hours per day, and requires emission rates to not exceed certain levels. For new emergency standby diesel-fueled engines (>50hp) located 100 meters or less from a school, DPM emission rates shall be less than or equal to 0.01 grams per brake horsepower hour (g/bhp-hr).
- **Regulation XIII (New Source Review)** authorizes the SCAQMD to deny any Permit to Construct for any new or modified source which results in an emission increase of any non-attainment air contaminant, any O₃ depleting compound, or ammonia, unless Best Available Control Technology is employed (Rule 1303) and it can be demonstrated through emissions modeling that the source would not cause or contribute to air quality violations.

SCAQMD CEQA Air Quality Handbook

Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality regarding plans and new development projects within its jurisdiction. In 1993, the SCAQMD prepared its *CEQA Air Quality Handbook* to assist local governmental agencies and consultants prepare environmental compliance documents pursuant to CEQA. The SCAQMD is in the process of developing its *Air Quality Analysis Guidance Handbook (Guidance Handbook)* to replace the *CEQA Air Quality Handbook*. The *CEQA Air Quality Handbook* and the *Guidance Handbook* describe the criteria that SCAQMD uses when reviewing and commenting on the adequacy of environmental compliance documents pursuant to CEQA. The *Guidance Handbook* provides the recommended thresholds of significance to determine if a project will have a significant adverse environmental impact. Other important subjects covered in the *CEQA Air Quality Handbook* and the pending *Guidance Handbook* include methodologies for estimating project emissions and mitigation measures that can be implemented to avoid or reduce air quality impacts. Although the Governing Board of the SCAQMD has adopted the *CEQA Air Quality Handbook* and is in the process of developing the *Guidance Handbook*, the SCAQMD does not, nor intends to, supersede a local jurisdiction's CEQA procedures.

While the *Guidance Handbook* is being developed, supplemental information has been adopted by the SCAQMD. These include revisions to the air quality significance thresholds and a procedure referred to as "localized significance thresholds," which has been added as a significance threshold under the *Final Localized Significance Threshold [LST] Methodology* (Chico and Koizumi 2003). LSTs represent the maximum emissions from a development project that would not cause or contribute to an exceedance of the most stringent applicable Federal or State air quality standard, based on the ambient concentrations of that pollutant for each source receptor area. The *Final LST Methodology* provides thresholds of significance for NO_x, CO, PM₁₀, and PM_{2.5} to evaluate localized air quality impacts at sensitive receptors near a development project. The *Final LST*

Methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. Further, LSTs are applicable at the project-specific level and are not applicable to regional projects such as General Plans or other long-term planning documents.

In addition, the SCAQMD has recommended that lead agencies not use the screening tables in Chapter 6 of the *CEQA Air Quality Handbook* because the tables were derived using an obsolete version of CARB's mobile source emission factor inventory and are also based on outdated trip generation rates from a prior edition of the Institute of Transportation Engineer's Trip Generation Handbook. The SCAQMD has also recommended that lead agencies not use the on-road mobile source emission factors in Table A9-5-J1 through A9-5-L as they are obsolete and instead recommends using on-road mobile source emission factors approved by CARB. The outdated and obsolete information was not used in this analysis. The applicable portions of the *CEQA Air Quality Handbook*, the *LST Methodology*, and other revised methodologies were used in preparing the air quality analysis in this section.

SCAQMD Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis

SCAQMD staff developed, and the SCAQMD reviewed, a technical guidance report (SCAQMD 2003) that is used for estimating potential DPM impacts from the following activities:

- Truck idling and movement (e.g., truck stops, warehouse/distribution centers, or transit centers)
- Ship hoteling at ports
- Train idling

The report provides guidance on the following components of a typical DPM risk analysis: project description, project emissions, dispersion modeling, estimation of health risks, and potential mitigation measures.

As discussed further below, an HRA was conducted for the proposed Project, which relied on the SCAQMD technical guidance report and analyzed the following potential health risks associated with DPM emissions associated with traffic along I-10:

- **Acute health impacts**, or adverse non-cancer health effects that occur over a relatively short period of time (e.g., minutes or hours). Acute health impacts involve brief exposures and effects which appear promptly after exposure;
- **Chronic health impacts**, or adverse non-cancer health effects that develop and persist (e.g., months or years) over time after long-term exposure (greater than one year) to a substance; and

- **Cancer health impacts**, or the incremental excess likelihood of developing cancer as a result of exposure to carcinogenic substances.

Regional Transportation Plan/Sustainable Communities Strategy

The Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) sets forth a long-range vision for transportation planning and programming activities in the SCAG region. The RTP/SCS sets forth how the region will integrate land use, transportation strategies, transportation investments including transit, bicycle, and pedestrian infrastructure, and future population growth while progressing State goals to reduce mobile source emissions.

The City has the authority to reduce air pollution through land use planning, policy, and regulation consistent with Federal, State, and regional standards. Specifically, the City is responsible for the assessment and mitigation of air emissions that City development generates. Pursuant to CEQA, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces mitigation measure implementation. The City also has adopted standard construction mitigation measure requirements for all development and monitors compliance with these standards. Further, the City is responsible for the implementation of traffic reduction and Transportation Demand Management (TDM) measures set forth in the AQMP, such as advanced ramp metering and expansion and integration of the traffic signal synchronization network to alleviate timing bottlenecks.

Santa Monica General Plan Conservation Element

The Conservation Element sets forth goals and objectives to ensure proper management and conservation of the City's natural resources. The Conservation Element includes the following goal and objectives that pertain to air resources:

Goal: An atmosphere free of pollution.

- Objectives:**
1. Eliminate all detrimental sources of air pollution.
 2. Encourage lowest feasible emissions from stationary and moving sources.
 3. Cooperate with and support Federal, State, and regional efforts to reduce smog and pollution.
 4. Reduce the total volume of vehicular traffic.

3.1.6 Impact Assessment Methodology

Thresholds for Determining Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts on air quality. Specifically, the CEQA Guidelines state that a proposed project may have a significant adverse impact on air quality if it:

- AQ-1** Conflicts with or obstruct implementation of the applicable air quality plan;
- AQ-2** Results in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable Federal or State ambient air quality standard;
- AQ-3** Exposes sensitive receptors to substantial pollutant concentrations; and/or
- AQ-4** Results in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

In determining whether an effect is significant, CEQA Guidelines Section 15064.7 states that a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, provided that the decision to use such thresholds is supported by substantial evidence. Further, with regard to air quality, CEQA Guidelines Section 15064.7 and Appendix G checklist's air quality section preamble reads:

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

In a February 2018 CEQA Guidance document released by SCAQMD, the SCAQMD further states that:

“Air districts’ thresholds provide a clear quantitative benchmark to determine the significance of project and project alternative air quality impacts. They also help identify the magnitude of the impacts, facilitate the identification of feasible mitigation measures, and evaluate the level of impacts before and after mitigation measures. Since one of the basic purposes of CEQA is to inform government decision makers and the public about the potential significant environmental effects of any proposed activities (CEQA Guidelines Section 15002[a][1]), use of air district thresholds is a best practice for CEQA impact determinations.”

The SCAQMD, the air pollution control agency in the Basin, has developed specific regional and local significance thresholds for air quality, and recommends that projects in the Basin be evaluated in terms of these thresholds. The City uses these SCAQMD thresholds to assess whether air pollution effects of proposed projects are significant. The following thresholds are currently recommended by the SCAQMD and have been used to determine the significance of air quality impacts associated with the proposed Project.

Conflict with Air Quality Plan

The threshold used for determining whether the proposed Project would conflict with or obstruct an applicable air quality plan is qualitative and is based on whether the proposed Project is consistent with the assumed growth, applicable control measures and air emission reduction policies in the AQMP. Therefore, the proposed Project would have a significant impact if it would:

- Conflict with or obstruct implementation of the AQMP or any other adopted regional and local plans adopted for reducing air quality impacts.

Cumulatively Considerable Net Increase in Criteria Pollutants

The SCAQMD has developed criteria for determining whether emissions from a project are regionally significant. They are useful for estimating whether a project is likely to result in a violation of the NAAQS and/or whether the project is in conformity with plans to achieve attainment. The SCAQMD no longer has “indirect source” rules (e.g., rules that place restrictions on housing or commercial development, or require reductions in trip generation and/or VMT to developed commercial or industrial sites).¹ Instead, the SCAQMD has published guidance on conducting air quality analyses under CEQA (SCAQMD 1993).² SCAQMD’s significance thresholds are summarized in Table 3.1-5 for criteria pollutant emissions during construction activities and Project operation. The proposed Project would have a regional air quality impact if emissions from its construction and/or operational activities exceed the corresponding SCAQMD significance thresholds.

Table 3.1-5. SCAQMD Emissions Thresholds for Significant Regional Impacts

Pollutant	Mass Daily Thresholds (lbs/day)	
	Construction	Operation
Nitrogen Oxides	100	55
Volatile Organic Compounds	75	55
Respirable Particulate Matter	150	150
Fine Particulate Matter	55	55
Sulfur Oxides	150	150
Carbon Monoxide	550	550
Lead	3	3

Source: SCAQMD 2023.

¹ Two indirect source rules (1501 - Work Trip Reduction Plans and 1501.1 - Alternatives to Work Trip Reduction Plans) were repealed in 1995.

² Partially updated in 2006.

Localized Significance Thresholds

LSTs were developed for construction activities in response to the SCAQMD Governing Board's Environmental Justice Enhancement Initiative (I-4). LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable Federal or State ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each SRA, project size, and distance to the sensitive receptor, etc. LSTs apply to emissions of CO, NO_x, PM₁₀, and PM_{2.5} emissions during construction and operation at the discretion of the Lead Agency.

The Final LST Methodology presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds. If receptors are within 25 meters (or 82 feet) of the site, the methodology document says that the threshold for the 25-meter distance should be used. If the project would result in exceedance of the screening criteria LSTs for the applicable pollutants, this would constitute a significant impact, unless dispersion modeling demonstrates no exceedance of the concentration-based standards.

The Project site is located in SRA 2. The nearest sensitive receptors to the Project site are located as close as 500 feet to the north of the Project site. Though recreational uses may sometimes be considered sensitive to poor air quality, particularly in the context of siting land uses or development generating long-term operational emissions, users and employees of the Park are not considered in this analysis given they are only present for very limited durations every couple days of the week, and their exposure to temporary, short-term construction emissions would be highly limited. Visitation and use of the Park is anticipated to be even lower through the duration of construction activities due to the temporary discontinuance in use of areas that are under construction. Further, exposure of Park guests and employees to construction-related emissions would only occur under the scenario in which construction and renovation activities occur in phases, by which only portions of the Park are closed for construction while other facilities remain accessible to the public. Under a single phase construction schedule, it is assumed that the entire Park would be closed, meaning that no Park guests or employees would be present or exposed to construction-related pollutant emissions. Therefore, for the purposes of this analysis and pursuant to SCAQMD's *Final Localized Significance Threshold Methodology*, the LSTs for sensitive receptors are based upon a distance of 500 feet (approximately 150 meters).

It was estimated that, as a worst case, the maximum daily disturbance for construction would be 4.77 acres, which has been rounded up to 5 acres for the purposes of providing a conservative worst-case analysis and determining the appropriate LSTs.

Table 3.1-6. Localized Significance Thresholds (LSTs) for Construction

Distance (meters)	Pollutant Threshold (pounds/day)			
	CO	NO _x	PM ₁₀	PM _{2.5}
25	1,531	221	13	6
50	1,985	212	40	8
100	2,762	226	55	14
200	4,383	350	84	29
500	10,467	312	174	95

Source: SCAQMD 2023.

Notes: LST based in SRA-2 for a 5-acre site.

Source: SCAQMD, Appendix C – Mass Rate LST Look-up Table, revised October 2009.

Toxic Air Contaminants

CARB indicates that one of the highest public health priorities is the reduction of DPM generated by vehicles on California's freeways and highways, as it is one of the primary TACs with the most direct and common implications for respiratory health problems. Per CARB criteria, heavily traveled roadways where AADT exceed 100,000 vehicles can be sources of particulate emissions from diesel-fueled engines. Other potential sources of TACs within the City are associated with specific types of facilities, such as gas stations, dry cleaners, and auto body repair shops, and are the focus of local control efforts. CARB's Air Quality and Land Use Handbook: A Community Health Perspective (2005) makes specific recommendations with respect to considering existing sensitive uses when siting new TAC-emitting facilities or with respect to TAC-emitting sources when siting sensitive receptors. CARB recommends the following buffer distances be observed when locating these types of TAC emitters or sensitive land uses:

- Freeways or major roadways – 500 feet
- Dry cleaners – 500 feet
- Auto body repair services – 500 feet
- Gasoline dispensing stations with an annual throughput of less than 3.6 million gallons – 50 feet; gasoline dispensing stations with an annual throughput at or above 3.6 million gallons – 300 feet
- Gasoline dispensing stations with an annual throughput at or above 3.6 million gallons – 300 feet

The SCAQMD recommends that site-specific HRAs be performed to document potential cancer and non-cancer health risk, either when siting sensitive land uses within the above buffer zone or when a project could generate TACs that may impact surrounding sensitive receptors (e.g., residences). Based on the methodology established by the OEHHA, the

SCAQMD established the following thresholding for maximum individual cancer risk (MICR)³ and non-cancer acute and chronic hazard index (HI)⁴ to assess a project's construction-related health impacts on sensitive receptors:

- MICR – cancer risk of less than 10 in one million (<10 x 10⁻⁶); and
- HI – highest chronic health index of less than 1

Carbon Monoxide Hotspots

With respect to the formation of CO hotspots, a project's localized air quality impact is considered significant if CO emissions create a hotspot where either the California 1-hour standard of 20 ppm or the Federal and State 8-hour standard of 9.0 ppm is exceeded. In general, this only occurs at severely congested intersections (i.e., Level of Service [LOS] E or worse).

The SCAQMD conducted CO modeling for the attainment demonstration in the Federal Attainment Plan for Carbon Monoxide (CO Plan for the 2003 AQMP). The SCAQMD modeled the four most congested intersections in the Basin, including: (1) Wilshire Boulevard and Veteran Avenue; (2) Sunset Boulevard and Highland Avenue; (3) La Cienega Boulevard and Century Boulevard; and (4) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP, SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day (SCAQMD 2003a). This intersection is located near the on- and off-ramps to I-405 in West Los Angeles. The evidence provided in Table 4-10 of Appendix V of the 2003 AQMP shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (maximum 1-hour concentration) and 3.2 (maximum 8-hour concentration) at Wilshire Boulevard and Veteran Avenue, exclusive of ambient background CO concentrations, which is well below the Federal and State CO standards. This indicates that intersections operating with less than 100,000 vehicles per day would not create a CO hot spot.

Other Emissions

With respect to other emissions such as those leading to odors, the threshold is qualitative. An impact associated with the proposed Project would be considered significant:

- If it created other adverse emissions affecting a substantial number of people.

³ MICR is the maximum estimated risk of contracting cancer when continually exposed for a lifetime (70 years) to a given concentration of a substance. This does not necessarily mean anyone will contract cancer as a result of the project.

⁴ The potential non-cancer health impacts resulting from a 1-hour exposure to toxic substances. An acute (i.e., generally developing suddenly and lasting a short time) hazard index is calculated by dividing the 1-hour concentration of a toxic pollutant by the acute reference exposure level for that pollutant. A chronic (i.e., conditions develop slowly and may worsen over an extended period of time) hazard index is calculated by dividing the annual average concentration of a toxic pollutant by the chronic reference exposure level for that pollutant.

Methodology

Conflict with Air Quality Plan

Federal and State ambient air quality standards are designed to prevent the harmful effects of air pollutant emissions. These standards are continually updated based on evolving research, including research which relates air quality impacts with health effects. At the regional level, plans such as the AQMP and SCAG's 2020-2045 RTP/SCS (Connect SoCal) work to ensure that the Basin reaches and maintains attainment with these Federal and State standards. Locally, EIRs evaluate a plan or project's consistency with applicable policies identified in the AQMP and Connect SoCal intended to protect human health.

SCAQMD is required, pursuant to the CAA, to reduce emissions of criteria pollutants for which the Basin is in non-attainment of the NAAQS (e.g., O₃ and PM_{2.5}). The assessment of consistency with the AQMP focuses on the potential for future housing development facilitated by the proposed Housing Element Update (e.g., construction and operation of individual residential development projects) to create or contribute to air quality violations and possibly delay air quality standards attainment. The 2003 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving attainment with the NAAQS and CAAQS. These strategies are developed, in part, based on regional growth projections prepared by SCAG. Further, the SCAQMD significance thresholds are health-protective and also serve to achieve attainment with the NAAQS and CAAQS within the Basin. Thus, projects, uses, and activities that are consistent with the assumed growth projections and control strategies assumed in the development of the AQMP would not conflict with or obstruct implementation of the AQMP, even if they exceed the SCAQMD's numeric thresholds for criteria pollutants.

Cumulatively Considerable Net Increase in Criteria Pollutants

Estimated regional air emissions from the on-site and off-site construction activities associated with the proposed Project were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. CalEEMod is a planning tool for estimating emissions related to land use projects. The model incorporates EMFAC2021 emission factors to estimate on-road vehicle emissions; and emission factors and assumptions from the ARB's OFFROAD 2007 and OFFROAD2011 model to estimate off-road construction equipment emissions. Model-predicted Project emissions are compared against SCAQMD's significance thresholds to assess regional air quality impacts. All modeling output files are provided in Appendix C.

Construction Emissions

Construction emissions were forecasted by estimating construction activities and applying the mobile source and fugitive dust emissions factors. The emissions were estimated using CalEEMod, which estimates emissions from each phase of construction, including demolition, excavation and site preparation, building construction, and architectural

coating. CalEEMod is based on outputs from the OFFROAD model and Emission FACTors (EMFAC) model, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, heavy-duty off-road equipment, and on-road vehicles. Emission estimates are based on the anticipated types and amount of equipment that would be used in construction activities associated with the proposed Project, the amount of demolition debris and excavated soil to be removed from the Project site, the size and type of new construction, anticipated construction schedule, and the number of vehicle trips generated by construction workers. Daily truck trips and default trip length data were used to assess roadway emissions from truck exhaust, as well as idling emissions based on typical idling activities in CalEEMod. The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the construction phasing assumptions used in the analysis to generate criteria pollutant emissions values for each construction activity.

For the purpose of this analysis, construction of the proposed Project was assumed to begin in Summer 2026 and finish in Spring 2029. However, two separate construction phasing schedules were developed and modeled. The first construction phasing schedule assumes a “single-phased” construction approach that would result in closure of the entire Park. The second construction phasing schedule assumes a more detailed “phased” construction approach, in which certain Park facilities would be temporarily closed to accommodate construction, demolition, and staging activities, and unaffected Park facilities would remain open and operational during such time. The first construction phasing schedule assumes all funding, entitlements, and approvals for the entirety of the proposed improvements occurs at one time, whereas the second construction phasing schedule assumes that funding, entitlements, and approvals for the various improvements occur in phases. The second construction phasing schedule (“detailed phase construction schedule”) more accurately represents the construction phasing assumptions described in Chapter 2.0, *Project Description*.

For each construction phasing schedule, CalEEMod default construction duration assumptions were utilized to estimate the number of days to execute the following construction activities:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

CalEEMod default construction assumptions for the types and numbers of construction equipment and worker trips by activity were utilized for each construction phasing scenario.

It also was assumed that the construction contractor would comply with all pertinent provisions of SCAQMD Rule 403 and Rule 1113 for controlling fugitive dust emissions from site preparation, grading, and demolition, and VOC emissions from application of architectural coating. Equipment exhaust emissions were determined using CalEEMod default values for horsepower and load factors.

Operational Emissions

Operational emissions associated with the proposed Project are estimated using CalEEMod for mobile source, area, and energy emissions. Operational air quality impacts are assessed based on the incremental increase in emissions compared to baseline conditions. Under CEQA, the baseline environmental setting for an EIR is established at or around the time that the Notice of Preparation (NOP) for the EIR is published.

Mobile emissions would be generated by the vehicle trips to and from the Park. However, as described in Section 2.5, *Project Description*, following the completion of the proposed Project, the new facilities and programs offered at Memorial Park would not generate any increase in employees. The new facilities would simply replace existing facilities where robust programming already exists. The VMT Screening Analysis prepared for the proposed Project documents that the proposed Project would result in negligible trip generation and would have a less than significant impact on transportation. Area source emissions would be generated by consumer products, architectural coating, and landscape maintenance equipment. Energy source emissions are generated by emissions resulting from electricity and natural gas consumption for space and water heating. To determine if an air quality impact would occur, the maximum daily emissions from operation of the proposed Project are compared with SCAQMD's regional (mass daily) thresholds. The default emissions were used for area and energy sources with consideration of SCAQMD rules and regulations that would be required of the proposed Project related to operations.

Toxic Air Contaminants

An HRA was prepared for the proposed Project using SCAQMD (2003) and OEHHA (2015) guidance for the analysis of impacts from TACs associated with traffic emissions along I-10 (see Appendix D). The objective of the HRA was to evaluate the potential health risks to future recreational users and Park employees (potential receptors) if the proposed Project is constructed. The HRA is based on dispersion modeling using AERMOD, which is the recommended model in the USEPA Guideline on Air Quality Models (40 Code of Federal Regulations [CFR] 51, Appendix W), the OEHHA Air Toxics Risk Assessment Guidelines (OEHHA 2015), and the SCAQMD Supplemental Guidelines for Preparing Risk Assessments (SCAQMD 2024b). The HARP model includes AERMOD as part of the software package and is recommended for conducting HRAs by both OEHHA and SCAQMD guidelines. The most current version of AERMOD (v21112) was run within HARP2 (version 22118) to perform air dispersion modeling for all sources and pollutants. AERMAP (v18081) also was run within HARP2 to include terrain heights within the model and assign receptor elevations.

CO Hotspots

Localized air quality impacts and respiratory health risks could occur as a result of CO hotspots. Areas with high vehicle volumes, such as congested intersections (i.e., LOS E or worse), have the potential to create high concentrations of CO, known as CO hot spots. This analysis considers the trip generation associated with the proposed Project and its contribution to the most congested intersections affected by the Project site.

3.1.7 Project Impacts and Mitigation Measures

Impact Description (AQ-1)

Would the project conflict with or obstruct implementation of the applicable air quality plan?

AQ-1 Implementation of the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. This would be a less than significant impact without mitigation.

The SCAQMD's 2022 AQMP is the applicable air quality plan for the Project site and surroundings. In the City, consistency with the 2022 AQMP means that projects are consistent with the regional population, housing, and employment forecast identified by SCAG. Additionally, because SCAG's regional growth forecasts are based upon, among other things, land uses designated in general plans, a project that is consistent with the land use designated in a general plan would also be consistent with the SCAG's regional forecast projections, and thus also with the AQMP growth projections.

The Project site has a Parks and Open Space land use / zoning designation pursuant to the City's Land Use and Circulation Element (LUCE). The Parks and Open Space land use designation allows for parks and green open space and supporting recreational and community-related development/uses. The Project site also is subject to the Memorial Park Activity Center Low Overlay. The area subject to this Overlay includes Memorial Park and the Expo Light Rail Station at 17th Street. The Memorial Park Activity Center Low Overlay capitalizes on the attributes of these two key resources to create an active mixed-use neighborhood.

The proposed Project involves the renovation, modernization, and expansion of the existing Park to meet an increasing demand for recreational activities. The proposed Project would be consistent with the Parks and Open Space land use designation of the site, and given the proposed Project would predominately involve the renovation and modernization of existing Park facilities, as well as improvement accessibility to amenities and enhanced community gathering spaces, the proposed Project would not result in substantial additional growth in regional population. The proposed Project would be consistent with growth projections and, therefore, consistent with the 2022 AQMP. In addition, as described below, the proposed

Project would not exceed SCAQMD thresholds that are based on the AQMP and designed to bring the Basin into attainment for criteria air pollutant concentrations for which the Basin is designated non-attainment. Therefore, the proposed Project would have insignificant impacts regarding conflicts with, and/or obstructions involving the implementation of, SCAQMD's 2022 AQMP.

Impact Description (AQ-2)

Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable Federal or State ambient air quality standard?

AQ-2 **Implementation of the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable Federal or State ambient air quality standard. This would be a *less than significant impact without mitigation.***

Construction

As previously described, for the purposes of this analysis and estimating construction emissions, two separate construction phasing schedules were developed and modeled. The first construction phasing schedule assumes a “single-phased” construction approach that would result in closure of the entire Park. The second construction phasing schedule assumes a more detailed “phased” construction approach, in which certain Park facilities would be temporarily closed to accommodate construction, demolition, and staging activities, and unaffected Park facilities would remain open and operational during such time. The first construction phasing schedule assumes all funding, entitlements, and approvals for the entirety of the proposed improvements occurs at one time, whereas the second construction phasing schedule assumes that funding, entitlements, and approvals for the various improvements occur in phases. The second construction phasing schedule (“detailed phase construction schedule”) more accurately represents the construction phasing assumptions described in Chapter 2.0, *Project Description*.

Tables 3.1-7 and 3.1-8 show the model’s estimates of maximum daily construction emissions for the proposed Project under each of the two modeled construction phasing scenarios.

Table 3.1-7. Maximum Daily Unmitigated Regional Construction Emissions (Single Phase Construction)

Construction Activity	Construction Year	Maximum Emissions (lbs/day) ¹					
		ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Demolition	2026	2.4	21.8	22.0	<0.1	2.3	1.1
Site Preparation	2026	3.3	29.3	31.4	<0.1	9.4	5.2

Construction Activity	Construction Year	Maximum Emissions (lbs/day) ¹					
		ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Grading		3.2	28.6	30.6	<0.1	5.5	2.7
Building Construction	2026	1.2	10.2	15.3	<0.1	0.9	0.5
Building Construction	2027	1.2	9.7	15.4	<0.1	0.9	0.4
Building Construction	2028	1.1	9.3	15.3	<0.1	0.9	0.4
Building Construction	2029	1.1	8.9	14.8	<0.1	0.8	0.4
Paving	2029	1.0	6.6	11.7	<0.1	0.0	0.0
Architectural Coating	2029	12.9	0.9	3.2	<0.1	0.5	0.1
Streetscape Improvements (Grading)	2029	2.8	21.1	30.5	0.1	2.6	1.0
Streetscape Improvements (Paving)	2029	0.8	6.8	11.8	<0.1	0.5	0.3
TOTAL Maximum Daily Emissions		12.9	29.3	31.4	0.1	9.4	5.2
SCAQMD Significance Thresholds		75	100	550	150	150	55
Exceeds Threshold?		No	No	No	No	No	No

Note: ¹ Maximum daily emissions during summer or winter.

Table 3.1-8. Maximum Daily Unmitigated Regional Construction Emissions (Detailed Phase Construction)

Phase	Construction Activity	Construction Year	Maximum Emissions (lbs/day) ¹					
			ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
1	Lumber Site, Field, and Parking Demolition	2026	2.7	39.0	28.7	0.1	18.0	4.1
	Site Preparation/Grading	2026	3.2	28.0	30.4	0.1	5.4	2.6
	Building Construction	2026	0.8	6.9	10.9	<0.1	0.8	0.4
	Building Construction	2027	0.8	3.3	10.3	<0.1	0.8	0.3
2	Youth Field Demolition	2027	2.5	29.2	24.2	0.1	9.6	2.4
	Site Preparation/Grading	2027	3.1	26.3	29.5	0.1	5.3	2.5
	Site Preparation/Grading	2028	3.0	25.0	29.3	0.1	5.2	2.5
	Combo Field, Community Hub Building, and Playground Construction	2028	0.8	6.6	12.6	<0.1	0.8	0.3
	Community Hub Building Finishing	2028	25.6	0.9	3.4	<0.1	0.5	0.1
3	Youth Field and Skatepark Demolition	2028	2.5	29.3	24.7	0.1	10.7	2.6
	Site Preparation/Grading	2028	3.0	25.2	29.7	0.1	5.3	2.5
	Youth Field and Skatepark Construction	2028	0.7	5.4	11.0	<0.1	0.7	0.3
	Youth Field and Skatepark Construction	2029	0.7	5.2	10.5	<0.1	0.7	0.3
4	Community Rec Center Demolition	2028	2.4	27.0	23.4	0.1	8.2	2.2
	Community Rec Center Construction	2028	1.1	9.3	14.9	<0.1	0.9	0.4
	Community Rec Center Construction	2029	1.1	8.9	14.8	<0.1	0.8	0.4
	Community Rec Center Finishing	2029	25.6	0.9	3.2	0.1	2.6	1.0
--	Streetscape Improvements (Grading)	2029	2.8	21.1	30.5	0.1	2.6	1.0

Phase	Construction Activity	Construction Year	Maximum Emissions (lbs/day) ¹					
			ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
	Streetscape Improvements (Paving)	2029	0.8	6.8	11.7	<0.1	0.5	0.3
Maximum Daily Emissions			25.6	39.0	30.5	0.1	18.0	4.1
SCAQMD Significance Thresholds			75	100	550	150	150	55
Exceeds Threshold?			No	No	No	No	No	No

Note: ¹ Maximum daily emissions during summer or winter.

For each criteria pollutant, construction emissions would be below the pollutant's SCAQMD significance threshold for both construction phasing scenarios. Therefore, the proposed Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Air quality impacts associated with construction emissions would be *less than significant without mitigation*.

Operation

The proposed Project would not generate substantial new operational-related criteria pollutant emissions compared to existing conditions. Implementation of the proposed Project would involve the renovation and reconfiguration of existing Park facilities that would not substantially increase daily visitation or use of the Park. The proposed Project includes features that support multimodal transportation and reduce reliance on single-rider automobile use. The proposed Project is centrally located within the Pico Neighborhood with vehicle, bicycle, and pedestrian connectivity to surrounding communities and businesses. In addition, the proposed Project would expand the City's bike network via the construction of a new Class I shared bike path on Colorado Avenue, connecting to the Exposition Corridor Bike Path. As such, the proposed Project would not substantially increase vehicle trips and associated mobile emissions over existing conditions. Further, the proposed Project would comply with the requirements of the City's Green Building and Energy Reach Codes and would involve replacement of existing aging infrastructure with more efficient facilities that would generate less area and energy emissions when compared to existing conditions.

Therefore, the proposed Project would not result in significant new operational criteria air pollutant emissions and impacts would be *less than significant without mitigation*.

Impact Description (AQ-3)

Would the project expose sensitive receptors to substantial pollutant concentrations?

AQ-3 **The proposed Project would not expose sensitive receptors to substantial pollutant concentrations. This impact would be *less than significant without mitigation*.**

Construction

Following SCAQMD guidance (Chico and Koizumi 2003), only on-site construction emissions of NO_x, CO, PM₁₀, and PM_{2.5} should be considered in the localized construction emissions significance analysis. According to the CalEEMod analysis, the highest on-site emissions for NO_x and CO would occur during the site preparation and grading phases from off-road equipment, while the highest onsite emissions for PM₁₀ and PM_{2.5} would occur during demolition activities. It was assumed that, as a worst case, the maximum daily disturbance for construction of the proposed Project would be 4.77 acres, which has been rounded up to five acres for the purposes of providing a conservative, worst-case analysis.

The nearest sensitive receptors to the Project site are residential uses located as close as 500 feet to the north of the Project site. Although recreational users may sometimes be considered sensitive to poor air quality, particularly in the context of siting land uses or development generating long-term operational emissions, recreational users and Park employees are not considered in this analysis given they are only present for very limited durations every couple days of the week, and their exposure to temporary, short-term construction emissions would be highly limited. Visitation and use of the Park is anticipated to be even lower through the duration of construction activities due to the disruptive characteristics of construction. Further, exposure of recreational users and Park employees to construction-related emissions only would occur under the scenario in which construction and renovation activities occur in phases, in which only portions of the Park would be closed for construction while other facilities would remain accessible to the public. Under a single phase construction schedule, it is assumed that the entire Park would be closed, meaning that no recreational users or Park employees would be present or exposed to construction-related pollutant emissions. Therefore, for the purposes of this analysis and pursuant to SCAQMD's Final Localized Significance Threshold Methodology, the LSTs for sensitive receptors are considered to be at a distance of 500 feet (approximately 150 meters) from the Project site (at the closest point).

Table 3.1-9 shows the results of the localized significance analysis for the proposed Project. As shown, criteria pollutant emissions would not exceed the applicable significance threshold. Therefore, localized construction air pollution impacts would be *less than significant without mitigation*.

Table 3.1-9. Localized Significance Threshold Analysis for Construction of Memorial Park (Detailed Phased Construction)

	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum On-site Emissions (lbs/day)	27.2	28.7	12.4	1.9
Localized Significance Threshold (lbs/day)	238.5	3,604.9	70.1	21.8
Significant?	No	No	No	No

Operation

As previously discussed, the proposed Project would not generate substantial new operational-related emissions of NO_x, CO, PM₁₀, and PM_{2.5} compared to existing conditions. The proposed Project would not result in significant localized operational criteria air pollutant emissions and impacts would be *less than significant without mitigation*.

Toxic Air Contaminant Emissions Exposure

As previously described, the SCAQMD recommends that site-specific HRAs be performed to document potential cancer and non-cancer health risk, either when siting sensitive land uses within 500 feet of a freeway or major roadway. While the Project site is not located within 500 feet of I-10, the City elected to prepare an HRA to model TAC exposure for those who use, or work at, Memorial Park. The complete results are presented in Appendix D and are summarized below.

For chronic and acute noncarcinogenic effects, observable biological effects are thought to occur only after a threshold dose is reached. To establish noncarcinogenic health criteria, this threshold dose usually is estimated from the no-observed adverse effect level or the lowest-observed adverse effect level determined in animal exposure studies by applying a series of uncertainty (i.e., safety) factors. For chemicals identified for evaluation in AB 2588, OEHHA and CARB provide reference exposure levels that represent levels of exposure below which adverse effects are not expected to occur with a substantial margin of safety.

Chemical emissions (e.g., benzene and arsenic) from truck and automobile traffic are not expected to pose significant chronic noncarcinogenic health effects for recreational users or Park employees. The highest target organ-specific chronic hazard index (HI) was 0.01 for the respiratory system at the Point of Maximum Impact (PMI).⁵ Therefore, the chronic hazards predicted for recreational users would be below the SCAQMD threshold of 1.0 for the noncarcinogenic hazard index (SCAQMD 2023). Further, the highest target organ-specific 8-hour HI was 0.005 for blood at the PMI. Therefore, the eight-hour hazards predicted for Park employees at the Project site would be below the SCAQMD threshold.

The HRA also evaluated impacts associated with potential acute inhalation hazards. (Potential acute inhalation hazards were not differentiated for recreational users and Park employees because all were evaluated at the PMI for exposure to the same maximum hourly air concentration.) The highest predicted target organ-specific acute HI was 0.01 for the reproductive/developmental system at the PMI. The acute hazards predicted for all receptors at the Project site would be below the SCAQMD threshold of 1.0 for the noncarcinogenic hazard index (SCAQMD 2023).

⁵ The PMI is influenced by distance to the source, climate, wind direction, and other environmental factors in the site vicinity, which can be estimated based on dispersion modeling. The locations of the cancer/chronic PMI are based on the maximum annual average exposure and acute PMI is based on the maximum 1-hour exposure.

Finally, the HRA also evaluated the cancer risk for recreational users and Park employees (e.g., from exposure to DPM). The carcinogenic risks at the PMI are 4×10^{-6} for the recreational user, and 2×10^{-6} for the Park employee, which is below the SCAQMD significance threshold of 1×10^{-5} . Therefore, TAC emissions from vehicle traffic traveling along I-10 are not expected to pose significant carcinogenic risk to future recreational users or Park employees.

Table 3.1-10. Health Risk Assessment Conclusions

Risk Characterization	Description	Exceeds SCAQMD Threshold?
Chronic Noncarcinogenic Health Hazards	The highest target organ-specific chronic HI was 0.02 at the PMI, and 0.005 for the 8-hour Park employee exposure at the PMI.	No
Acute Noncarcinogenic Health Hazards	The highest target organ-specific acute HI was 0.01 at the PMI	No
Potential Carcinogenic Risks	The theoretical carcinogenic risk for the recreational user and Park employee located at the PMI were 4×10^{-6} and 2×10^{-6} , respectively.	No

In summary, the Project site would not expose visitors of, and/or employees at, Memorial Park to significant risks associated with exposure to TACs from traffic emissions from I-10. Based on the evaluation presented in the HRA, the proposed Project would not exceed the SCAQMD's thresholds associated with chronic noncarcinogenic health hazards, acute noncarcinogenic health hazards, and/or potential carcinogenic risks. Impacts associated with exposure to TACs from traffic emissions from I-10 would be *less than significant without mitigation*.

CO Hotspots

SCAQMD conducted CO modeling for the attainment demonstration in the Federal Attainment Plan for Carbon Monoxide (*CO Plan* for the SCAQMD's 2003 *Air Quality Management Plan*). SCAQMD modeled the four most congested intersections in the Basin, including: (1) Wilshire Boulevard and Veteran Avenue; (2) Sunset Boulevard and Highland Avenue; (3) La Cienega Boulevard and Century Boulevard; and (4) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP, SCAQMD stated that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day (SCAQMD 2003). This intersection is located near the on- and off-ramps to I-405 in West Los Angeles. The 2003 AQMP (Appendix V, Table 4-10) shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (maximum one-hour concentration) and 3.2 (maximum eight-hour concentration) at Wilshire Boulevard and

Veteran Avenue, exclusive of ambient background CO concentrations, which is well below the Federal and State CO standards. This indicates that even these highly congested intersections would not cause a CO hotspot to result.

Based on the Transportation Study prepared by Fehr & Peers for the City's Housing Element Update (City of Santa Monica 2021), none of the intersections within the surrounding vicinity exceed or even approach 80,000 vehicle trips per day. As described in Section 2.5, *Project Description*, following the completion of the proposed Project, the new facilities and programs offered at Memorial Park would not generate any increase in employees. The new facilities would simply replace existing facilities where robust programming already exists. The VMT Screening Analysis prepared for the proposed Project documents that the proposed Project would result in negligible trip generation and would have a less than significant impact on transportation. As a result, CO concentrations would remain far less than those estimated in the 2003 AQMP for the most congested intersection in Los Angeles and would not create a CO hot spot or exceed the CAAQS for CO concentrations. Therefore, the proposed Project would not directly result in or substantially contribute to a CO hotspot and impacts would be *less than significant without mitigation*.

Impact Description (AQ-4)

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

AQ-4 **The proposed Project would not result in emissions that are not addressed in the other thresholds that are used to evaluate air quality impacts in this EIR. This impact would be *less than significant without mitigation*.**

According to the SCAQMD *CEQA Air Quality Handbook*, objectionable odors are typically associated with industrial uses such as agricultural facilities (e.g., farms and dairies), refineries, wastewater treatment facilities, and landfills. The proposed Project would involve redevelopment of the Park, the operation of which does not typically generate nuisance odors perceptible to sensitive receptors. During construction, short-term, temporary odors would be expected from construction equipment and paving activities. Any odors that may be generated would be localized and temporary and would not affect a substantial number of people or result in a nuisance as defined by SCAQMD Rule 402. Therefore, odor impacts associated with the proposed Project would be *less than significant without mitigation*.

3.1.8 Cumulative Impacts

The thresholds set forth above evaluate both the Project-specific impacts, as well as the contribution of the proposed Project to cumulative impacts, involving air quality. The plans, policies, and regulations addressed above are designed to address a project's contribution

to cumulative impacts associated with air quality at a regional (Basin-wide) and local (City-wide) level. If a project does not comply with the requirements of applicable plans, policies, and regulations, it is considered to have a cumulatively considerable contribution to significant cumulative impacts associated with air quality.

Similarly, the SCAQMD's thresholds and guidance evaluate impacts associated with air quality using specific quantitative thresholds for criteria pollutants, which the SCAQMD adopted after accounting for other projects within, and using air emissions modeling scenarios for, the entire Basin. Therefore, a project that exceeds an applicable quantitative threshold will have a significant project-specific impact and will make a cumulatively considerable contribution to a significant cumulative impact, regarding air quality.

As described above, the proposed Project would be consistent with the applicable plans, policies, and regulations regarding air quality, including (but not limited to) those involving construction activities, green building design, and energy efficiency. Additionally, the proposed Project would not exceed any of the construction-related nor operational air quality thresholds set forth above.

Finally, the proposed Project would not exceed the SCAQMD's thresholds associated with chronic noncarcinogenic health hazards, acute noncarcinogenic health hazards, and/or potential carcinogenic risks, due to recreational users' and/or Park employees' exposure to TACs associated with traffic emissions from I-10. The analysis summarized above accounted for cumulative traffic generation along I-10 and, therefore, evaluated both Project-specific impacts, as well as the Project's contribution to cumulative impacts associated with TACs exposure.

Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact involving air quality.

3.2 CULTURAL AND TRIBAL CULTURAL RESOURCES

This section of the Environmental Impact Report (EIR) analyzes the Memorial Park (Park) Redevelopment and Expansion Project's (Project's) potential impacts to cultural and tribal cultural resources. Cultural resources are defined as archaeological objects or sites dating from either the prehistoric or historic period, or historic resources, including buildings, structures, objects, and sites of historic importance. Tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either: (1) included or determined to be eligible for inclusion in the California Register of Historical Resources (California Register); or (2) included in a local register of historical resources as defined in Public Resource Code (PRC) Section 21074. Tribal cultural resources may also include resources determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant.

This section presents a summary of the prehistory and history of the Project site and the surrounding vicinity, describes known or anticipated cultural and tribal cultural resources, assesses the potential impacts that could result from implementation of the proposed Project, and identifies appropriate mitigation measures.

3.2.1 Environmental Setting

Prehistoric Setting

There is evidence of human occupation in Southern California dating back more than 10,000 years. Population densities along the coast may have been low initially, judging from the small number of sites dated to this period. However, many ancient sites may have been lost, inundated, or deeply buried as a result of rising sea levels, marine transgression, erosion, aggradation, and other natural forces.

Prehistoric human occupation and cultures within coastal Southern California evolved significantly based on changes in climate, food availability, technological innovations, and utilization and changes in population densities and cultural characteristics. Although prehistoric remains within the region could be from any of the various past cultural epochs, they would most likely represent past occupation by the Gabrieleño/Tongva or other Takic people. The Gabrieleño/Tongva occupied territory that included the Los Angeles Basin, south to parts of Orange County, and north to Topanga Canyon and the southern Channel Islands. The total Gabrieleño/Tongva territory covered more than 1,500 square miles and included the watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers, as well as the islands of Santa Catalina, San Clemente, and San Nicolas. Within this territory were more than 50 villages with populations that ranged from approximately 50 to 150 individuals. The fully developed Gabrieleño/Tongva culture was a socially and economically complex

hunting and gathering group, very advanced in their culture, social organization, religious beliefs, and art and material object production. The tribe was known for its artisanship in the form of pipes, ornaments, cooking implements, inlay work, and basketry. It is believed their economic system exchanged goods and managed food reserves (i.e., storage and processing), which allowed them to maintain permanent year-round villages. The Gabrieleño/Tongva are estimated to have had a population numbering around 5,000 in the pre-contact period (Kroeber 1925). Gabrieleño/Tongva populations and culture underwent dramatic changes following European contact. Introduced diseases weakened and killed large numbers of native peoples, and most villages were abandoned by 1810.

Due to the substantial extent of urban development within the City of Santa Monica (City) – including the Project site – the full extent and density of Gabrieleño/Tongva or other prehistoric culture occupation is difficult to accurately characterize as numerous resources have most likely been disturbed without professional documentation. The Gabrieleño/Tongva village at Kuruvungna Springs located approximately 3 miles north of the Project site indicates that the Gabrieleño/Tongva occupied and utilized natural resources within the vicinity of the Project site over an extended period (City of Santa Monica 2021). However, no prehistoric sites or evidence of settlement have previously been recorded within the immediate vicinity of the Project site. Further, no prehistoric or historic-period archaeological resources have been previously identified within the immediate vicinity of the Project site.

Historic Setting

City of Santa Monica

Initial European contact with the Gabrieleño/Tongva populations began in 1542. Juan Cabrillo, a Portuguese navigator, sailing under the flag of Spain, commanded the first expedition along the California coast. Cabrillo named several geographical features, including San Pedro Bay, Santa Catalina Island, and Santa Monica. The claimed Spanish territory remained unexplored until 1769, when the King of Spain sent missionaries to colonize California, leading to the creation of Missions along the coast.

European colonization significantly altered Indigenous societies in California. Mission life was highly regimented and contrasted sharply with the traditional Gabrieleño/Tongva lifeway, resulting in dramatic and negative effects on Gabrieleño/Tongva society, including fugitivism, declined populations, and epidemics caused by the introduction of European diseases. The Gabrieleño/Tongva people eventually settled at small Indian and Mexican settlements in the Eagle Rock and Highland Park districts of Los Angeles as well as in Pauma, Pala, Temecula, Pechanga, and San Jacinto.

In addition to the establishment of missions, many soldiers of the early expeditions were subsequently granted large tracts of land in payment for their services, which marked the beginning of the rancho system in California. Rancho San Vicente y Santa Monica previously occupied what became Downtown Santa Monica, spanning a 33,000-acre area bordered by

the Pacific Ocean to the west, Santa Monica Canyon to the north, present-day Pico Boulevard to the south, and present-day Westwood to the east. The 1846 Mexican-American War and the subsequent Treaty of Guadalupe Hidalgo marked the decline of the Rancho period. However, the influx of tens of thousands of newcomers to California during the gold rush, allowed Ranchos to maintain the cattle industry and other pastoral pursuits through the 1870s. By the late 19th Century, present-day Santa Monica had become home to a diverse population, including immigrants from Mexico, Peru, Holland, Germany, England, Ireland, and Syria.

Colonel R.S. Baker and Nevada Senator John Percival Jones, who were later credited as Santa Monica's founders, contributed to the region's railroad development and envisioned a coastal town as the terminus for a California railroad. Together, Jones and Baker established the Los Angeles and Independence Railroad to link the Colorado and Nevada mines to the Pacific Ocean.

The original Santa Monica townsite was surveyed in 1875, encompassing the area between Colorado and Montana Streets and the Pacific Ocean to 26th Street. By the end of that year, development had accelerated with commercial buildings, businesses, residences, hotels and railroad infrastructure. Early homes and hotels were typically wood-framed while commercial buildings were either wood-framed or brick. During the real estate boom of the 1880s, Santa Monica established itself as a resort community, attracting wealthy tourists, some of whom became permanent residents. This growth culminated in the City's incorporation in November 1886 (City of Santa Monica 2002).

Pico Neighborhood

The Project site is located within the City's Pico Neighborhood, a centrally located neighborhood bounded by Lincoln Boulevard (State Route [SR-] 1 [Pacific Coast Highway]) on the west, Centinela Boulevard on the east, Santa Monica Boulevard and Colorado Avenue on the north, and Pico Boulevard on the south.

The development history of the Pico Neighborhood has been largely influenced by major transportation routes, which link Santa Monica with Downtown Los Angeles. The neighborhood originally developed from west to east along the south side of the Southern Pacific railroad tracks. The area closer to the beach was subdivided into residential tracts and built up with modest one-story bungalows and tract houses primarily from the 1920s through the 1940s, while tracts further inland were typically zoned for multi-family residential or industrial uses.

The Pico Neighborhood has always been among the City's most ethnically diverse communities. In the 1930s and 1940s, it contained a high concentration of the City's African American, Japanese American, and Mexican American populations. During World War II, as the defense industry opened employment to African Americans for the first time, the City saw a demographic shift of its African American community to the Pico neighborhood, due to its proximity to the Douglas Aircraft Company. It was also during this period that Broadway

became the primary commercial corridor for the local African American community, becoming home to many Black institutions and Black-owned businesses.

After World War II, the Pico Neighborhood began to see substantial infill construction as single-family dwellings were replaced with multi-family dwellings. In the 1960s, the neighborhood's lower property values made it a prime target for the extension of I-10 (Santa Monica Freeway). The freeway sliced diagonally through the neighborhood, disrupting the grid pattern, demolishing hundreds of homes, and displacing many low-income residents. After the freeway was completed, many adjacent residential streets were converted to industrial use. Today, the Pico neighborhood is a mixture of development types and periods, reflecting the area's evolution over many decades (City of Santa Monica 2002).

Project Site

Historically, the Project site has been occupied by recreation and light industrial facilities that are similar to the current facilities located on the Park and former Fisher Lumber site.

The Park parcel was vacant until 1923, when a portion of the site was informally developed into a baseball field for the Santa Monica Tigers. The site was used as a makeshift baseball diamond until the City leased the large parcel to develop the Santa Monica Municipal Stadium, dedicated on March 15, 1935. The City eventually purchased the property in 1938 and made additional but minor improvements. Besides the site of local baseball games, the Municipal Stadium was a popular event center that featured rodeos, motorcycle and midget car racing, football, boxing matches, dog shows, and more. However, by the end of the 1940s, the stadium was outdated and in need of repair. While there were plans for the renovation of the Municipal Stadium, in 1949, the City purchased the remaining parcels with the intention of demolishing the Municipal Stadium and redeveloping the site as a City park.

In 1951, the City formally established the Park that exhibited similar recreational amenities as the current ones. The Park included a standard league baseball field, two little league ball fields, two tennis courts, a parking lot, landscaping, and a one-story recreation center. By 1971, the original recreation center was replaced by a vernacular contemporary style gymnasium designed by local architect James Mount. New additions were added to the facility, including the Cultural Arts Building (now called the "Community Activity Building") in 1976 and the Police Activities League (PAL) Youth Center in 1992.

The former Fisher Lumber site was once the right-of-way for the Southern Pacific (SP) Railroad, which operated a freight line between Los Angeles and Santa Monica. In 1908, the Los Angeles Pacific Electric (PE) Railway leased the line to electrify it for passenger service. The PE line carried passengers along the route with several stops in between, until passenger service was discontinued in 1953. As freight line uses also declined, the tracks along Santa Monica and Sepulveda boulevards were removed and service became sparse. By the 1970s, the western end of the line terminated at the Fisher Lumber Company site at the southeast corner of 14th Street and Colorado Avenue.

The John W. Fisher Lumber Company, one of the oldest commercial retail businesses in the City, occupied a portion of the right-of-way shoulder. By January 1923, the lumberyard consisted of a one-story office structure at the northwest corner of 14th Street and Colorado Avenue, as well as a large two-story lumber warehouse that measured roughly 60 feet by 90 feet and a small lumber shed. The rest of the parcel contained pallets of timber, timber products, building supplies, and other hardware related equipment. By 1935, the lumberyard was reduced in size to allow for the construction of two large pole frame lumber sheds. In the 1970s, the original office structure was demolished for the construction of a new, larger office building and a pole frame shed. The new contemporary style sales office was approximately 150 feet by 100 feet and designed by James Mount. Throughout the 1980s, the lumber site experienced other facility changes, including the construction of another pole frame storage building and the demolition of an older warehouse structure. The lumberyard company purchased the remainder of the right-of-way land from the Southern Pacific Railroad in 1995. In early 2003, the property was sold to real estate developer KC Riverside. A year later, the City purchased the land from KC Riverside with the intention of expanding the Park.

Archaeological Resources

Archaeological resources represent and document activities, accomplishments, and traditions of past cultures and link current and former inhabitants of an area. Archaeological resources may date from the historic or prehistoric period and include deposits of physical remains of the past (e.g., artifacts, manufacturing debris, dietary refuse, and the soils in which they are contained) or areas where prehistoric or historic activity measurably altered the earth.

Records that are available in the State Office of Historic Preservation's (OHP's) California Historical Resources Information System (CHRIS) identify two pre-contact archaeological located approximately 1 mile southwest of the Project site. The two sites, CA-LAN-1061 and CA-LAN-1123, are associated with the coastal settlements of Saa'anga and Waachnga and included lithic and shell scatters within previously disturbed soil. In addition, as previously described the Kuruvungna site (the location of the Gabrieleño village) is located approximately 3 miles north of the Project site. The Kuruvungna Sacred Spring is designated as California State Landmark No. 522.

Historic Architectural Resources

The historic built environment includes standing buildings, structures, and objects of historic importance (collectively, "historic architectural resources"). Historic architectural resources amplify the local population's sense of community, enhance perceptions and enjoyment of the community by residents and visitors, and provide an important measure of the physical quality of life in the community. Properties subject to review under the California Environmental Quality Act (CEQA) are those meeting the criteria for listing in the National Register, California Register, or designation under a local ordinance, as described in Section 3.2.5, *Regulatory Setting*.

Potentially Historic Structures at the Project Site

A Historic Resources Assessment (Ostashay & Associates Consulting 2025; see Appendix F) was conducted for the proposed Project. The assessment identified and assessed the existing buildings within the Project site for eligibility as historical resources, as defined by the CEQA Guidelines Section 15064.5(a). In addition, a Cultural Resources Report (WSP 2025; see Appendix E) was also prepared to assess the potential adverse impacts of the proposed Project on cultural resources. This assessment included a CHRIS records search and literature review, a review of historical cartographic information, and a cursory site visit, as well as a California Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search (see *Native American Consultation and Tribal Cultural Resources*). The following describes the findings of these reports regarding potentially historic structures at the Project site.

As previously described, the Project site consists of the existing Park and the former Fisher Lumber site. The Park is occupied by the Community Recreation Center, which is comprised of the gymnasium, PAL Youth Center, and Community Activity Building. The former Fisher Lumber site includes three buildings, including the City's Public Landscape Division Headquarters building.

The existing Memorial Park facility and the former Fisher Lumber site do not possess sufficient historical or architectural importance to reach the threshold of significance as historical resources under any of the applicable Federal, State, or local eligibility criteria (Ostashay & Associates Consulting 2025; see Appendix F). Specifically, the gymnasium, designed by local architect James Mount, has been substantially altered by the construction of later additions onto its north, south, and west elevations. In addition, the gymnasium structure or its later additions do not reflect or represent the distinctive architectural qualities or design features typically associated with Mount's known professional work. Further, the former Fisher Lumber site has been extensively redeveloped and there are no extant features associated with the original John W. Fisher Lumber Company. The three buildings currently on site are non-descript, altered structures that are contemporary in design and were built in the recent past (i.e., 1974, 1975, 1983). As such, they do not possess exceptional significance necessary for recent past resources.

Cultural resources records at the South Central Coastal Information Center (SCCIC) of the CHRIS, located at California State University, Fullerton, include the following three studies that involved the Project site:

- ▶ **LA-09677:** In May 2009, ArchaeoPaleo Resource Management, Inc. conducted a survey of Memorial Park on behalf of the City for the Sustainable Water Infrastructure Project (SWIP). ArchaeoPaleo Resource Management identified two structures associated with the former Fisher Lumber site that likely represent lumber barns originally constructed in 1923, remnants of the Santa Monica Air Line, and various concrete slabs that may be of historic age. However, none of these resources were formally recorded or evaluated as part of the study.

- ▶ **LA-11184:** In 2008, EDAW, Inc. conducted a detailed architectural reconnaissance survey of the Area of Potential Effects (APE) for the Expo Line. The survey identified 40 potentially eligible historic buildings that would require further evaluation. Though the proposed expansion area of the Project site was included in LA-11184's APE, no eligible structures were identified within it.
- ▶ **LA-11305:** In December 2008, M.K. Meiser of EDAW, Inc. authored the complete results of the historic resources evaluation for the Exposition Corridor Transit Project Phase 2, on behalf of the Los Angeles Metropolitan Transportation Authority. As with LA-11184, though the expansion area of the current Project site was included in the study's APE, no eligible properties were identified within it.

The CHRIS records identified one previously recorded resource within the vicinity of the Project site. In 2008, EDAW, Inc. recorded the Santa Monica Air Line Segment (CA-LAN-3808H) of the Southern Pacific Railroad as part of the Archaeological Survey Report for the Exposition Corridor Transit Project Phase 2 (LA-09453). EDAW archaeologists recommended the Santa Monica Air Line eligible for listing on the NRHP under Criteria A for being a critical determinant in the development of Santa Monica. In addition, while many sections of the Santa Monica Air Line have been paved over and are no longer in use, the rail line maintains its integrity of location, design, setting, feeling, and association. However, EDAW only surveyed the Santa Monica Air Line segment between Robertson Boulevard in Culver City and 20th Street in Santa Monica, and it did not include the segment within the Project site. Further, the Santa Monica Air Line has not been formally listed on the NRHP or listed as eligible for the NRHP. Site observations have identified remnant tracks that has been buried beneath asphalt. As such, the potential resource has not been evaluated for its historic integrity.

Potentially Historic Structures in the Project Vicinity

The CHRIS records identify a total of 84 previously recorded resources within one mile of the Project site. The majority of the sites within the one-mile area surrounding the Project site include numerous historic commercial buildings and single-family dwellings, as well as several historic districts, including the Central Business District (19-178135) and the Third Street Mall (19-188768).

The nearest potential historic resource is a two-story commercial building located at 1415 Colorado Avenue (alternate address is 1557 14th Street). This commercial structure, built in 1955 as the Crescent Cleaners, is located approximately 80 feet from the northwest corner of the Project site at the northeast corner of Colorado Avenue and 14th Street. The City's 2018 Historic Resources Inventory Update identified the property as eligible for listing as a Santa Monica Landmark as it is a potential local resource due to its distinctive Streamline Moderne characteristics. In addition, the building exhibits distinctive characteristics that are associated with the growth and development of the City's public infrastructure prior to World War II (Ostashay & Associates, 2025; City of Santa Monica, Architectural Resources Group, and Historic Resources Group 2018).

Native American Consultation and Tribal Cultural Resources

To determine whether any known Native American cultural properties (e.g., traditional use or gathering areas, places of religious or sacred activity) are present within or adjacent to the Project site, the NAHC in Sacramento was contacted on April 9, 2025, to request a review of the SLF. The NAHC responded on April 18, 2025, stating that the search of the SLF for the Project site was negative for Native American cultural resources.

On March 5, 2025, the City sent notifications regarding the proposed Project to representatives of seven California Native American Tribes from a list of contacts that the City maintains. Of the representatives contacted, two responded with comments. The Gabrielino Tongva Indians of California requested that a Native American Monitor be present during ground disturbance activities. The Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation) formally requested government-to-government consultation with the City and indicated the Kizh Nation has ancestral and cultural ties to the Project site and the surrounding vicinity. While the Kizh Nation requested consultation, the tribe representative did not respond to the City’s efforts to schedule an initial consultation meeting and, consequently, consultation did not occur.

A copy of the letters sent, the list of contacts provided by NAHC, and responses received are included in Appendix E.

3.2.2 Regulatory Setting

Several Federal, State, and local laws address the preservation and protection of cultural resources. These include the National Historic Preservation Act (NHPA), PRC, and the Public Health and Safety Code. At the local level, the City of Santa Monica Landmark and Historic Preservation Ordinance requires protection of historical resources to the greatest extent feasible. The following regulations apply to the proposed Project.

Federal

National Register of Historic Places (NRHP or National Register)

The National Register was established by the NHPA to help identify and protect properties that are significant cultural resources at the Federal, State, and/or local levels. The National Register employs four criteria to determine if a resource is significant to U.S. history, architecture, archaeology, engineering, or culture and should be listed in the National Register. These criteria include:

1. Association with events that have made a significant contribution to the broad patterns of our history;
2. Association with the lives of persons significant in our past;

3. Embodiment of 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; and
4. Ability to yield, or likeliness to yield, information important in prehistory or history.¹

Districts, sites, buildings, structures, and objects of potential significance that are at least 50 years in age must meet one or more of the above criteria to be eligible for listing in the National Register. However, the National Register does not prohibit the consideration of properties less than 50 years in age whose exceptional contribution to the development of U.S. history, architecture, archaeology, engineering, or culture can be clearly demonstrated under National Register Criteria Consideration G.

In addition to meeting the Criteria for Evaluation, a property must have integrity, or the ability of a property to convey its significance. According to National Park Service (NPS) Bulletin 15, the National Register recognizes seven aspects or qualities that, in various combinations, define integrity. To retain historic integrity a property will always possess several, and usually most, of these seven aspects: location, design, setting, materials, workmanship, feeling, and association. In assessing a property's integrity, the National Register criteria recognize that properties change over time; therefore, it is not necessary for a property to retain all its historic physical features or characteristics. The property must retain, however, the essential physical features that enable it to convey its historic identity.

State

The OHP implements the policies of the NHPA on a Statewide level. The OHP also conducts the duties set forth in the PRC and maintains the CHRIS and the California Register. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the State's jurisdictions. Further, CEQA requires projects to identify any substantial adverse impacts which may affect the significance of identified historical resources.

California Register of Historic Resources (CRHR or California Register)

The California Register is “an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (California Code of Regulations [CCR], Title 14, Section 4850.1). Based on the criteria of eligibility for the California Register, a historic resource may be eligible for listing if it:

¹ “Guidelines for Completing National Register Forms,” NPS Bulletin 16, U.S. Department of Interior, National Park Service, September 30, 1986. This bulletin contains technical information on comprehensive planning, survey of cultural resources and registration in the National Register.

- 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
- Has yielded, or may be likely to yield, information important in prehistory or history

A historic resource eligible for listing in the California Register must meet one or more of the criteria of significance described above and retain enough of its historic character or appearance to be recognizable as a historic resource and to convey the reasons for its significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.

The California Register includes “all properties formally determined eligible for, or listed in, the National Register of Historic Places,” (PRC Section 5024.1) and certain specific California Historical Landmarks, and California Points of Historical Interests that have been evaluated and recommended for inclusion on the California Register. Unless a resource listed in a survey has been demolished, lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the California Register. The fact that a resource is not listed or determined to be eligible for listing in the California Register, not included in a local register of historical resources, or identified in an historical resources survey, does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

State Historical Building Code (SHBC)

Created in 1975, the SHBC provides regulations and standards for the preservation, restoration, rehabilitation, or relocation of historic buildings, structures, and properties that have been determined by an appropriate State or local governmental jurisdiction to be significant in the history, architecture, or culture of an area. Rather than being prescriptive, the SHBC constitutes a set of performance criteria. The SHBC is designed to help facilitate restoration or change of occupancy in such a way as to preserve original or restored elements and features of a resource; to encourage energy conservation and a cost-effective approach to preservation; and to provide for reasonable safety from earthquake, fire, or other hazards for occupants and users of such “buildings, structures and properties.” The SHBC also serves as a guide for providing reasonable availability, access, and usability by the physically disabled.

Codes Governing Human Remains

The disposition of human remains is governed by Public Health and Safety Code Section 7050.5 and PRC Sections 5097.94 and 5097.98, and falls within the jurisdiction of the NAHC.

If human remains are discovered, the County Coroner must be notified immediately and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to PRC Section 5097.98, will immediately notify the Most Likely Descendant (MLD) from the deceased Native American(s) so they can inspect the burial site and make recommendations for treatment or disposal.

Assembly Bill (AB) 52

AB 52 was signed into law in 2014, amended PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. The primary intent of AB 52 is to include California Native American tribes early in the environmental review process and to establish a new category of resources related to Native American tribes that require consideration under CEQA, known as tribal cultural resources (as defined in PRC Section 21074[a]). On July 30, 2016, the California Natural Resources Agency adopted the final text to update Appendix G of the CEQA Guidelines for tribal cultural resources, which was approved by the Office of Administrative Law on September 27, 2016.

PRC Section 21080.3.1 requires that within 14 days of a Lead Agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the Lead Agency shall provide formal notification to the designated contact, or a tribal representative, of California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the Lead Agency (PRC Section 21080.3.1[b]). Tribes interested in consultation must respond in writing within 30 days from receipt of the Lead Agency's formal notification and the Lead Agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1[d] and 21080.3.1[e]).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures that would mitigate or avoid a significant effect, if a significant effect exists on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2[b]).

If a California Native American tribe has requested consultation pursuant to PRC Section 21080.3.1 and has failed to provide comments to the Lead Agency, or otherwise failed to engage in the consultation process, or if the Lead Agency has complied with PRC Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the Lead Agency may certify an EIR or adopt a Negative Declaration (ND) or Mitigated Negative Declaration (MND) (PRC Section 21082.3[d][2] and [3]).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the Lead Agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the Lead Agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all the information to the public.

However, confidentiality does not apply to data or information that are, or become publicly available, are already in lawful possession of the project applicant before the provision of the information by the California Native American tribe, are independently developed by the project applicant or the project applicant's agents, or are lawfully obtained by the project applicant from a third party that is not the Lead Agency, a California Native American tribe, or another public agency (PRC Section 21082.3[c][2][B]).

Local

City of Santa Monica Landmarks and Historic District Ordinance

The Santa Monica Landmarks and Historic Districts Ordinance (City of Santa Monica Municipal Code [SMMC] Chapter 9.56) was adopted by the City in 1976 and amended in 1987, 1991, and 2015. The ordinance established the City's Landmarks Commission with the power to designate Landmarks, Structures of Merit, and Historic Districts. The ordinance established criteria and procedures for designating these historic resources. The City's Landmarks Commission has the sole authority for oversight of compliance with the Secretary of the Interior's Standards.

Section 9.56.100 of the City of Santa Monica Landmarks and Historic Districts Ordinance sets forth the criteria for designation of Landmarks and Historic Districts. A geographic area or a noncontiguous grouping of thematically related properties may be designated a Historic District. An individually significant property may be designated a Landmark. Landmarks may include structures, natural features, or any type of improvement to a property that is found to have particular historic or architectural significance to the City. Such designations may be made provided that the subject property meets one or more of the following criteria outlined in the SMMC Section 9.56.100(A):

1. It exemplifies, symbolizes, or manifests elements of the cultural, social, economic, political or architectural history of the City.
2. It has aesthetic or artistic interest or value, or other noteworthy interest or value.
3. It is identified with historic personages or with important events in local, State, or national history.

4. It embodies distinguishing architectural characteristics valuable to a study of a period, style, method of construction, or the use of indigenous materials or craftsmanship, or is a unique or rare example of an architectural design, detail or historical type valuable to such a study.
5. It is significant or a representative example of the work or product of a notable builder, designer or architect.
6. It has a unique location, a singular physical characteristic, or is an established and familiar visual feature of a neighborhood, community, or the City.

An historic district is defined by the City of Santa Monica as “a geographic area or noncontiguous grouping of thematically related properties that may be designated a Historic District if the City Council finds such area meets one of the following criteria, outlined in the SMMC Section 9.56.100(B):

1. Any of the criteria identified in SMMC Section 9.56.100(A)(1) through (6).
2. It is a noncontiguous grouping of thematically related properties or a definable area possessing a concentration of historic, scenic or thematic sites, which contribute to each other and are unified aesthetically by plan, physical development or architectural quality.
3. It reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning.
4. It has a unique location, a singular physical characteristic, or is an established and familiar visual feature of a neighborhood, community or the City.

Section 9.56.080 of this ordinance recognizes the significance of Structures of Merit and empowers the City Landmarks Commission to designate such structures. The City Landmarks Commission may designate Structures of Merit if the structure possesses one of the following characteristics:

- A. The structure has been identified in the City’s Historic Resources Inventory (HRI).
- B. The structure is a minimum of 50 years of age and meets one of the following criteria:
 1. The structure is a unique or rare example of an architectural design, detail or historical type.
 2. The structure is representative of a style in the City that is no longer prevalent.
 3. The structure contributes to a potential Historic District.

Other sections of the ordinance include an economic hardship provision, requirements and exemptions for maintenance and repair of resources, and procedures to respond to unsafe conditions. In addition to regulatory requirements, the ordinance provides for preservation incentives including waivers of fees and zoning regulations, use of the SHBC, and the Mills Act property tax reduction contracts.

The ordinance requires a Certificate of Appropriateness for any proposed alterations, restorations, construction, removal, relocation, or demolition, in whole or in part, of or to a

Structure of Merit, Landmark or Landmark Parcel, or to a building or structure located within a Historic District. Certificates are issued by the Landmarks Commission or the City Council if a determination can be made using the criteria stated in the ordinance. Generally, the proposed work should not detrimentally change, destroy, or adversely affect any exterior features of a protected resource and should be compatible with the character of the resource.

SMMC Requirements for Demolition

SMMC Chapter 9.25 establishes regulations that address the demolition of buildings and structures in the City. This code states that the City cannot issue demolition permits for structures 40 years or older until the application has been sent for review to the Landmarks Commission. The ordinance provides a period of 75 days during which an application for the designation of the structure as a Landmark, historic district, or structure of merit may be filed. If no application for designation is filed, the demolition may proceed subject to all other legal requirements. However, if an application for designation is filed, the structure is then subject to the designation procedures of the City's Landmarks and Historic Districts Ordinance.

Santa Monica General Plan Historic Preservation Element

The purpose of the Historic Preservation Element (2002) is to establish a long-range vision for the protection of historic resources in the City and to provide implementation strategies to achieve that vision. The Historic Preservation Element is part of the Santa Monica General Plan and it is organized into goals, objectives, and policies. Some of the goals include identifying and evaluating historic and cultural resources on a regular basis including conducting additional surveys to identify types and contexts, protecting historic and cultural resources from demolition and inappropriate alterations while ensuring compliance with CEQA and Section 106 of the NHPA, seeking designation for historic resources, and protecting historic views and landscapes.

Santa Monica General Plan Land Use and Circulation Element

The Land Use and Circulation Element (LUCE), adopted in 2010 and last amended in 2020, acknowledges historic preservation as a fundamental community value. The LUCE provides a range of policies to serve as tools for responding to a wide range of requirements for historic preservation, preservation of historically significant attributes, and conservation of neighborhood resources. The LUCE promotes an integrated set of policies and programs in historic preservation, neighborhood conservation, and urban form to reduce impacts to historic resources. All the policies and programs were designed to build upon and incorporate consistently with the Historic Preservation Element. Chapter 2.3 of the LUCE includes policies to ensure that the City continues to protect what is unique and valued on a citywide and neighborhood level, including Palisades Park and the bluffs; Santa Monica Pier; and neighborhood streetscapes, architecture, and building scale.

Santa Monica Historical Resources Inventory (HRI)

The HRI, last updated in 2018, is a database used by the City to identify properties of potential historic significance. Each property listed on the HRI has been evaluated based on a “windshield survey” conducted by preservation professionals using nationwide standards and criteria. The identification of a property on the HRI does not necessarily mean that the property is a designated historic resource. Designation is a separate process undertaken in accordance with the City’s Landmark Ordinance.

3.2.3 Impact Assessment Methodology

Thresholds for Determining Significance

The following thresholds of significance for cultural and tribal cultural resources are based on Appendix G of the CEQA Guidelines. The City uses these questions as thresholds for determining the significance of impacts in its EIRs. The CEQA Guidelines provide that a lead agency may use the questions set forth in the Appendix G to assess the significance of a project’s environmental effects. Although the use of Appendix G as a significance threshold is not mandatory, it is routinely sanctioned by the courts. For the purposes of this EIR, the proposed Project would have a significant adverse impact on cultural and tribal resources if it:

- CR-1** Causes a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines;
- CR-2** Causes a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines;
- CR-3** Disturbs any human remains, including those interred outside of dedicated cemeteries; and/or
- CR-4** Causes 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:
 - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or
 - ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1,

the lead agency shall consider the significance of the resource to a California Native American tribe.

Historic Architectural Resources

Analysis of impacts to historic architectural resources requires that a lead agency first determine whether a building, structure, object, or feature is a historical resource as defined in CEQA Guidelines Section 15064.5. If the lead agency determines a historic architectural resource is a historical resource, its significance may be materially impaired for the reasons outlined below. Typically, the significance of an architectural or structural historical resource is materially impaired through demolition or alteration. The resource may also be materially impaired by incompatible adjacent new construction that alters the setting of the resource, thereby diminishing its integrity and significance.

According to the CEQA Guidelines Section 15064.5(b), a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment. A substantial adverse change means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings, resulting in material impairment of the historical resource (CEQA Guidelines Section 15064.5[b][1]). According to CEQA Guidelines Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register;
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to PRC Section 5020.1(k) or its identification in an historical resources survey meeting the requirements of PRC Section 5024.1(g), unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a Lead Agency for purposes of CEQA.

The maintenance, repair, stabilization, restoration, preservation, conservation, or reconstruction of a historic resource in a manner consistent with the Secretary of the Interior's Standards (Weeks and Grimmer 1995), generally will constitute mitigation of impacts to a less than significant level. Documentation of historic buildings and structures, while potentially permitting demolition or substantial alteration, typically include documentation (e.g., research, reports, photo documentation, displays, or informational signage) to the standards of the Historic American Buildings Survey or Historic American

Engineering Record (HABS/HAER), may also reduce impacts but may not reduce them to less than significant levels.

The Secretary of the Interior's Standards for the Treatment of Historic Properties (36 Code of Federal Regulations [CFR] Part 68) defines four options for the treatment of historic buildings: (1) preservation; (2) rehabilitation; (3) restoration; and (4) reconstruction. Generally:

1. Preservation involves the application of measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment (Weeks and Grimmer 1995).
2. Rehabilitation entails making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values (Weeks and Grimmer 1995).
3. Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period (Weeks and Grimmer 1995).
4. Reconstruction involves new construction to recreate the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location (Weeks and Grimmer 1995).

The Secretary of the Interior's Standards for the Treatment of Historic Properties are not prescriptive but instead provide general guidelines and are intended to be flexible and adaptable to specific project conditions, including aspects of adaptive use, functionality, and accessibility. The goal is to balance continuity and change and retain historic building fabric to the maximum extent feasible.

The analysis in this EIR considers both direct impacts and indirect impacts on historic resources. Direct impacts may occur by:

1. Physically damaging, destroying, or altering all or part of the resource;
2. Altering characteristics of the surrounding environment that contribute to the resource's significance;
3. Neglecting the resource to the extent that it deteriorates or is destroyed; or
4. The incidental discovery of cultural resources without proper notification.

Removal, demolition, or alteration of historical resources can directly impact their significance by destroying the historic fabric of an archaeological site, structure, or historic district. Direct impacts can be assessed by identifying the types and locations of proposed development, determining the exact locations of historical resources within the project

area, assessing the significance of the resources that may be affected, and determining the appropriate mitigation.

Indirect impacts result from blocking significant public views of a resource's defining character; isolating a resource from its setting or relationship to the streetscape; altering the setting of a resource; introducing incompatible visual, audible, or atmospheric elements to a resource's setting; or introducing shadows over a historic landscape or an architectural resource with sun-sensitive features that contribute to that resource's significance. Indirect impacts may also involve potential damage to fragile off-site historical structures during typical construction procedures (e.g., pile driving) that could undermine the stability of a historic resource through ground-borne vibration.

A key element in this impact assessment methodology involves consideration of the effectiveness of the City's well-established historical preservation program and existing protections for historical resources, such as the policies contained in the Historic Preservation Element, LUCE, Downtown Community Plan (DCP), and Bergamot Area Plan as well as regulations in the SMMC (e.g., SMMC Chapter 9.56 [Landmarks and Historic Districts Ordinance]). The analysis below considers the efficacy and effectiveness of this combination of goals, policies, actions, and City regulations in avoiding or minimizing impacts to historic resources in the City, as a result of residential development projects planned for under the proposed Housing Element Update.

Archaeological Resources and Human Remains

The CEQA Guidelines Section 15126.4(b) provide direction on mitigation for impacts to historical resources. According to the CEQA Guidelines Section 15126.4(b)(3), public agencies should, whenever feasible, seek to avoid damaging effects to archaeological resources and shall consider the following regarding impacts to an archaeological site:

1. Preservation in place (avoidance) is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
2. Preservation in place may be accomplished by, but is not limited to, the following:
 - a. Planning construction to avoid archaeological sites;
 - b. Incorporation of sites within parks, greenspace, or other open space;
 - c. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site.
 - d. Deeding the site into a permanent conservation easement.
3. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center.

Archaeological sites known to contain human remains shall be treated in accordance with the provisions of the Health and Safety Code Section 7050.5.

4. Data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented and that the studies are deposited with the California Historical Resources Regional Information Center.

Typically, such measures will reduce impacts on archaeological resources to less-than-significant levels.

Methodology

Historic Architectural Resources

As described above, the CEQA Guidelines Section 15064.5(b)(2) require the evaluation of a proposed development to determine its impact on the potential eligibility of a structure(s) or a site for designation as a historic resource. As such, a Historic Resources Assessment was prepared by Ostashay & Associates Consulting (2025) to identify and evaluate historic resources that may be affected by the implementation of the proposed Project.

The Historic Resources Assessment included a records search of the National Register and its annual updates, and assessments of eligibility for the National Register, California Register, OHP's CHRIS, and OHP's Built Environment Resource Directory (BERD). Ostashay & Associates Consulting also reviewed local historic resources surveys and inventories, including the Santa Monica List of Designated Historic Resources and the Santa Monica Historic Resources Inventory. Further, the Historic Resources Assessment included a site inspection of the Project site to assess existing conditions, define the historical resources survey study area, document potential significant properties, and identify character-defining features. Lastly, Ostashay & Associates Consulting conducted site-specific research utilizing building permits, Sanborn Fire Insurance maps, city directories, historical photographs, University of Southern California Digital Collections, historical publications of the *Los Angeles Times*, and other published sources.

Archaeological Resources

A Cultural Resources Assessment (WSP 2025) was prepared to assess the potential for adverse impacts to cultural resources as a result of ground disturbance associated with the proposed Project. This assessment included a CHRIS records search and literature review, a review of historical cartographic information, a cursory site visit, and recommendations specific to the proposed Project.

Tribal Cultural Resources

The impact analysis for tribal cultural resources is based on a records search of the SLF from the NAHC (WSP 2025), the location of the Project site relative to known tribal activities, site-specific geologic and topographic conditions, and the footprint and depth of the subsurface excavation associated with the proposed Project. As described above, the City provided notification of the proposed Project to, and requested consultation from, Native American Tribes. Although the City received a request for consultation and input regarding how to manage the disposition of resources that might be encountered onsite, tribal cultural representatives have not conducted consultation with the City regarding the proposed Project.

3.2.4 Project Impacts and Mitigation Measures

Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

Impact Description (CR-1)

CR-1 Construction activities associated with the proposed Project would not adversely affect potential historical resources and would result in *less than significant impacts without mitigation.*

As described in *Historic Setting*, during its recent history the Project site was occupied by recreation and storage/industrial facilities that are similar to the current facilities located on the Park and the former Fisher Lumber site. The Park was previously developed with the Santa Monica Municipal Stadium before being redeveloped into a City park with the original gymnasium. The former Fisher Lumber site was previously owned and occupied by the John W. Fisher Lumber Company, one of the oldest commercial retail businesses in the City, as well as Southern Pacific Railroad Company. Today, the Park is occupied by the Community Recreation Center, which is comprised of the gymnasium, PAL Youth Center, and Community Activity Building. The former Fisher Lumber site includes three buildings, including the City's Public Landscape Division Headquarters building, and remnants of the Santa Monica Air Line of the Southern Pacific Railroad.

Implementation of the proposed Project would involve the demolition of the three buildings on the former Fisher Lumber site and the redevelopment of the Community Recreation Center. Given the Project site's history and potential to contain historic architectural significance, the Historic Resources Assessment that was prepared for the proposed Project included an assessment of the existing buildings for eligibility as historical resources, as defined by the CEQA Guidelines Section 16054.5(a).

The Historic Resources Assessment concluded that the facilities at the existing Park and the former Fisher Lumber property do not possess sufficient historical or architectural importance to reach the threshold of significance as historical resources under any of the applicable Federal, State, or local eligibility criteria. Specifically, the gymnasium, designed by local architect James Mount, has been substantially altered by the construction of later additions onto its north, south, and west elevations. In addition, the gymnasium structure and/or its later additions do not reflect or represent the distinctive architectural qualities or design features typically associated with the architect's known professional work. Further, the former Fisher Lumber site has been extensively redeveloped and there are no extant features associated with the original John W. Fisher Lumber Company. The three buildings currently on site are non-descript, altered structures contemporary in design that were built in the recent past (i.e., 1974, 1975, 1983). As such, they do not possess exceptional significance necessary to be considered a historical resource under CEQA. Therefore, the proposed demolition of the Community Recreation Center and the three former Fisher Lumber buildings would not constitute a substantial adverse change in the significance of a historic resource.

In addition, the records that are available in the OHP's CHRIS identify the Santa Monica Air Line Segment of the Southern Pacific Railroad as a potentially eligible historic resource (CA-LAN-3808H). As stated above, at least one inventory of potential historical sites recommended the Santa Monica Air Line eligible for listing on the National Register, as the rail line significantly contributed to the City's development and maintains its integrity of location, design, setting, feeling, and association. However, the recommendation of eligibility was reflective of the Air Line segment between Robertson Boulevard in Culver City and 20th Street in Santa Monica and did not include the segment within the Project site. Many sections of the Air Line have been paved over or are no longer in use, such as at the Project site. Previous site observations identified portions of the tracks on the Project site to be buried beneath asphalt. The asphalt and previous development has likely compromised or destroyed the integrity of the resource.

Further, as previously described, 1415 Colorado Avenue is a potential historic site within the vicinity of the proposed Project. The two-story commercial building located at the site has been previously identified in prior City-sponsored historic resources survey efforts as a potential local resource due to its distinctive Streamline Moderne characteristics. However, the Historic Resources Assessment concluded that given the substantial distance (80 feet) and clear physical and visual separation between the Project site and the 1415 Colorado Avenue property, the proposed Project would not create a significant impact to this eligible historic site. The Streamline Moderne characteristics that convey the property's local significance and justify its eligibility as a potential City of Santa Monica landmark property would be retained unaltered upon implementation of the proposed Project.

Therefore, impacts to historic resources as a result of the proposed Project would be *less than significant without mitigation*.

Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the CEQA Guidelines?

Impact Description (CR-2)

CR-2 **Ground disturbing activities associated with construction of the proposed Project could uncover significant prehistoric or historic-period archaeological deposits that qualify as cultural resources as defined in Section 15064.5 of the CEQA Guidelines. Damage or destruction of such resources would result in a potentially significant impact. This impact would be *less than significant with mitigation*.**

The Cultural Resources Assessment (WSP 2025) prepared for the proposed Project indicated that there are no prehistoric or historic-period archaeological resources that have been recorded within the Project site. As previously described, the Project site has been substantially disturbed due to construction and operation of the Southern Pacific Railroad in the late 1800s, the Fisher Lumber Company in the 1920s, the Santa Monica Municipal Stadium in the 1930s, and the more recent facilities associated with the Park.

While there are no documented archaeological resources within the Project site, archaeological deposits have been previously discovered within the City and within the vicinity of the Project site. The Cultural Resources Assessment identified two pre-contact archaeological sites (i.e., CA-LAN-1061 and CA-LAN-1123) located approximately one mile to the southwest of the Project site, which may be associated with the coastal settlements of Saa'anga and Waachnga. The sites were recorded as containing lithic and shell scatters within previously disturbed soil.

Given the proximity of the Project site to known archaeological resources and the potential for unknown, undisturbed resources within the area, the Cultural Resources Assessment identified the Project site as having potentially moderate to high archaeological sensitivity. Project construction would involve approximately 45,000 cubic yards of grading, including excavation depths up to 2 feet below ground surface (bgs). As such, the proposed Project has the potential to encounter unknown, potentially significant subsurface archaeological remains and potentially damage such resources, if improperly handled. The impact would be *potentially significant* and requires mitigation.

Mitigation Measures

MM CR-1 (Cultural Resource Awareness Training) would require worker environmental awareness program training for all construction personnel by a qualified cultural resources representative. In addition, in the event that archaeological resources are discovered, the proposed Project would be subject to **MM CR-2 (Archaeological Construction Monitoring)** and **MM CR-3 (Inadvertent Discoveries)**, which would require construction monitoring and protocols for the handling, recording, and preservation of any discovered historic resources.

MM CR-1 ***Cultural Resource Awareness Training.*** As part of the required Worker Environmental Awareness Program training, all construction personnel will be trained by a qualified, on-site cultural resources representative regarding the identification, recognition, and protection of possible buried cultural resources during construction, prior to the initiation of construction or ground-disturbing activities. Training will inform construction personnel of the procedures to be followed upon the discovery of cultural materials. These procedures include notifying a cultural resources monitor upon an accidental discovery and cessation of all work activities within the area of discovery until the monitor provides written approval to proceed. All personnel will be instructed that unauthorized collection or disturbance of cultural resources is unlawful.

MM CR-2 ***Archaeological Construction Monitoring.*** A qualified professional archaeologist familiar with the types of prehistoric and historic-period archaeological resources that could be encountered within the Project site, shall monitor the Project site for the presence of historic and/or archaeological resources. All grading, excavation, trenching, and site preparation including vegetation removal within native, in-tact soils shall be monitored. Following the completion of ground disturbance within native, in-tact soils, monitoring shall no longer be required. A monitoring program shall be developed and implemented prior to the commencement of construction activities to ensure the effectiveness of monitoring.

MM CR-3 ***Inadvertent Discoveries.*** In the event of any inadvertent discovery of prehistoric, historic-period archaeological, or tribal cultural resources or human remains during construction, all construction activity shall immediately cease within 50 feet of the discovery. The construction manager shall immediately notify the City of Santa Monica Planning and Community Development Department and shall retain a Registered Professional Archaeologist (RPA) to evaluate the significance of the discovery and/or inspect the remains.

Prehistoric, Historic-Period Archaeological, and Tribal Cultural Resources: In the event of the discovery of prehistoric, historic-period archaeological, and/or tribal cultural resources, the investigation shall be subject to a Treatment Plan that sets forth explicit criteria for evaluating the significance of the resource and identifies appropriate data recovery methods and procedures to mitigate Project effects on the significant resources. An RPA who is familiar with both prehistoric and historic-period archaeological resources shall prepare the Treatment Plan, prior to further excavation or site investigation. The Treatment Plan shall also provide for a final technical report on all

cultural resource studies and for the curation of artifacts and other recovered remains at a qualified curation facility. If the archaeologist determines that the find may qualify for listing in the California Register, the site shall be avoided, or a data recovery plan shall be developed. Any required testing or data recovery shall be directed by an RPA prior to construction being resumed in the affected area. Work shall not resume until the City provides authorization.

Human Remains: In the event of the discovery of human remains, the investigation shall be subject to applicable procedural and other requirements set forth in California Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5, and PRC Section 5097.98. An RPA shall inspect the remains and confirm that they are human, and if so, shall immediately notify the City of Santa Monica Planning Division and contact the County coroner. If the coroner determines the remains are Native American, the coroner shall contact the NAHC. The NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent shall make recommendations for the means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.

Significance after Mitigation

With the implementation of **MM CR-1** through **MM CR-3**, impacts regarding archaeological resources would be *less than significant*.

Would the project disturb any human remains, including those interred outside of formal cemeteries?

Impact Description (CR-3)

CR-3 **Ground disturbing activities associated with construction of the proposed Project could potentially uncover and disturb buried human remains. The impact would be *less than significant with mitigation*.**

As previously described in Section 3.2.1, *Environmental Setting*, Southern California provided a favorable environment for early human settlement, with evidence of human occupation dating back more than 10,000 years. While human remains have not been identified previously in the City, the Cultural Resources Assessment (WSP 2025) identified the Project site as having potentially moderate to high archaeological sensitivity. As such, Project construction, including 45,000 cubic yards of grading and excavation depths up to 2 feet below the surface, has the potential to uncover human remains. The impact is considered *potentially significant* and requires mitigation.

Mitigation Measures

MM CR-3 (Inadvertent Discovery), described above, prescribes the process to be followed in the event of an accidental discovery of human remains, as provided in California Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5, and PRC Section 5097.98.

Significance after Mitigation

With the implementation of **MM CR-3**, impacts regarding human remains would be *less than significant*.

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, or 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 at least one of the following:

- *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or*
- *A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1(c), the Lead Agency shall consider the significance of the resources to a California Native American tribe?*

Impact Description (CR-4)

CR-4 Tribal cultural resources, as defined in PRC Section 21074, may be inadvertently uncovered during ground disturbing activities associated with construction of the proposed Project. Damage or destruction of such tribal cultural resources would be a potentially significant impact. However, with the implementation of Native American monitoring, impacts would be reduced to *less than significant with mitigation*.

As previously described in *Native American Consultation and Tribal Cultural Resources*, the City contacted the NAHC, Native American individuals, and tribal organizations to elicit information and/or concerns regarding cultural resource issues related to implementation of the proposed Project. The Gabrielino Tongva Indians of California requested that a Native American Monitor be present during ground disturbance activities. In addition, the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation) requested formal government-to-government consultation with the City and indicated that the Kizh Nation has ancestral and cultural ties to the Project area. However, following their formal

consultation request, the Kizh Nation did not further engage with the City and schedule an initial consultation meeting.

In addition, previous AB 52 consultation processes have indicated the presence of tribal cultural resources within the vicinity of the Project site. For example, during the consultation process for the EIR for the City's Ocean Avenue Project (State Clearinghouse [SCH] No. 2018121060), the Kizh Nation confirmed that the City is sensitive for tribal cultural resources given its location along the coast and within an area of historic use by Gabrieleño/Tongva villages, such as *Suangna* and *Comicrabit*, and trade routes and waterways, which are considered cultural landscapes pursuant to PRC Section 21074.

Therefore, while there are no known tribal cultural resources on the Project site, implementation of the proposed Project has the potential to encounter currently unknown, subsurface tribal cultural resources that could be located onsite. The proposed construction activities would include grading, trenching, and excavation up to 2 feet bgs, which have the potential to encounter and adversely affect tribal cultural resources that could be located on-site. As such, the proposed Project may have a *potentially significant* impact on tribal cultural resources and is subject to mitigation measures.

Mitigation Measures

In addition to **MM CR-1 (Cultural Resources Awareness Training)** and **MM CR-3 (Inadvertent Discoveries)**, the proposed Project would be subject to **MM CR-4 (Native American Construction Monitoring)**. Consistent with the request from the Gabrieleño/Tongva Indians of California, construction activities would require a tribal monitor to be present during excavation activities, including site pavement demolition, soil excavation, grading, and trenching. Consistent with **MM CR-3 (Inadvertent Discoveries)**, any discovery of previously unknown buried resources would trigger an immediate stop in construction while the resource is evaluated. Project impacts on tribal cultural resources would be *less than significant with mitigation*.

MM CR-4 Native American Construction Monitoring. Prior to the commencement of ground disturbance activities, the City shall retain a Native American tribal monitor. The Native American tribal monitor shall be present during all grading, excavation, trenching, and site preparation including vegetation removal within native, in-tact soils. Following the completion of ground disturbance within native, in-tact soils, monitoring shall no longer be required.

Significance After Mitigation

With the implementation of **MM CR-1**, **MM CR-3**, and **MM CR-4**, impacts regarding tribal cultural resources would be *less than significant*.

3.2.5 Cumulative Impacts

A cumulative impact to cultural resources would result if the impacts associated with the Project, along with other pending, approved, and recently completed projects in the City, would cumulatively impact historic architectural resources, archaeological resources, or tribal cultural resources. Excavation, grading, and other ground disturbing activities associated with cumulative development in the City could increase the potential for prehistoric or historic cultural resources to be altered, disturbed, or otherwise damaged. The potential to create adverse cumulative impacts to such resources depends on certain characteristics of each project (e.g., site location in relation to known resources and depth and amount of ground disturbance that will occur).

As described in Chapter 2.0, *Project Description*, the Project site is a potential location for an underground stormwater harvesting tank as part of the City's Sustainable Water Infrastructure Project (SWIP). As described in the [IS/MND for the Sustainable Water Infrastructure Project](#) and [Addendum \(State Clearinghouse Number 2016071056\)](#), construction of the tank would require approximately 30-foot excavation of a 0.53-acre area, with the reservoir depth at approximately 15-foot below the surface. In addition, it is estimated that approximately 17,800 cubic yards of soil will be exported off-site. These activities have the potential to encounter, and possibly damage, cultural and tribal cultural resources and would be in addition to the impacts associated with the proposed Project involving ground disturbance within areas located onsite that would not involve ground disturbance associated with the SWIP. Therefore, the SWIP and the proposed Project have the potential to create a significant, cumulative impact regarding cultural resources that could be located onsite, and the contribution of the proposed Project would be cumulatively considerable.

However, each project—including the proposed Project and the SWIP—would be required to comply with the laws and regulations related to historic architectural resources, archeological resources, discovery of human remains, and tribal cultural resources discussed above (refer to Section 3.2.2, *Regulatory Setting*). The SWIP would be subject to a mitigation measure that requires construction monitoring and protocols to protect cultural resources in the event of an inadvertent discovery during ground disturbance activities. Similarly, as previously described, the proposed Project would be subject to **MM CR-1** through **MM CR-4** to ensure proper worker training, construction monitoring, and protocols to handle, record, and preserve any cultural or tribal cultural resources that are encountered as a result of the proposed Project. Therefore, with the implementation of the recommended mitigation measures, the proposed Project would *not contribute to cumulatively considerable impacts* on cultural or tribal cultural resources.

3.3 GREENHOUSE GASES AND CLIMATE CHANGE

This section of the Environmental Impact Report (EIR) analyzes the potential impacts of the Memorial Park Redevelopment and Expansion Project (Project) regarding greenhouse gases (GHGs) and climate change. The following analysis addresses the short-term construction impacts, long-term operational impacts, and contributions to cumulative impacts.

3.3.1 Greenhouse Gas Emissions and Climate Change

The U.S. Environmental Protection Agency (USEPA) describes climate change as “changes in global or regional climate patterns attributed largely to human-caused increased levels of atmospheric greenhouse gases.” Climate change can include major changes in air temperature, precipitation, or wind patterns, among others, that occur over several decades or longer. Causes of these changes include oceanic processes, variations in solar radiation received by earth, plate tectonics and volcanic eruptions, and anthropogenic (i.e., human-related) activities. However, the primary anthropogenic driver of climate change is the release of GHG into the atmosphere.

The “greenhouse effect” refers to Earth’s natural warming process which is necessary to support life. The Earth’s atmosphere consists of a variety of gases that absorb solar energy and regulate the Earth’s temperature by preventing the loss of heat to space; these gases are referred to as GHGs because they trap heat like glass does in a greenhouse. Relying on decades of research, most of the scientific community agrees that human activities, which include the burning of fossil fuels to produce energy and deforestation, have contributed to elevated concentration of GHGs in the atmosphere since the Industrial Revolution (USEPA 2024a). When GHGs build up in the atmosphere, they lead to a warmer climate which leads to many other potential adverse physical and environmental effects including sea level rise, flooding, increased weather variability and intensified storm events, reduced reliability of water supplies, reduced quality of water supplies, and increased stress on ecosystems that would reduce biodiversity. Additionally, climate change may have impacts to human health due to heat waves and extreme weather events, reduced air quality, and increased climate-sensitive diseases, including food-borne, water-borne, and animal-borne diseases.

GHGs consist of a variety of gases that have the potential to trap heat, though regulations generally focus on carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). (Chloroflourocarbons [CFCs] have been banned and have no natural source; therefore, these GHGs are not included in this analysis.) The following provides a brief description of each of the remaining GHGs and their sources.

Carbon dioxide (CO₂) is the primary greenhouse gas emitted through human activities. In 2022, CO₂ accounted for 80 percent of all U.S. GHG emissions. The natural production and

absorption of CO₂ occurs through the burning of fossil fuels (e.g., oil, natural gas, and coal), solid waste, trees and wood products, and other chemical reactions, such as those required to manufacture cement. CO₂ is constantly being exchanged among the atmosphere, ocean, and land surface as it is both produced and absorbed by many microorganisms, plants, and animals. Globally, the largest source of CO₂ emissions is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. CO₂ is removed from the atmosphere (or sequestered) when it is absorbed by plants as part of the biological carbon cycle.

Methane (CH₄) is emitted from a variety of both human-related and non-human-related sources. Anthropogenic sources include the production and transport of coal, natural gas, and oil, from livestock and other agricultural practices, and from the decay of organic waste in municipal solid waste landfills. In 2022, CH₄ accounted for 12 percent of all U.S. GHG emissions from human activities. Natural sources of CH₄ include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. Methane's lifetime in the atmosphere is much shorter than CO₂, but CH₄ is more efficient at trapping radiation than CO₂. Pound for pound, the comparative impact of CH₄ is 28 times greater than CO₂ over a 100-year period (USEPA 2025).

Nitrous oxide (N₂O) accounted for 6 percent of all U.S. GHG emissions from human activities, as of 2022. Globally, 40 percent of total N₂O emissions come from human activities. N₂O is emitted from agriculture, land use, transportation, industry, and other activities. In addition to agricultural sources, some industrial processes (e.g., fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to the atmospheric load of N₂O (USEPA 2025).

N₂O emissions result from the nitrogen cycle, which is the circulation of nitrogen among the atmosphere, plants, animals, and microorganisms that live in soil and water. Nitrogen takes on a variety of chemical forms throughout the nitrogen cycle, including N₂O. Bacteria breaks down nitrogen in soils and the oceans, thereby emitting N₂O. N₂O is removed from the atmosphere when it is absorbed by certain types of bacteria or destroyed by ultraviolet radiation or chemical reactions. N₂O molecules stay in the atmosphere for an average of 121 years before being removed by a sink or destroyed through chemical reactions. The impact of one pound of N₂O on warming the atmosphere is 265 times that of one pound of CO₂.

Existing GHG Emissions

U.S. Emissions

The USEPA's annual *Inventory of U.S. Greenhouse Gas Emissions and Sinks* tracks U.S. GHG emissions and sinks by source, economic sector, and GHG. In 2022, the U.S. emitted 6,343 million metric tons of carbon dioxide equivalent (MMT CO₂e). U.S. emissions decreased by three percent from 1990 to 2022 and increased by 0.2 percent from 2021 to 2022 (14.4 MMT CO₂e). In 2022, CO₂ emissions from fossil fuel combustion increased by

one percent relative to the previous year. This increase in fossil fuel consumption emissions was from increased energy use due, in part, to the continued rebound in economic activity after the height of the COVID-19 pandemic. CO₂ accounted for 79.7 percent of 2022 GHG emissions while CH₄ accounted for 11.1 percent, N₂O for 6.1 percent, and fluorinated gases for 3.1 percent (UESPA 2024).

In 2022, the electric power industry at 25 percent, transportation at 28 percent, industry at 23 percent, agriculture at 10 percent, and residential and commercial at 13 percent, were the top five emitters of GHG emissions from direct fossil fuel combustion (USEPA 2024b).

California Emissions

In 2022, California generated approximately 371.1 MMT CO₂e, 2.4 percent lower than in 2021 (380.4 MMT CO₂e). The 2022 emissions data is representative of California's continuing long-term trend of GHG emissions declines, despite the anomalous emissions trends from 2019 through 2021, due in large part to the impacts of the COVID-19 pandemic. The largest decrease in emissions occurred in the transportation sector, with a decrease of 3.6 percent (5.2 MMT CO₂e) compared to 2021 (California Air Resources Board [CARB] 2024b). Transportation emission decreases are largely attributed to reduced use of fossil distillate and fossil gasoline. GHG emissions in the electricity sector declined by 4.1 percent (2.6 MMT CO₂e) compared to 2021 due to increases in solar, wind, and hydropower power generation. GHG emissions in the industrial sector decreased by 2 percent (1.5 MMT CO₂e) compared to 2021 (CARB 2024b). This decline is attributed to historic lows in oil and gas production and processing sub-sector emissions since 2000.

City of Santa Monica Emissions

The City has been tracking local GHG emissions for over 20 years through an annual community, sector-based emissions inventory, which measures the emissions by region using data from energy consumption in buildings, vehicles, waste, and aviation. The City completed the *Greenhouse Gas Emissions Inventory Update* in 2023 which provides a snapshot of the communities impacts and identifies opportunities to reduce emissions. The updated GHG emissions inventory compares community trends from 2019 to 2022 and progress towards achieving the City's goal of reducing emissions by 80 percent below 1990 levels by 2030.

Table 3.3-1 below illustrates the City's historical GHG emissions for between 1990 and 2022. In 2022, the City generated approximately 724,970 MT CO₂e. Vehicle transportation emissions, at 499,822 MT CO₂e, represented the largest share of emissions at 68.9 percent. Commercial and residential building energy represented the second and third largest source of emissions with 104,393 MT CO₂e and 81,045 MT CO₂e, accounting for 14.4 and 11.2 percent of emissions, respectively. Waste emissions accounted for 4.8 percent (34,578 MT CO₂e) of emissions. Lastly, aviation emissions accounted for just 0.7 percent (5,132 MT CO₂e) of emissions. Total emissions in 2022 were approximately 48 percent less than emissions in 2019 (1,386,642 MT CO₂e). The changes are largely driven by increased

efficiency in vehicle fuel, reduced waste being sent to the landfill, a decline in natural gas consumption, and reduced aviation activity. The emissions reduction also is due to increased renewable energy for electricity generation, as the City began to purchase electricity from the Clean Power Alliance (CPA), electing to default all residential and commercial customers at 100 percent Green Power (City of Santa Monica 2023).

Table 3.3-1. City of Santa Monica GHG Emissions Inventory (MT CO₂e)

Subsector	1990	2000	2011	2019	2022
Waste	74,546	63,364	35,001	28,211	34,578
Vehicle Transportation	762,242	752,156	746,230	617,837	499,822
Commercial Buildings	361,338	351,986	248,482	129,234	104,393
Residential Buildings	188,515	202,331	154,667	103,576	81,045
Aviation	N/A	N/A	21,912	3,391	5,132
Total	1,386,642	1,369,836	1,206,292	882,249	724,970
Percent Change from 1990 Baseline	--	-1.2	-13.0	-36.4	-47.7

Source: City of Santa Monica 2023.

3.3.2 Regulatory Setting

The Federal, State, and local regulations responsible for regulating GHGs are summarized below.

Federal Regulations

Energy Independence Act

The Energy Independence and Security Act (EISA) of 2007 includes several key provisions that will increase energy efficiency and the availability of renewable energy, and thereby reduce GHG emissions. The EISA facilitates the reduction of GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard that requires fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.
- Achieving approximately 25 percent greater efficiency for light bulbs by phasing out old incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020.

- Establishing a minimum average fuel economy of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by 2020.
- Directing the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.

Vehicle Emissions Standards

In 2009, a national policy was adopted for fuel efficiency and emissions standards in the U.S. auto industry, which applies to passenger cars and light-duty trucks for model years 2012 to 2016 (referred to as the Pavley standards; Phase 1 standards). The standards surpass the prior Corporate Average Fuel Economy standards and require an average fuel economy standard of 35.5 mpg and 250 grams of CO₂ per mile by model year 2016, based on USEPA calculation methods. These standards were formally adopted on April 1, 2010.

In 2012, new standards were adopted for model year 2017 to 2025 for passenger cars and light-duty trucks. By 2020, new vehicles are projected to achieve 41.7 mpg – if GHG reductions are achieved exclusively through fuel economy improvements – and 213 grams of CO₂ per mile (Phase 2 standards). By 2025, vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO₂ per mile. According to the USEPA, a model year 2025 vehicle would emit approximately one-half of the GHG emissions from a model year 2010 vehicle.

On October 25, 2016, the USEPA established rules for a comprehensive Phase 2 Heavy-Duty National Program that established fuel consumption and CO₂ standards for each of the four regulatory categories of heavy-duty vehicles. The rule also included separate standards for the engines that power combustion tractors and vocational vehicles. These standards build upon the Phase 1 and Phase 2 standards for light-duty vehicles spanning model years 2012-2025.

On March 24, 2024, the USEPA announced new, more ambitious proposed standards to further reduce harmful air pollutant emissions from light-duty and medium-duty vehicles starting with model year 2027 and through 2032 (USEPA 2024b).

State Regulations

California Building Code

California Code of Regulations (CCR), Title 24, is known as the California Building Code (CBC), which establishes the regulations for building construction and system design and

installation to achieve energy efficiency and preserve outdoor and indoor environmental quality.

CCR, Title 24, Part 6 comprises the California Energy Code, which was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to increase the baseline energy efficiency requirements. The Title 24 standards were updated in 2021 and became effective on January 1, 2023. The updated standards apply to all buildings for which an applicable building permit application is submitted on or after January 1, 2023, and established new standards for electric-ready requirements, expanded solar PV and battery storage, and strengthened ventilation standards for improved air quality. The Title 24 standards also include efficiency improvements to the residential standards for attics, walls, water heating, and lighting; and efficiency improvements to the non-residential standards are in alignment with the American Society of Heating and Air-Conditioning Engineers (ASHRAE) 90.1-2013 National Standards.

CCR, Title 24, Part 11 comprises California Green Building Standards (CalGreen), which establishes mandatory green building code requirements as well as voluntary measures (Tier 1 and Tier 2) for new buildings in California. The mandatory provisions in CalGreen will strengthen water efficiency conservation, increase construction waste recycling, and increase energy efficiency. Tier 1 and Tier 2 are intended to further encourage building practices that minimize the building's impact on the environment and promote a more sustainable design.

California Legislation Regarding Climate Change

Recent California legislation related to GHG emissions and climate change includes the following:

- Assembly Bill (AB) 1493 – Requires CARB to define standards for cars and light trucks manufactured after 2009.
- Executive Order (EO) S-3-05 – Announced GHG emission reduction targets.
- AB 32 (Global Warming Solutions Act of 2006) – Requires CARB to adopt regulations to evaluate statewide GHG emissions and then create a program and emission caps to limit statewide emissions to 1990 levels.
- EO S-01-07 – Requires establishment of a statewide goal to reduce the carbon intensity of California's transportation fuels.
- EO B-16-12 – Requires state agencies to increase the number of zero-emission vehicles (ZEV) within the state fleet through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are ZEV by 2015 and 20 percent by 2025.

- Senate Bill (SB) 97 – Acknowledges that climate change analysis is to occur in conjunction with the California Environmental Quality Act (CEQA) process and that the Governor’s Office Land Use and Climate Innovation (LCI) is responsible for developing CEQA Guidelines.
- SB 375 – Creates a process whereby local governments and other stakeholders work together within their region to achieve the reduction of GHG emissions.
- EO B-30-15 – Established a new interim statewide GHG emission reduction target.
- Climate Change Scoping Plan – Designed to reduce overall carbon emissions in California.
- CARB GHG Emission Inventory – Creates GHG emissions limits and requires an emissions inventory for the industries determined to be significant sources of GHG emissions.
- SB 32 – Extension of AB 32 requiring the State to further reduce GHG to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged).
- SB 100 and 350 – Supports the reduction of GHG emissions from the electricity sector by accelerating California’s Renewables Portfolio Standard (RPS) Program, which was last updated by SB 350 in 2015.
- SB 1383 – Requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants.
- EO B-55-18 – Established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter.
- EO N-79-20 – Established a new statewide goal of achieving 100 percent of in-state sales of new passenger cars and trucks will be ZEV by 2035, 100 percent of in-state sales of new medium and heavy-duty vehicles will be ZEV by 2045, and transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible.
- AB 1279 (California Climate Crisis Act) - Declares the policy of the state both to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels. AB 1279 also requires the state to ensure that updates to the Scoping Plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable CO₂ removal solutions and carbon capture, utilization, and storage technologies in California.

Regional and Local Regulations

Regional Transportation Plan/Sustainable Communities Strategy

The Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) sets forth a long-range vision for transportation planning and programming activities in the Southern California Association of Governments (SCAG) region. The RTP/SCS sets forth how the region will integrate land use, transportation strategies, transportation investments including transit, bicycle, and pedestrian infrastructure, and future population growth while progressing California state goals to reduce GHG emissions and vehicle miles traveled (VMT).

Santa Monica General Plan Land Use and Circulation Element

The Santa Monica General Plan Land Use and Circulation Element (LUCE), last amended November 2024, provides goals, policies, and standards to guide land use and transportation decisions in the City through 2030. An important principle of the LUCE is to create a more sustainable Santa Monica by providing the framework to achieve the GHG reduction goals of the Sustainable City Plan. The LUCE addresses GHG emissions through its land use and transportation decisions such as focusing new land uses near transit, creating complete neighborhoods, supporting infill mixed-use projects, and affordable and diverse housing near jobs and transit. In addition, the LUCE supports a complete network of walking and bicycling, transit improvements, carpooling, car-sharing, and Transportation Demand Management (TDM) strategies to reduce vehicle trips. The LUCE includes the following applicable policies pertaining to air quality and GHG emissions.

Goal LU2: Integrate Land Use and Transportation for GHG Reduction. Integrate land use and transportation, carefully focusing new development on transit-rich boulevards and in the districts, to create sustainable active pedestrian-friendly centers that decrease reliance on the automobile, increase walking, bicycling, and transit use and improving community quality of life.

Policy LU2.1 Redirect Growth. Redirect growth away from residential neighborhoods onto transit corridors, where new uses are served by convenient transportation networks.

Policy LU2.2 Transit Villages. Capitalize on the Expo Light Rail stations to create vital new complete sustainable communities with transit as a focal element, green connections and pathways, a variety of housing types and jobs, enhanced creative arts and institutions, and local-serving retail and services.

Policy LU2.5. Vehicle Trip Reduction. Achieve vehicle trip reduction through comprehensive strategies that designate land uses, establish development and street design standards, implement sidewalk, bicycle and roadway

improvements, expand transit service, manage parking, and strengthen TDM programs that support accessibility by transit, bicycle and foot, and discourage vehicle trips at a district-wide level. Monitor progress using tools that integrate land use and transportation factors. Increase bicycle and pedestrian connectivity in transit districts and adjust bus and shuttle services to ensure success of the transit system.

Policy LU2.6 Active Spaces. Focus new development in defined districts to enable active places that can support diverse local-serving retail and services, walkability, arts and culture. Require, whenever possible, new development to provide convenient and direct pedestrian and bicycle connections.

Goal LU3: Transition from Regional-Serving Commercial Uses to Local-Serving Uses in Areas Served by Transit. Redirect regional-serving commercial and office development potential into new housing opportunities with access to neighborhood-serving uses in transit-accessible areas as part of a citywide trip reduction strategy.

Policy LU3.2 Focus on Housing in Transit-Accessible Corridors and Districts. Focus additional housing opportunities on the transit-rich commercial boulevards.

Policy LU3.3 Focus on Local-Serving Uses. Emphasize uses which address local-serving needs and daily resources necessary to reduce vehicle trips and VMT.

Goal LU4: Complete Sustainable Neighborhoods. Create complete neighborhoods that exemplify sustainable living practices with open spaces, green connections, diverse housing, local employment, and local-serving businesses that meet the daily needs of residents and reduce vehicle trips and GHG emissions.

Policy LU4.2 Uses to Meet Daily Needs. Encourage uses that meet daily needs such as grocery stores, local-serving restaurants and other businesses and activities within walking distance of residences to reduce the frequency and length of vehicle trips.

Policy LU4.3 Mixed-Use Associated with Transit. Encourage mixed-use development close to transit to provide housing opportunities for the community, support local businesses, and reduce reliance on automobiles.

Policy LU4.4 Pedestrian-Oriented Design. Engage pedestrians with ground floor uses, building design, site planning, massing and signage that promote vibrant street life and emphasize transit and bicycle access.

Goal LU8: Reduction of Vehicle Trips/Management of Congestion – Establish a complete transportation network that supports integrated land use. Ensure that transportation supports human activity and access to land uses through a diverse multimodal transportation system that incentivizes walking, biking and transit and reduces the need for vehicle trips.

Policy LU8.1 Transportation Demand Management. Require participation in TDM programs for projects above the base to encourage walking, biking, and transit, and to reduce vehicle trips. Engage existing development in TDM Districts and programs to encourage reduction of existing vehicle trips.

Goal LU12: Encourage Historic Preservation Citywide – Preserve buildings and features which characterize and represent the City’s rich heritage.

Policy LU12.4 Sustainability. Recognize adaptive reuse as a sustainable policy, and encourage sustainable technologies, such as solar panel installation and energy retrofitting, that respect character-defining features.

Goal T18: Encourage a more sustainable transportation system.

Policy T18.1 Strive toward carbon neutrality by encouraging reduced VMT per capita.

Policy T18.2 Develop programs and strategies to meet CO₂ or VMT reduction standards established by regional, state or federal agencies.

Goal S2: Reduce GHG emissions from land use and transportation decisions.

Policy S2.1 Implement the VMT reducing policies of the LUCE including, but not limited to: focusing new growth in higher density, mixed-use, transit-oriented districts; focusing new growth along existing corridors and nodes; creating complete, walkable neighborhoods with goods and services within walking distance of most homes; and, implementing and supporting a wide range of pedestrian, bicycle and transit improvements in the City.

Policy S2.2 In cooperation with the State and SCAG, proactively promote the implementation of SB 375, in particular utilizing its incentives for transit-oriented development. The City will also ensure that its local plans are consistent with the SCS Plan requirement of SB 375.

Policy S2.9 Consider incorporating the “no net new P.M. peak hour vehicle trips” policy into the City’s CEQA environmental analysis and require

mitigation of significant impacts for projects that will generate new net vehicle trips.

Goal S3: Reduce overall energy use in the City.

Policy S3.1 Actively strive to implement the City’s “zero net” electricity consumption goal by 2020 through a wide variety of programs and measures, including the generation of renewable energy in the City and energy efficiency measures.

Policy S3.2 Consider a requirement for all new residential buildings to use net zero energy by 2020 and all new commercial buildings by 2030.

Goal S4: Increase the use of renewable energy in the City.

Goal S5: Improve the environmental performance of buildings.

Policy S5.1 Continue to maintain a Building Code and prescriptive compliance options that meet or exceed state requirements for energy, water and other sustainability standards. Specifically, pursue California Energy Commission goals to achieve net zero energy buildings by 2020 for low-rise residential buildings and 2030 for commercial buildings and achieve a LEED-equivalent local building code by 2020.

Policy S5.5 Encourage shade trees on south- and west-facing sides of all new buildings to reduce building energy loads.

Policy S5.6 Encourage cool roofs or green roofs on new buildings

Policy S5.8 Encourage installation of electrical outlets in loading zones and on the exterior of new buildings to reduce emissions from gas-powered landscape maintenance and operating refrigeration for delivery trucks.

Sustainable City Plan

The Santa Monica Sustainable City Plan, updated in 2022, established GHG emissions reduction targets for the City to address climate change impacts which, if achieved, would result in greater GHG emissions reductions than those set by the State, at least in the short-term. The Sustainable City Plan includes targets for reducing GHG emissions by at least 80 percent below 1990 levels by 2030 Citywide, reducing community emissions below 277,328 MT CO₂e, reducing per capita emissions below 1.9 MT CO₂e, and achieving an annual decrease in municipal GHG emissions.

The Sustainable City Plan anticipated most reductions would result from reducing energy use, increasing renewable energy, improving mobility and active transportation, and

reducing waste. The following City programs and policies support or were developed to support the achievement of targeted reductions in GHG emissions listed in the Sustainable City Plan.

- **Resource Conservation Goal 1:** Significantly decrease overall community consumption, specifically the consumption of non-local, non-renewable, non-recyclable, and non-recycled materials, water, and energy and fuels.
- **Resource Conservation Goal 2:** The City should take a leadership role in encouraging sustainable procurement, extended producer responsibility and should model innovative strategies to become a zero waste city.
- **Resource Conservation Goal 3:** Within renewable limits, encourage the use of local, non-polluting, renewable and recycled resources (water, energy, and material resources).
- **Environment and Public Health Goal 1:** Protect and enhance environmental health and public health by minimizing and where possible eliminating:
 - The use of hazardous or toxic materials by residents, businesses and city operations;
 - The levels of pollutants entering the air, soil and water; and
 - The risks that environmental problems pose to human and ecological health.
- **Transportation Goal 1:** Create a multi-modal transportation system that minimizes and, where possible, eliminates pollution and motor vehicle congestion while ensuring safe mobility and access for all without compromising our ability to protect public health and safety.
- **Transportation Goal 2:** Facilitate a reduction in automobile dependency in favor of affordable alternative, sustainable modes of travel.
- **Sustainable Local Economy Goal 2:** Businesses, organizations and local government agencies within Santa Monica continue to increase the efficiency of their use of resources through the adoption of sustainable business practices.
- **Open Space and Land Use Goal 2:** Implement land use and transportation planning and policies to create compact, mixed-use projects, forming urban villages designed to maximize affordable housing and encourage walking, bicycling, and the use of existing and future public transit systems.

City of Santa Monica Climate Action and Adaptation Plan

In May 2019, the City adopted the Climate Action and Adaptation Plan (CAAP) to help the City meet its goal of carbon neutrality by 2050 and its interim goal of reducing GHG emissions to 80 percent below 1990 levels by 2030. The 2019 CAAP identifies eight objectives that, if completed by the end of 2030, would achieve the City's interim GHG

emissions reduction goal. These objectives are grouped in the following three categories: Zero Net Carbon Buildings, Zero Waste, and Sustainable Mobility. Objectives relevant to the proposed Project include:

- **Objective 1:** Achieve 100 percent renewable grid electricity.
- **Objective 2:** Install 100 MW of local solar energy.
- **Objective 3:** Reduce fossil fuel use 20 percent in existing buildings.
- **Objective 4:** Discourage fossil fuels in new buildings.
- **Objective 6:** Convert 50 percent of local trips to foot, bike, scooter & skateboard.
- **Objective 7:** Convert 25 percent of commuter trips to transit.
- **Objective 8:** Convert 50 percent of vehicles to electric or zero emission.

The intent of the CAAP is to provide overarching policy direction with respect to climate change through Citywide objectives and broad strategies to reduce GHG emissions. The CAAP is not a regulatory plan to be applied on a project-specific basis. Rather, the City recognizes that GHG reduction goals cannot be achieved by individual projects alone, but instead requires a comprehensive Citywide approach that would include the enactment of future plans, changes to existing ordinances, and an integrated and sustainable approach to land use/transportation planning.

The following City programs and policies support or were developed to support the achievement of targeted reductions in GHG emissions listed in the CAAP.

- **Policy ZNC1:** Implement a Community Choice Energy (CCE) Program. Implement CCE in Santa Monica, offering the highest amount of cost-competitive renewable energy. Develop programs to incentivize new local renewable-energy projects. Adopt rates to achieve 100 percent renewable energy by 2025.
- **Policy ZNC5:** Adopt a Carbon Reduction Ordinance for Existing Buildings. Adopt a Carbon Reduction Ordinance to require energy benchmarking and carbon performance of existing buildings over 20,000 square feet (sf), including multifamily buildings. Require a reduction of fossil fuel use of covered buildings by 15 percent in five years and elimination of fossil fuel use by 2050.
- **Policy ZNC8:** Adopt Carbon Neutral Construction Codes. Require New Construction for commercial, mixed-use and multi-family properties to achieve zero net carbon onsite or pay in-lieu carbon impact fee to offset fossil fuel use. Require electric-ready construction for future electrification of appliances and buildings systems. Ensure that affordable housing developers have additional financing or compliance alternatives available.

- **Policy ZNC11:** Create Equitable Access to Clean Energy Programs. Partner with utilities and the Clean Power Alliance to provide free home-energy audits and upgrade incentives for low-income households and affordable housing developers and property owners.
- **Policy ZW1:** Implement Citywide Organics Recycling. Require waste diversion stations (trash, recycling, composting) in all businesses. Develop outreach and enforcement programs to ensure commercial and residential organics recycling citywide.
- **Policy ZW5:** Increase Construction and Demolition Debris Diversion Requirements. Explore fees and fines to create more incentives for recycling, composting and salvage, while discouraging landfill waste. Provide educational resources to promote responsible demolition and deconstruction.
- **Policy SM6:** Complete Streets Network. Increase the extent and quality of the complete street network and greenways to ensure residents and visitors alike have safe, convenient, and affordable transportation options. Create designated bike lanes that are protected to provide greater safety and assurance for all riders. Emphasize the movement of people with greater space dedicated to space efficient and low emission modes of transportation. Lower speed limits to improve safety. Expand publicly owned spaces and work with property owners to facilitate public access.
- **Policy SM8:** Prioritize Transit-Oriented Affordable Housing. Increase the housing-to-jobs ratio by prioritizing the expansion and investment in affordable housing located near dense transit hubs with limited parking, through local zoning and incentives.
- **Policy SM12:** Increase Charging Infrastructure for Electric Vehicles and Electric Mobility Devices. Expand network of off- and on-street public charging stations to 1,000 ports by 2025. Provide charging stations that will accommodate a wide range of vehicle types including bicycles, scooters and other mobility devices. Provide outreach and additional incentives for renters, lower-income individuals and non-profit property owners. Implement emerging best practices in electric vehicle (EV) technology, including mobile charging, wireless charging, energy storage, and web/smartphone applications.

Santa Monica Municipal Code: Chapter 8.36 Energy Code

The City recently updated its Energy Code that amended Title 24 Part 6 of the California Energy Code and Title 24, Part 11 of the California Green Building Standards Code. The local amendments are part of the City's efforts to achieve carbon neutrality. The revised Energy Code, which was effective on January 1, 2020, requires new buildings in Santa Monica to

achieve one of two design pathways for complying with the City’s Energy Code: all-electric design or mixed-fuel design. As an incentive to design all-electric buildings, a higher level of energy efficiency would be required for mixed-fuel buildings. All-electric buildings would not be subject to higher levels of energy efficiency and may be built to the State’s standard design requirements. All-electric buildings powered by a combination of onsite solar and 100 percent Green Power from CPA are effectively Zero-Emission Buildings. The energy requirements for new building types are as follows:

- For new single-family, duplex, and multi-family residential buildings up to three stories:
 - All-Electric Building shall be designed to code established by the 2019 California Energy Code (CEC).
 - Mixed-Fuel Building shall be designed to CalGreen Tier 1 established by the 2019 CEC. CalGreen Tier 1 buildings have additional integrated efficiency and onsite renewable energy sufficient to achieve a Total Energy Design Rating of 10 or less.
- For new multi-family buildings, four stories and greater, and new hotels and motels:
 - All new buildings shall have a solar photovoltaic (PV) system with a minimum rating of 2 watts per square foot of the building’s footprint.
 - All-Electric Building shall be designed to code established by the 2019 CEC.
 - Mixed-Fuel Building shall be designed to be 5 percent more efficient than the code established by the 2019 CEC. (A change from the current Energy Reach Code, which requires these buildings to be 10 percent more efficient is the result of the cost-effectiveness study.)
- For all other new non-residential buildings:
 - All new buildings shall have a solar PV system with a minimum rating of 2 watts per square foot of the building’s footprint.
 - All-Electric Building shall be designed to code established by the 2019 CEC.
 - Mixed-Fuel Building shall be designed to be 10 percent more efficient than the code established by the 2019 CEC.

3.3.3 Impact Assessment Methodology

Thresholds for Determining Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts from GHG emissions. Specifically, the CEQA Guidelines state that a proposed project may have a significant adverse impact if it:

- GHG-1** Generates greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- GHG-2** Conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

According to the California Air Pollution Control Officers Association (CAPCOA), “GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective” (CAPCOA 2008). CEQA Guidelines Section 15064.4(b) states that “in determining the significance of a project’s greenhouse gas emissions, the lead agency should focus its analysis on the reasonable foreseeable incremental contribution of the project’s emissions to the effects of climate change. A project’s incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions.” Due to the global context of climate change, GHG analysis is based on the cumulative impact of emissions.

Generally, the evaluation of an impact under CEQA involves comparing the project’s effects against a threshold of significance. The CEQA Guidelines clarify that “when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.” For GHG emissions and global warming, there currently is not an established, universally agreed-upon quantified threshold of significance for GHG impacts. The CEQA Guidelines do not establish a quantified threshold of significance for GHG impacts. Instead, lead agencies have the discretion to establish significance thresholds for their respective jurisdictions. A lead agency may look to thresholds developed by other public agencies or other expert entities, so long as the threshold chosen is supported by substantial evidence.

The CEQA Guidelines Section 15064.4(b) recommend considering certain factors when determining the significance of a project’s GHG emissions, including: (1) the extent to which the project may increase or reduce GHG emissions as compared to the existing conditions; (2) whether the project’s GHG emissions exceeds a significance threshold that the lead agency determines applies to the project; and (3) extent to which the project complies with regulations or requirements adopted to implement a State-wide, regional, or local plan for the reduction or mitigation of GHGs.

Even in the absence of clearly defined thresholds for GHG emissions, the CEQA Guidelines Section 15064.4 provides guidance to lead agencies for determining the significance of impacts from GHG emissions. Section 15064.4(a) provides that a lead agency should make a good-faith effort based, to the extent possible, on scientific and factual data to describe, calculate, or estimate the amount of GHG emissions resulting from a project. CEQA Guidelines Section 15064.4(a) further provides that a lead agency shall have the discretion to determine, in the context of a particular project, whether: (1) to use a model or methodology to quantify GHG emissions resulting from a project and which model

methodology to use; and/or (2) to rely on qualitative analysis or performance-based standards.

Pursuant to the CEQA Guidelines Section 15064.4(a), the analysis presented herein uses a model or methodology to quantify GHG emissions resulting from the proposed Project. The analysis contained herein provides a good-faith effort to describe, calculate, and estimate GHG emissions resulting from the proposed Project.

Although the GHG emissions have been quantified for the proposed Project, neither CARB, South Coast Air Quality Management District (SCAQMD), SCAG, nor the City have adopted quantitative significance thresholds for assessing impacts related to GHG emissions applicable to the proposed Project. Further, while the City completed their CAAP in 2019, it does not qualify for tiering pursuant to CEQA Guidelines Section 15183.5 because the CAAP has not undergone CEQA review per the tiering requirements from CEQA Guidelines Section 15183.5. Therefore, the analysis herein cannot rely on a qualitative tiering analysis with the City's CAAP.

While no thresholds have been formally adopted, the SCAQMD has been evaluating GHG significance thresholds since April 2008. Most recently, in September 2010, SCAQMD proposed a tiered efficiency target approach to evaluate potential GHG impacts from various uses. This tiered approach allowed for flexibility when analyzing GHG emissions based on project size, land use type, or other characteristics. The various tiers include: (1) potential CEQA exemptions for certain projects; (2) compliance with a qualified GHG reduction strategy; (3) comparison with separate screening level thresholds for industrial (10,000 MT CO₂e/year), commercial (1,400 MT CO₂e/year), residential (3,500 MT CO₂e/year), and mixed-use (3,000 MT CO₂e/year) projects or comparison against a single numerical screening threshold of 3,000 MT CO₂e/year for all non-industrial projects; (4) consistency with compliance options, including a performance-based reduction analysis (i.e., compare with a Business-As-Usual level), compliance with AB 32, and/or comparison with efficiency-based thresholds (i.e., quantitative thresholds that are based on a per capita efficiency metric; 4.8 MT CO₂e/service population/year for project level analysis and 6.6 MT CO₂e/service population/year for plan level analysis); and/or (5) implement offsite mitigation to reduce GHG emission impacts to a less-than-significant level. The draft GHG guidance is included as part of the periodic updates to SCAQMD's Air Quality Handbook; however, the SCAQMD draft interim guidance was never officially adopted, and the proposed thresholds were not designed for versatile application to unique project types such as the proposed Project. These proposed targets have also not been adopted by the SCAQMD or distributed for widespread public review and comment, and the working group tasked with developing the targets has not met since September 2010. Additionally, the efficiency targets proposed under SCAQMD's Tier 4 threshold are no longer applicable as they were specific to outdated AB 32 goals and do not consider more recently adopted reduction targets contained in SB 32 and EO B-30-15, or updated State policy for achieving carbon neutrality by no later than 2045.

To date, the CARB, SCAQMD, and the City have not adopted new efficiency targets established consistent with SB 32 for each sector for the 2030 and 2050 target years; however, various other organizations have published technical guidance evaluating potential 2030 efficiency metrics. For instance, in October 2016, the Association of Environmental Professionals (AEP) published *The Final White Paper Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California* (2016). AEP's technical guidance presents data and calculations for a potential adjusted statewide 1990 land use sector emissions inventory and new metric for 2030 of 2.7 MT CO₂e/service population/year for the land use sector.

In addition to evaluation of a project's impacts against a quantifiable significant threshold, per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can also be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions." Thus, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with programs and/or other regulatory schemes to reduce GHG emissions.

In light of this shifting regulatory environment and available threshold concepts recommended by expert agencies, for the purposes of this CEQA analysis, a project's contribution to cumulative impacts to global climate change would be considered significant if the proposed Project would:

- Generate net new GHG emissions exceeding 3,000 MT CO₂e/year OR generate GHG emissions from land use sources exceeding 2.7 MT CO₂e/service population/year; or
- Conflict with (and thereby be inconsistent with) the applicable regulatory plans and policies to reduce GHG emissions, which include the emissions reduction measures included within the LUCE, Sustainable City Plan, and CAAP; SCAG's 2020-2045 RTP/SCS (Connect SoCal); AB 32, SB 32, and SB 375; the LCI and Climate Action Team recommendations; or CARB's 2022 Scoping Plan.

Methodology

CEQA Guidelines Section 15064.4 gives lead agencies the discretion to determine whether to assess the significance of GHG emissions quantitatively or qualitatively. Under either approach, the lead agency's analysis must demonstrate a good faith effort to disclose the

amount and significance of GHG emissions resulting from a project, based to the extent possible on scientific and factual data (CEQA Guidelines Section 15064.4[a]). The threshold for evaluating the significance of GHG emissions is based on consistency with applicable regulatory plans and policies to reduce GHG emissions; however, in a good faith effort to fully disclose the potential GHG emissions associated with the proposed Project, the City has also chosen to quantify GHG emissions associated with the proposed Project, as described in further detail below.

Methodology for Assessing Consistency with GHG Reduction Plans

The analysis of potential conflicts with an applicable regulatory plans and policies to reduce GHG emissions assesses whether the proposed Project would be consistent with applicable GHG plans at the State, regional, and local levels. At the State level, the CARB's 2017 Scoping Plan Update provides strategies and recommendations for achieving the State's 2020, 2030, and 2050 GHG reduction targets. Additionally, the 2017 Scoping Plan Update specifically addresses transportation-related GHG emissions, and provides technical information on what level of State-wide VMT reduction would promote achievement of State-wide GHG emissions reduction targets and the 2017 Scoping Plan Update. Further, the California Climate Action Team Report provides recommendations for specific emission reduction strategies for reducing GHG emissions and reaching the targets established in AB 32 and Executive Order S-3-05.

Locally, the City's GHG reduction goals are contained within the CAAP. The intent of the CAAP is to provide overarching policy direction with respect to climate change through City-wide objectives and broad strategies to reduce GHG emissions. For the purposes of this EIR, the analysis focuses on whether the proposed Project would support, and not hinder, the City-wide objectives and goals of the CAAP. The City has also adopted the LUCE and Sustainable City Plan as well as Green Building Standards and the 2020 Energy Reach Code, each of which include goals, policies and actions for the purpose of reducing local GHG emissions. Thus, if implementation of the proposed Project is consistent with these policies and regulations, it would result in a less than significant impact, because it would be consistent with the overarching local and State regulations on GHG reduction.

Methodology for Estimating GHG Emissions

For disclosure in this EIR, total GHG emissions (i.e., construction and operation) from the proposed Project were quantified to provide information to decision makers and the public regarding the level of the annual GHG emissions associated with the proposed Project. GHG emissions are typically separated into three categories that reflect different aspects of ownership or control over emissions:

- **Scope 1:** Direct, onsite combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).
- **Scope 2:** Indirect, offsite emissions associated with purchased electricity or purchased steam.

- **Scope 3:** Indirect emissions associated with other emissions sources, such as third-party vehicles and energy required for water pumping and treatment for end-uses.

The proposed Project would result in net GHG operational emissions directly from on-road mobile vehicles, electricity, and natural gas, and indirectly from water conveyance, wastewater generation, and solid waste handling. In addition, construction activities such as demolition, hauling, and construction worker trips would generate GHG emissions. Since potential impacts resulting from GHG emissions are long-term rather than acute, GHG emissions are calculated on an annual basis.

Estimated GHG emissions from the on-site and off-site construction activities associated with the proposed Project were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. CalEEMod is a planning tool for estimating emissions related to land use projects. The model incorporates EMFAC2021 emission factors to estimate on-road vehicle emissions; and emission factors and assumptions from the CARB's OFFROAD 2007 and OFFROAD2011 model to estimate off-road construction equipment emissions.

For the purpose of this analysis, construction of the proposed Project was assumed to begin in Summer 2026 and finish in Spring 2029. However, two separate construction phasing schedules were developed and modeled. The first construction phasing schedule assumes a "single-phased" construction approach that would result in closure of the entire Park. The second construction phasing schedule assumes a more detailed "phased" construction approach, in which certain Park facilities would be temporarily closed to accommodate construction, demolition, and staging activities, and unaffected Park facilities would remain open and operational during such time. The first construction phasing schedule assumes all funding, entitlements, and approvals for the entirety of the proposed improvements occurs at one time, whereas the second construction phasing schedule assumes that funding, entitlements, and approvals for the various improvements occur in phases. The second construction phasing schedule ("detailed phase construction schedule") more accurately represents the construction phasing assumptions described in Chapter 2.0, *Project Description*.

For each construction phasing schedule, CalEEMod default construction duration assumptions were utilized to estimate the number of days to execute the following construction activities:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving

- Architectural Coating

CalEEMod default construction assumptions for the types and numbers of construction equipment and worker trips by activity were utilized for each construction phasing scenario.

3.3.4 Project Impacts and Mitigation Measures

Impact Description (GHG-1)

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG-1 **The proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. This impact would be *less than significant without mitigation*.**

As previously described, to estimate construction emissions, two phasing schedules were modeled: one assumes a single-phase approach requiring full Park closure, while the other uses a phased strategy allowing partial operations during construction. The phased schedule, which staggers funding and approvals, more accurately reflects the assumptions outlined in Chapter 2.0, *Project Description*.

CalEEMod default construction assumptions for the types and numbers of construction equipment and worker trips by activity were utilized for each construction phasing scenario. Total annual GHG emissions for construction of the proposed Project were estimated using CalEEMod and are presented in Tables 3.3-2 and 3.3-3 for the two modeled construction phasing scenarios. The GHG emissions shown are based on a general assumption that construction equipment would operate continuously throughout the workday. In reality, however, construction equipment operates periodically or cyclically throughout the workday. Therefore, the GHG emissions shown reflect a conservative, worst-case estimate.

Table 3.3-2. GHG Emissions from Construction (Single Phase Construction)

Year	GHG (MT CO ₂ e/yr)
2026	801
2027	365
2028	365
2029	342
TOTAL	1,873
Amortized over 30 years	62.4

Table 3.3-3. GHG Emissions from Construction (Detailed Phase Construction)

Year	GHG (MT CO ₂ e/yr)
2026	422

Year	GHG (MT CO ₂ e/yr)
2027	169
2028	656
2029	374
TOTAL	1,621
Amortized over 30 years	54.0

As indicated in Tables 3.3-2 and 3.3-2 above, construction activities for the proposed Project would result in temporary generation of GHG emissions totaling 1,873 MT CO₂e when assuming construction would occur over a single phase, or a total of 1,621 MT CO₂e when construction activities are phased. As described above, the SCAQMD recommends that construction-related GHG emissions be amortized over a project’s lifetime (typically 30 years) to include these emissions as part of a project’s annualized lifetime total emissions. Pursuant to SCAQMD methodology, the estimated construction GHG emissions have been amortized over a 30-year lifetime period and would total approximately 62.4 MT CO₂e/year, or 54.0 MT CO₂e/year, depending on the construction scenario. Neither construction scenario would generate construction GHG emissions that would exceed the screening level threshold of 3,000 MTCO₂e/year. Therefore, the proposed Project would not generate GHG emissions that are considered to have a significant impact on the environment, and impacts would be *less than significant without mitigation*.

Operation

Long-term operation of the proposed Project would generate air pollutant emissions that would be similar to existing conditions. As previously described, the proposed Project would involve the replacement and optimization of existing recreational facilities and sports fields at Memorial Park, along with the installation of features and improvements that would support multimodal transportation, reducing vehicle-related GHG emissions. Replacement facilities also would be consistent with the City’s Green Building Code and Energy Reach Code and are likely to reduce operational GHG emissions when compared to GHG emissions from existing facilities.

Therefore, the proposed Project would not generate substantial new operational GHG emissions and impacts would be *less than significant without mitigation*.

Impact Description (GHG-2)

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

GHG-2 **The proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be *less than significant without mitigation*.**

The City's adopted GHG reduction plans and policies are set forth in the LUCE, Sustainable City Plan, the CAAP, and the Santa Monica Municipal Code (SMMC). The proposed Project would be consistent with these goals and policies related to GHG emissions. The proposed Project includes features that support multimodal transportation and reduce reliance on single-rider automobile use. The proposed Project is centrally located within the Pico Neighborhood with vehicle, bicycle, and pedestrian connectivity to surrounding communities and businesses. In addition, the proposed Project would expand the City's bike network via the construction of a new Class I shared bike path on Colorado Avenue, connecting to the Exposition Corridor Bike Path and, pursuant to the City's EV Charger Reach Code, the proposed Project would include parking spaces equipped with Level 2 EV chargers and parking spaces installed as Level 2 EV Capable.

The proposed Project would comply with the requirements of the City's Green Building Code that aims to reduce the use of volatile organic compounds (VOC) emitting materials, strengthen water efficiency conservation, increase construction waste recycling, and increase energy efficiency. Further, the proposed Project would be designed in compliance with the City's Energy Reach Code. Other sustainable design features that would be finalized during the design process include the installation of energy efficient heating, ventilation, and air conditioning (HVAC) systems, operable windows to increase air flow, a high-performance building envelope to maximize insulation, lighting systems with occupancy sensors and dimmers, energy efficient building materials and appliances, cool roof or green roofs (consistent with LUCE Policy S5.6), and landscaping to reduce building energy loads (consistent with LUCE Policy S5.5).

Therefore, the proposed Project would be considered consistent with applicable local plans, policies, and regulations adopted (in part) for the purpose of reducing the emissions of GHGs. Impacts would be *less than significant without mitigation*.

3.3.5 Cumulative Impacts

The thresholds set forth above evaluate both the Project-specific impacts, as well as the contribution of the proposed Project to cumulative impacts, involving GHG emissions. The plans, policies, and regulations addressed above are designed to address a project's contribution to cumulative impacts associated with GHG emissions at a regional (Basin-wide) and local (City-wide) level. If a project does not comply with the requirements of applicable plans, policies, and regulations, it is considered to have a cumulatively considerable contribution to significant cumulative impacts associated with GHG emissions.

Similarly, the SCAQMD's thresholds and guidance evaluate impacts associated with GHG emissions using specific quantitative thresholds for criteria pollutants and GHG, which the SCAQMD adopted after accounting for other projects within, and using air emissions

modeling scenarios for, the entire Basin. Therefore, a project that exceeds an applicable quantitative threshold will have a significant project-specific impact and will make a cumulatively considerable contribution to a significant cumulative impact, regarding GHG emissions.

As previously described, the proposed Project would be consistent with the applicable plans, policies, and regulations regarding GHG emissions, including (but not limited to) those involving construction activities, green building design, and energy efficiency. Additionally, the proposed Project would not exceed any of the construction-related nor operational-related GHG emissions quantitative thresholds set forth above.

Therefore, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact involving GHG emissions.

3.4 HAZARDS AND HAZARDOUS MATERIALS

3.4.1 Introduction

This section describes the existing conditions related to hazards and hazardous materials in the vicinity of the Project site and analyzes the potential for impacts due to the release of hazardous materials that could result from the proposed Memorial Park Redevelopment and Expansion Project (Project).

“Hazardous materials” are substances with physical and chemical properties of flammability, corrosivity, reactivity, or toxicity, which may pose a threat to human health or the environment. Hazardous materials are chemicals such as petroleum, oils, lubricants, solvents, pesticides, herbicides, asbestos-containing materials (ACMs), lead-based paints (LBPs), and other regulated materials (e.g., polychlorinated biphenyls [PCBs]). Additionally, “release” describes spills, leaks, illegal dumping, or other methods of hazardous materials exposure in soil, groundwater, or surface water. Areas where historical releases of hazardous materials have occurred could pose a risk to the environment and public health.

Other hazards are addressed in other sections of this Environmental Impact Report (EIR):

- Section 3.1, *Air Quality*, analyzes impacts regarding air pollution, such as toxic air contaminants (TACs) and particulate matter (PM).
- Appendix A includes the Initial Study prepared for the proposed Project, which analyzes impacts regarding: geotechnical hazards, such as seismic shaking, seismic-related ground failure, and landslides; and fire hazards and response/suppression systems.

3.4.2 Environmental Setting

As described in Chapter 2.0, *Project Description*, of this EIR, the Project site is centrally located within the City’s Pico Neighborhood, an urbanized area with various wholesale and retail commercial stores, service-oriented businesses, professional offices, and educational facilities. There are several schools within the vicinity of the Project site, including Crossroad Elementary School approximately 900 feet east, Beginnings Learning Center approximately 0.25 miles northeast, and Santa Monica Montessori School approximately 0.25 miles northeast, of the Project site. Further, the nearest airport is the Santa Monica Municipal Airport (SMO), located approximately 2 miles southeast of the Project site.

The 13.2-acre Project site is fully developed with the existing Park and Colorado Yards site (former Fisher Lumber Company site). The Park is located in the central and southeastern portions of the Project site, and it includes the Community Recreation Center, baseball fields, tennis courts, skateparks, playground, dog run, concession stand, restroom, and a surface parking lot. The former Fisher Lumber site is located on the northwestern portion of the Project site and consists of offices, a maintenance shop, equipment storage, and fleet storage and parking.

Potential Presence of Hazardous Materials Associated with Existing Uses

A Phase I Environmental Site Assessment (ESA) was prepared for the Project site to identify the material risks and known environmental conditions at the Project site (WSP 2025a; see Appendix G). The Phase I ESA included: (1) a visual site inspection of the Project site and surrounding vicinity; (2) a historical records review; and (3) an environmental regulatory database search.

The following sections present the observations pertaining to the general physical conditions of the Project site and the potential presence of hazardous materials.

Former Fisher Lumber / Colorado Yards Site

The former Fisher Lumber / Colorado Yards site, addressed as 1601 14th Street, is occupied by predominantly light-industrial facilities, including an office, a maintenance shop, vehicle/fleet storage, parking, chemical and material storage, and inactive railroad tracks. Specifically, the following materials and storage facilities were observed onsite:

- Bagged fertilizers
- Pesticides in flammable cabinets
- Paint
- Thinners
- Adhesives
- Gasoline and diesel fuel in five-gallon cans
- 55-gallon drums of oil and waste oil on secondary containment pallets
- Two above-ground diesel fuel tanks, double-walled
- Bulk soil/mulch

The property shows minimal signs of previous leaks, spills, and releases. There were no leaks, spills, or staining observed on the ground surface near the above ground storage tanks (ASTs). The storage yard had exposed soil where a concrete pad had been broken, but it did not appear stained. Oil leaks and stains were observed on the flooring inside the maintenance shop and on the asphalt outdoor storage and parking areas; however, these

were a *de minimis* condition, or a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Lastly, no oily sheen was observed on the water inside the drains in the storage yard.

As described in *Historical Uses* below, the former Fisher Lumber / Colorado Yards site is occupied by inactive tracks, previously used by Pacific Railroad. The site assessor did not observe evidence of related releases or stains; however, railroad use is often associated with heavy metals and wood preservative contaminants, such as creosote and arsenic. Due to the historical use of a railroad, these contaminants are likely to have impacted the subsurface at the Project site and are considered to represent a recognized environmental condition (REC).¹

Memorial Park

As previously described, Memorial Park is occupied by the Community Recreation Center, baseball fields, tennis courts, skateparks, playground, dog run, concession stand, restroom, and a surface parking lot. The site assessor did not observe spills or staining that were of environmental concern. Specifically, the concession stand, located on the southeast side of the Project site, includes an above-ground grease trap that is reportedly maintained as needed. Kitchen oil residue and stains were observed on the nearby wall but are a *de minimis* condition. In addition, there was no evidence of spills near the municipal trash cans or dumpsters.

Further, it is estimated that the construction of the existing buildings on Project site occurred starting in the early 1970's (Ostashay & Associates 2025; see Appendix F). Based on the age of the buildings, the following hazardous materials are of concern:

- **ACMs** – Asbestos is a carcinogenic mineral fiber that was widely used in a variety of building construction materials for insulation, as well as in friction and heat-resistant products. The use and manufacturing of ACMs was banned in 1977 in California. Older buildings constructed prior to 1978 may contain ACMs. When left intact and undisturbed, these materials do not pose a health risk to building occupants. Asbestos release can occur after ACMs are disturbed by cutting, sanding, or other remodeling or demolition activities. Improper attempts to remove ACMs can release

¹ A REC is defined as (1) the presence of hazardous substances or petroleum products in, on, or at a property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at a property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at a property under conditions that pose a material threat of a future release to the environment.

asbestos fibers into the air, increasing asbestos levels and affecting human respiratory health.

- **LBP** – Lead is a harmful environmental pollutant with potential exposure pathways through air, drinking water, food, contaminated soil, deteriorating paint, and dust. Before the dangers of lead were documented, it was widely used in paint. In 1978, the State of California banned the use of LBPs. Older buildings constructed prior to 1978 may contain LBPs. If LBPs are improperly removed from surfaces by dry scraping or sanding, LBP can be absorbed into the body and can pose a potential public health risk.
- **Mold** – The presence of visible water damage, damp materials, visible mold, or mold odor in buildings increases the potential risks of respiratory disease for occupants. Known health risks include the development of asthma, allergies, respiratory infections, increased wheeze, cough, difficulty breathing, and other symptoms (California Department of Public Health 2016).

Historical Uses

The Phase I ESA included a historical records review of the Project site and the surrounding properties to identify the previous uses and their likelihood of resulting in a REC. To assess the land use history for the vicinity of the Project site, the Phase I ESA included a review of the following sources:

- Historic aerial photographs
- Historical U.S. Geological Survey (USGS) topographical maps
- Local street directory search results
- Sanborn® (Fire Insurance) Maps
- Building Permits included in the Radius Report
- Google Earth Pro historical aerial photographs

The historical records indicate that the Project site and surrounding properties were previously developed with similar uses as the existing Park and former Fisher Lumber / Colorado Yards site. Table 3.4-1 includes a summary of the previous development.

Table 3.4-1 Summary of Development within the Project Area

Time Period	Project Site	Adjoining Properties
1894-1900	Undeveloped except for railroad tracks.	Undeveloped except for an adjoining roadway northeast of the site.
1902-1924	Predominantly undeveloped except for three structures and a southeast trending road across the middle of the site.	Unidentified buildings and roads on the northwest, northeast, and southwest sides of the site.
1928	Possible outdoor storage area on the former Fisher Lumber property. The stored materials were not identified.	Undeveloped and residential dwellings to the northwest, northeast, and southeast. Likely commercial development to the southwest.
1938-1950	The Santa Monica Municipal Stadium, The Spot, Santa Monica City Police Activities League, Virginia Avenue Park Community Center, ballfields, and parking are observed on the existing Memorial Park property. John Fisher Lumber occupies the northern portion of the site with two lumber sheds and an office.	Predominantly commercial and industrial, including “Sash, Door & H’DW” warehouse, dry cleaning/clothes pressing, a possible gas station with gas/oil tanks, auto wrecking/auto body repair, machine shops, and door manufacturing. To the northeast is the Garfield Public School and a residential dwelling.
1952-2012	Ballfields, structures, parking, and grass areas on the Memorial Park property. Renovated buildings are on the Fisher Lumber property. By 2012, the previously observed railroad tracks are no longer depicted on the topographic maps.	Predominantly commercial, including auto wrecking/auto repair, machine shops, aerospace test equipment manufacturing, plastic surfboard manufacturing, and a sheet metal shop. To the northeast is the Santa Monica Business Park, Santa Monica School District offices, and computer training office.
2015-2020	By 2016, site features appear similar to present day features.	Adjoining properties appear similar to the 2012 aerial photograph.

Sources: WSP 2024, see Appendix E

As indicated in Table 3.4-1, the Project site was developed with railroad tracks by 1894 and a commercial business consistent with Fisher Lumber and outside storage existed by 1928. Hazardous materials associated with railroad use and treated lumber include wood preservatives (e.g., creosote and arsenic) and heavy metals. Due to the probable outdoor storage of treated wood and the historic use of the railroad, contaminants associated with these uses have likely impacted the surrounding subsurface and are considered to represent a REC for the Project site.

Hazardous Materials Site Listing

As part of the Phase I ESA, an environmental regulatory database search of Federal, State, tribal, and proprietary records was conducted to identify previous release(s) of hazardous materials and/or known contamination at the Project site and in the surrounding vicinity. The environmental databases and supplemental sources include, but are not limited to, the following:

- Department of Toxic Substances Control's (DTSC's) Hazardous Waste Tracking System (HWTS)
- DTSC's HAZNET
- DTSC's Envirostor
- DTSC – Chatsworth and Cypress Offices
- Regional Water Quality Control Board (RWQCB) Geotracker
- RWQCB – Los Angeles Region, Division of Water Quality
- California Environmental Reporting System Hazardous Waste (CERS HAZ WASTE)
- Resource Conservation and Recovery Act Non Generators – No Longer Regulated (RCRA NONGEN/NLR)

Project Site

Based on the environmental regulatory database search, the Project site is listed in the following databases: HWTS, HAZNET, RCRA NONGEN/NLR, and CERS HAZ WASTE. The existing Park, located 1401 Olympic Boulevard, was listed for the disposal of 33.71 tons of Other Organic Solids (CA Waste Code: 352) in 2006. In addition, the former Fisher Lumber / Colorado Yards site, 1601 14th Street, was listed for the disposal of laboratory waste chemicals, detergent and soap, and unspecified organic liquids between 2014 and 2015. In addition, in 2015, the property was listed as disposing off-spec, aged, or surplus organics. One violation was reported in September 2023 for failure to label hazardous waste containers, with a return to compliance in October 2023. No other violations were listed. The Phase I ESA concludes that there is no evidence of releases supported, and the Project site is not considered to represent a REC.

Adjoining Properties

The properties adjoining the Project site (but separated by City streets) are generally commercial use with some manufacturing. These properties were listed under several databases associated with hazardous materials use, hazardous waste generation and disposal, historical gasoline or auto service stations, historical cleaners, underground storage tanks (USTs), closed leaking UST (LUST), and historical USTs. Several of the

database listings related to historic cleaners or historical gasoline/auto service stations, as described below.²

Dry Cleaning Facilities: The Environmental Data Resources, Inc. (EDR) Historical Cleaners Database lists Crescent Cleaners & Laundry (Crescent Cleaners, Crescent Soft Water Laun-DBY [EDR Radius Report IDs 8 through 12]), addressed at 1557 14th Street approximately 60 feet to the north of the Project site, as a historical cleaner from 1928 through 1992, with drycleaning listed from 1973 through 1992. Further, in 1983, the property was listed as a site on which perchloroethylene (PCE)-containing equipment was used.

Dry-cleaning services is often associated with the use and storage of hazardous materials, including PCE and petroleum hydrocarbon-solvents (e.g., Stoddard solvent). Petroleum hydrocarbon-based solvents and PCE liquid and vapor have the ability to permeate flooring and building foundations, entering the subsurface soils and potentially groundwater, and potentially volatilizing and migrating into buildings. This is considered a potential risk to human health. Short-term, high-level inhalation exposure can result in irritation of the upper respiratory tracts and eyes, kidney dysfunction, and neurological effects. Long-term exposure can result in neurological impacts including impaired cognitive and motor neurobehavioral performance as well as adverse effects in the kidney, liver, immune system and hematologic system, and on development and reproduction (U.S. Environmental Protection Agency [USEPA] 2012). The Phase I ESA concludes that while there were no reported releases, the environmental impacts from dry cleaning facilities cannot be ruled out. Therefore, given: (1) the close proximity to the Project site; (2) the long duration of drycleaning activities; and (3) the potential for environmental impacts, the properties are considered a potential environmental concern for the Project site.

LUST: The EDR environmental database records search identified Snyder Diamond; S&D Enterprises; S and D Enterprises; and 1X Snyder, Louis, H. (EDR Radius Report IDs 17 through 26), addressed at 1399 Olympic Boulevard, approximately 60 feet to the west, as a LUST site, where gasoline and diesel reportedly impacted the soil and groundwater in 2009. Remediation occurred, and, in 2024, the Los Angeles RWQCB granted the case with closure/no further action (NFA). The case closure summary indicated that the following remain in low level quantities in the groundwater, consistent with the Water Board's Low Threat Closure Policy: gasoline range petroleum hydrocarbon; benzene, toluene, ethylbenzene, and xylene (BTEX); and naphthalene (SWRCB 2025). Further, the groundwater flow direction is away from the Project site (i.e., the Project site is considered upgradient). Therefore, the listed property is not considered to represent an environmental concern, but is considered a Controlled REC based on the groundwater conditions.

² The Phase I ESA report found limited information regarding these past activities or chemical/petroleum hydrocarbon releases. The lack of information and regulatory status related to the historical gasoline, auto service stations, and historic cleaners are considered a data gap for the Project site.

3.4.3 Regulatory Setting

Several Federal, State, and local regulations limit the risk of upset during the use, transport, handling, storage, and disposal of hazardous materials. Hazardous materials management is subject to laws, policies, and regulations at all levels of government. The Federal enforcement agency is the USEPA. Enforcement agencies at the State level include two branches of the California Environmental Protection Agency (CalEPA): DTSC and the RWQCB. The Santa Monica Fire Department (SMFD) is the Certified Unified Program Agency (CUPA) at the local level for the City.

Federal Regulations

Federal agencies that regulate hazardous materials include the USEPA, Occupational Safety and Health Administration (OSHA), and U.S. Department of Transportation (USDOT). Applicable Federal regulations are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR). Some of the major Federal laws include the following:

- Resources Conservation and Recovery Act (RCRA);
- Toxic Substances Control Act (TSCA);
- Hazardous and Solid Waste Act (HSWA);
- Federal Insecticide, Fungicide, and Rodenticide Act;
- Asbestos Hazard Emergency Response Act;
- OSHA – Process Safety Management Standard (29 CFR §1910.119);
- Clean Water Act;
- Clean Air Act;
- Safe Drinking Water Act;
- National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR 61 Subpart M; and
- Residential Lead-Based Paint Hazard Reduction Act of 1992.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as the Superfund Act, was developed to protect the nation’s water, air, and land resources from the risks created by past chemical disposal practices. Under CERCLA, the USEPA is authorized to undertake short- or long-term actions for the cleanup of abandoned contaminated sites in the nation, known as Superfund sites, which pose a risk to human health or the environment. The USEPA maintains the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) database, which contains information on current Superfund sites, former Superfund sites,

and remediation activities. CERCLIS includes Superfund sites that are on the National Priorities List (NPL) or are being considered for the NPL.

USEPA Pacific Southwest Region 9 (Region 9)

The Project site is located within USEPA Region 9, which administers programs for Arizona, California, Hawai`i, Nevada, Pacific Territories, and 148 Native American tribes. Programs include the following:

- Superfund is USEPA's program to identify, investigate, and clean up uncontrolled or abandoned hazardous waste sites throughout the U.S.;
- Region 9's Brownfields Program works to clean up and redevelop potentially contaminated lands in the Pacific Southwest region, making it easier for such lands to become vital, functioning parts of their communities. It is also Region 9's program to prevent, prepare, and respond to environmental emergencies; and
- Region 9's PCB Program regulates the processing, distribution, use, cleanup, storage, and disposal of PCBs under the TSCA and also provides support for TSCA compliance to limit the manufacture, processing, and distribution of PCBs.

State Policies and Regulations

Primary State agencies with jurisdiction over hazardous chemical materials management include CalEPA, DTSC, and RWQCB. Other State agencies involved in hazardous materials management are the Department of Industrial Relations, State Office of Emergency Services, California Department of Fish and Wildlife (CDFW), California Air Resources Board (CARB), California Department of Transportation (Caltrans), State Office of Environmental Health Hazard Assessment, and the California Integrated Waste Management Board. The enforcement agencies for hazardous materials transportation regulations are the California Highway Patrol (CHP) and Caltrans. Hazardous materials waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations.

Hazardous chemical and biohazardous materials management laws include the following:

- Hazardous Waste Control Act;
- California Hazardous Materials Release Response Plans and Inventory Law (Business Plan Act);
- Safe Drinking Water and Toxic Enforcement Act (Proposition 65);
- Hazardous Substances Act;
- Hazardous Waste Management Planning and Facility Siting (Tanner Act); and
- Hazardous Materials Storage and Emergency Response.

DTSC EnviroStor Database

DTSC maintains a database that contains information on properties in California where hazardous substances have been released, or where the potential for a release exists. This database is known as EnviroStor (formerly CalSites) and is one of a number of databases that comprise the Cortese List and Spills, Leaks, Investigations, and Cleanups (SLIC) List. EnviroStor provides a brief history of cleanup activities, contaminants of concern, and scheduled future cleanup activities. The EnviroStor database also includes properties that have been remediated and certified by DTSC.

SWRCB GeoTracker Database

GeoTracker is the SWRCB's online database that: (1) provides access to statewide environmental data; and (2) tracks regulatory data for the following types of sites:

- LUST cleanup sites;
- Cleanup program sites (also known as site cleanups and formerly known as SLIC sites);
- Military sites including military UST sites, military privatized sites, and military cleanup sites;
- Land disposal sites (i.e., landfills);
- Permitted UST facilities;
- Waste discharge requirement sites; and
- Agricultural waivers program sites (also known as Irrigated Lands Regulatory Program [ILRP]).

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) regulates asbestos through Rule 1403, Asbestos Emissions from Renovation/Demolition Activities. Rule 1403 defines asbestos as a toxic material and controls the emissions of asbestos from demolition and renovation activities by specifying agency notifications, appropriate removal procedures, and handling and cleanup procedures. Rule 1403 applies to owners and operators involved in the demolition or renovation of asbestos-containing structures, asbestos storage facilities, and waste disposal sites. The SCAQMD also regulates volatile organic compound (VOC) emissions from contaminated soil through Rule 1166, Volatile Organic Compound Emissions from Decontamination of Soil. Rule 1166 sets requirements to control the emission of VOCs from excavating, grading, handling, and treating soil contaminated with VOCs as a result of leakage from storage or transfer operations, accidental spillage, or other deposition, including hydrocarbons.

California's Health and Safety Code 108945

California's Health and Safety Code 108945 (CA AB-652, 2021) prohibits the sale or distribution of new juvenile products containing either intentionally added PFAS or PFAS precursors, or total organic fluorine at or above 100 parts per million (ppm; or milligrams per kilogram [mg/kg]).

California's Health and Safety Code 108970

California's Health and Safety Code 108970 (CA AB-1817, 2022) prohibits the sale and distribution of textiles containing regulated PFAS at total organic fluorine levels above 100 ppm as of January 1, 2025 and 50 ppm as of January 1, 2027.

Local Policies and Regulations***CUPA Responsibilities***

The primary local agency, or CUPA, with responsibility for implementing Federal and State laws and regulations pertaining to hazardous materials management is the SMFD. The CUPA is certified by CalEPA to implement the six state environmental programs within the local agency's jurisdiction. This program was established under the amendments to the California Health and Safety Code pursuant to Senate Bill (SB) 1082. The six consolidated programs include:

- Hazardous Materials Reporting and Response Planning;
- Uniform Fire Code Business Plan;
- Hazardous Waste Generation and Onsite Treatment;
- Accidental Release Prevention;
- AST; and
- UST.

CalEPA certified the SMFD as the CUPA for the City in 1997. As the CUPA for the City, SMFD maintains the records regarding location and status of hazardous materials sites in the City and administers programs that regulate and enforce the transport, use, storage, manufacturing, and remediation of hazardous materials. The SMFD contracts with the Los Angeles County Fire Department for hazardous waste inspection and enforcement components of the Unified Program.

City of Santa Monica General Plan Safety Element, 2025 Update

The Safety Element of the General Plan contains several policies regarding fire hazards, hazardous materials, and emergency management. Specifically, it provides assessment of natural and manmade hazards associated with fires, as well as providing a framework and policies to guide future development and strengthen existing regulations within the City. The

policies that are applicable to the proposed Project and hazardous materials are listed below:

- Policy 3.1 Continue, enhance, and implement regulations and programs to reduce the potential release of hazardous materials.
- Action 3.1.1 The Santa Monica CUPA shall conduct annual inspections to ensure that hazardous materials are safely managed, hazardous wastes are properly disposed, hazardous materials are designed with secondary containment systems, and that all aboveground and underground tanks are monitored and maintained to prevent the release of hazardous substances to the environment.
- Action 3.1.2 Require new multi-unit buildings for occupancy in nonresidential districts to conduct a Phase I environmental site assessment to investigate for the presence of hazardous materials and/or waste contamination before the issuance of building permit. Continue to require remediation and construction techniques for adequate protection of construction workers, future occupants, adjacent residents, and the environment are adequately protected from hazards associated with contamination.
- Action 3.1.2 Continue to encourage residents and businesses to use safer alternate products and non-hazardous materials.
- Action 3.1.4 Continue to operate programs for business and residents that provide for the reduction of hazardous materials and for the safe and proper collection and disposal of hazardous waste.
- Action 3.2.1 Restrict or prohibit the siting of land uses that will generate or use significant hazardous materials near critical facilities and schools.

City of Santa Monica Municipal Code

Santa Monica Municipal Code (SMMC) Section 5.24 establishes Hazardous Materials Reporting and Response Planning and Hazardous Materials Management Plans requirements. SMMC Section 5.24.010 requires all businesses to declare to the City if they use, store, or manufacture any quantity of a hazardous or extremely hazardous material. An annual business plan must be submitted if the business uses, stores, or manufactures hazardous materials exceeding 55-gallons or more of liquid, 500-pounds or more of solid, and/or 200-cubic feet or more of a gas, at stand temperature and pressure. In addition to inventorying the materials in question, the business plan must describe emergency response plans and procedures to be used in the event of an accident. The requirements are established to prevent or mitigate the damage to the health and safety of persons and the environment from the release or threatened release of hazardous materials into the

workplace and environment. SMMC Section 8.104 requires that the installation, operation and removal of USTs be conducted under the authority of City issued permits.

3.4.4 Impact Assessment Methodology

Thresholds for Determining Significance

The following thresholds of significance are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. Appendix G of the CEQA Guidelines provides screening questions that address potential impacts related to a number of environmental issues. The City uses these questions as thresholds for determining the significance of impacts in its EIRs. The CEQA Guidelines provide that a lead agency may use the questions set forth in the Appendix G to assess the significance of a project's environmental effects. Although the use of Appendix G as a significance threshold is not mandatory, it is routinely sanctioned by the courts. For purposes of this EIR, implementation of the proposed Project may have a significant adverse impact related to hazards or hazardous materials if it:

- HAZ-1** Creates a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- HAZ-2** Creates a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involved in the release of hazardous materials into the environment;
- HAZ-3** Emits hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; and/or
- HAZ-4** Will 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 create a significant hazard to the public or the environment.

The Initial Study prepared for the proposed Project and included as Appendix A, concluded that the proposed Project would not result in a potentially significant impact associated with CEQA Checklist Questions e), f), and g).

- e) For a project located within an area that is subject to 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 result in a safety hazard or excessive noise for people residing or working in the project area;
- f) Impairs implementation of, or physically interferes with, an adopted emergency response plan or emergency evacuation plan; and/or

- g) Exposes people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

For the reasons described below, as well as in the *Hazards and Hazardous Material* discussions within the Initial Study and Chapter 4.0, *Other CEQA Considerations*, these issues will not be further analyzed in this EIR.

(e) (Airports). The Project site is not located within an area that is subject to an airport land use plan (e.g., the Airport Land Use Plan for the Santa Monica Municipal Airport). Accordingly, the proposed Project would not result in a safety hazard for people visiting or working at Memorial Park. Therefore, this issue will not be analyzed further in the EIR.

(f) (Emergency Response). The proposed Project would not result in the interference of emergency response or evacuation plans. The proposed Project would consist of development within a contiguous City block and would not substantially modify the surrounding roadways that would hinder or block evacuation routes. In addition, the proposed Project would be subject to emergency access and circulation requirements established in the City's Fire Code. Therefore, this issue will not be analyzed further in this EIR.

(g) (Wildfires). The Project site is located within an urbanized area and is not located in a designated high or very high fire hazards severity zone. The proposed Project would not exacerbate wildfire risk or otherwise increase public exposure to wildfires. Therefore, this issue will not be analyzed further in this EIR.

Methodology

As previously described, the following technical reports were prepared to identify potential hazards that could occur as a result of construction and operation of the proposed Project.

A Phase I ESA was prepared to identify the presence of existing hazardous materials and known environmental conditions at the Project site (WSP 2025a; see Appendix G) that could pose a hazard. The Phase I ESA included: (1) a visual site inspection of the Project site and surrounding vicinity; (2) a historical records review; and (3) an environmental regulatory database search.

Additionally, a literature review and technical memorandum was prepared to address potential health risk and other concerns related to PFAS and microplastics associated with artificial turf (WSP 2025b; see Appendix H).

3.4.5 Project Impacts and Mitigation Measures

Impact Description (HAZ-1)

Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

HAZ-1 **The proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be *less than significant with mitigation*.**

Construction and operational activities associated with the proposed Project would involve the routine use, transport, and disposal of common hazardous materials.

Demolition and construction activities would likely involve the short-term use of petroleum products, solvents, paints, and other regulated materials. Construction workers would be trained in safe handling of hazardous materials use pursuant to OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations. Additionally, the use, storage, transport, and disposal of construction-related hazardous materials would be subject to various Federal, State, and local regulations, including the Hazardous Waste Control Act (Title 26 of the California Code of Regulations [CCR]). In addition, the California Vehicle Code Section 31602(b) and 32104(a) would regulate the transport of hazardous materials through licensing and designated route restrictions.

Operations of the Park would entail routine cleaning and maintenance activities that involve the use and handling of commercially available hazardous materials. For example, the proposed Project would require routine landscape maintenance that would involve the use of pesticides, herbicides, and petroleum-based products (e.g., fuels and lubricants for maintenance activities). Further, the proposed recreational facilities, including the redeveloped Community Recreation Center and Community Hub Building, would likely involve the use of paints, solvents, sealants, and cleaning supplies. However, such materials would not be in quantities that are commercially reportable and would be handled in compliance with all applicable Federal, State, and local regulations established by the USEPA, CalEPA, OSHA, California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA), and the DTSC.

In addition to the common hazardous materials used during the construction and operation of buildings and landscapes, the proposed Project would include design features that contain potentially hazardous materials. Specifically, the proposed Project would include the installation of two synthetic turf combo turf fields. Additionally, the proposed Project would include the replacement of the existing children's playground with a new universally accessible playground. Scoping comments received in response to the Notice of Preparation (NOP) have asserted that materials used in artificial turf as well as plastic

playground equipment, particularly synthetic surfacing materials (e.g., used tire crumb, ethylene propylene diene monomer, polyvinyl chloride), pose significant risk from chemical exposure via dermal contact, inhalation and ingestion.

Human Health Risk Associated with Artificial Turf

Impacts related to the routine use of the synthetic turf would be significant if the use resulted in adverse health effects due to inhalation of vapors and particulates from the synthetic turf, ingestion of the synthetic turf, dermal contact with the synthetic turf materials, or inappropriate use of detergents and disinfectants to maintain the field. Impacts related to routine disposal of hazardous materials could occur because the turf requires disposal or recycling at the end of its useful life.

As described further in Appendix H, dozens of regulatory and peer-reviewed studies have evaluated exposure and risk related to artificial turf and recycled rubber infill in the past decade and determined that there is no evidence that the levels of chemicals in recycled rubber infill present a public health concern. Many Federal agencies within the U.S. are continuing to study these issues, with the USEPA, Agency for Toxic Substances and Disease Registry (ATSDR), and the National Toxicology Program (NTP) continuing to fund research on artificial turf and recycled tire crumb rubber infill (USEPA et al. 2019a, 2019b) but almost all of that controversy is the result of studies that have only measured chemicals in recycled rubber – they have not evaluated potential exposure to the chemicals in recycled rubber or the risk of that exposure. The mere presence of chemicals is not indicative of potential risk; all consumer products we use daily are made up of chemicals that could be hazardous. The scientific and medical community agree that there is a significant difference between the presence of a chemical and risk from exposure to that chemical. In order to understand potential human health risk, we must understand exposure and dose.

Several studies that have comprehensively evaluated the issues surrounding artificial turf fields have been published within, either in the peer-reviewed literature or by government public health agencies. On the Federal level, within the U.S., the USEPA (in partnership with the Centers for Disease Control and Prevention's [CDC's] ATSDR) and the NTP released their findings from a comprehensive study of artificial turf fields in 2019 (USEPA et al. 2019a, 2019b). In July 2019, USEPA and ATSDR released an evaluation of potential exposure to recycled tire crumb rubber on synthetic turf playing fields. USEPA (2022) concluded that "while chemicals are present as expected in the tire crumb rubber, human exposure appears to be limited based on what is released into air or simulated biological fluids." NTP's conclusions from a series of four toxicological studies (Beckley et al. 2018; Pott et al. 1989; NTP 2019a, 2019b) were that no evidence of toxicity was found in mice from the ingestion of crumb rubber or exposure through bedding material, that animal studies show that "very low" levels of compounds from crumb rubber were identified in animals following exposure to crumb rubber, and that "[n]o health problems were observed" in these four studies (NTP 2022).

More recently, the Japanese National Institute of Health Sciences conducted four studies of synthetic turf infill and published them in the peer-reviewed literature (Kawakami et al. 2022; Nishi et al. 2022; Kubota et al. 2022; Sakai et al. 2022). The Japanese National Institute of Health Sciences concluded that "risk related to the exposure to metals from synthetic turf rubber granule infill is considered low" (Kubota et al. 2022).

Past studies from other international public health agencies, such as the European Chemicals Agency (ECHA 2017), the French Agency for Food, Environmental and Occupational Health and Safety (ANSES 2018), and the Dutch National Institute of Public Health and the Environment (RIVM 2018), found similar results (i.e., negligible risk for children and athletes playing on or near rubber surfaces).

Taken together, the results of the recently published peer-reviewed and government health agency exposure and risk studies reaffirm the results of the dozens of previous studies that found no evidence of a public health concern for athletes playing on artificial turf and recycled crumb rubber infill (Peterson et al. 2018; the NTP studies [Beckley et al. 2018; Pott et al. 1989; NTP 2019a, 2019b]; USEPA et al. 2019a, 2019b; Kawakami et al. 2022; Nishi et al. 2022; Kubota et al. 2022; Sakai et al. 2022; Schneider et al. 2020a, 2020b, 2020c).

Per- and Poly-Fluoroalkyl Substances (PFAS)

PFAS, a group of persistent and potentially harmful chemicals, has recently emerged as a public health concern in the context of artificial turf fields. PFAS is often used in the manufacturing of plastic turf fibers and backing materials to enhance durability, water resistance, and stain repellency of artificial turf fields. However, these "forever chemicals" do not break down easily in the environment and can leach from turf components into soil and water over time, posing potential risks to environmental and human health.

PFAS are considered Candidate Chemicals and are a category of chemical additives used in artificial turf to "enhance plastic extrusion and reduce surface defects" (DTSC 2024).³ More specifically, fluoropolymers, precursor fluorotelomer alcohols (FTOHs), and short-chain PFAS have been used or detected in artificial turf blades and backing (Zuccaro 2013; Ecology Center 2019; TRC 2022). PFAS presents toxicological, environmental, and exposure potential hazard traits (DTSC 2024). Children may be particularly vulnerable to the effects of toxic chemicals due to their relatively low body weight and potential exposure during growth

³ DTSC recently published the *Background Document on Candidate Chemicals in Artificial Turf* (DTSC 2024) as part of the Safer Consumer Products Program (SCP). The SCP is responsible for designating consumer products as Priority Products, which signifies a consumer product that: "(1) contains one or more Candidate Chemicals that have the potential to harm people or the environment, and (2) has been formally listed in the California Code of Regulations through rulemaking" (DTSC 2024). Artificial turf containing one or more Candidate Chemicals is being considered for listing as a Priority Product as part of the "Building Products and Materials Used in Construction and Renovation" category.

and developmental stages. Children may be exposed to PFAS during sport, play and leisure on artificial turf (DTSC 2024).

Although there are no State regulations that currently address PFAS in artificial turf, California's Health and Safety Code 108945 (CA AB-652, 2021) prohibits the sale or distribution of new juvenile products containing either intentionally added PFAS or PFAS precursors, or total organic fluorine at or above 100 ppm (or mg/kg).

Of note, California's Health and Safety Code 108970 (CA AB-1817, 2022) prohibits the sale and distribution of textiles containing regulated PFAS at total organic fluorine levels above 100 ppm as of January 1, 2025 and 50 ppm as of January 1, 2027. Although the definition of textiles does not apply to artificial turf, it is indicative of other PFAS regulatory thresholds in consumer products, and it is unclear whether the 100 ppm threshold for children's product in CA AB-652 may eventually be reduced to the same 50 ppm.

As described further in Appendix H, the results of scientific study appears somewhat mixed, and of insufficient quality to fully evaluate possible PFAS exposure from artificial turf.

Nevertheless, in an abundance of caution, given the concerns surrounding release of PFAS during stormwater events or transfer of PFAS to humans and the environment from regular use and weathering, **MM HAZ-1 (Voluntary Compliance with Per- and Poly-Fluoroalkyl Substances [PFAS] Concentration Limitations)** and **MM HAZ-2 (Use of Alternative Infill Materials)** would be required to reduce the potential for unsafe exposure. **MM HAZ-1** would require compliance with the requirements of CA AB-652 and CA AB-1817 should be considered to govern acceptable concentrations of PFAS in artificial turf. Additionally, **MM HAZ-2** would require the use of alternative infill materials such as walnut shell, olive pits, coconut, woodchips, cork, or other certified organic/plant-based alternatives, which shall be used in place of traditional crumb rubber or other plastic-based infill. Impacts would be *less than significant with the implementation of these mitigation measures*.

Microplastics

Artificial turf fields have also become a growing concern due to their contribution to microplastic pollution. Plastic grass blades (i.e., fibers) and infill materials, such as crumb rubber or plastic pellets, can degrade over time and release microscopic plastic particles into the surrounding environment. Through weathering, abrasion, and surface runoff, microplastics from artificial turf can be transported into nearby soil, waterways, and even the air, raising potential risks to ecosystems and human health.

Widespread artificial turf installations have raised concerns about microplastics resulting from the infill and fiber material. Microplastic shedding occurs due to environmental conditions that artificial turf is typically exposed to, including ultraviolet (UV) radiation, precipitation, temperature changes, and mechanical wear during use and maintenance (Hann et al. 2018). A multisport artificial turf field with an average pile weight of 1.4 kilograms per square meter (kg/m²) (0.29 pounds per square foot [lbs/ft²]) loses 0.5 to 0.8 percent of the plastic fiber annually, resulting in 52 to 83 kg (114.64 to 189.98 lbs) of microplastics

released annually from one average football field (Synthetic Turf Council [STC] 2017; Hann et al. 2018). The microplastics, weathered from artificial turf, can enter the stormwater system with runoff during rainfall events, eventually reaching marine environments, particularly in coastal areas (Li 2019).

Brooming of artificial turf fields is considered standard practice: its purpose is to return the blades to an upright position (Jastifer et al. 2019). This is usually done with heavy equipment with the frequency depending on the active hours and traffic load (Jastifer et al. 2019). Additionally, equipment must be used to loosen infill several times per year and to add new infill material as it gets lost with time (e.g., infill material can stick to players' clothes and shoes, be lost during brooming and washing process, or be washed away during rain events) (Jastifer et al. 2019). While this vigorous mechanical maintenance extends the life of the artificial turf field, it can also contribute to blade deterioration and splitting, creating plastic particles (Fleming et al. 2020).

In 2019, the World Health Organization (WHO) commissioned a report to evaluate evidence for risks to human health associated with exposure to microplastics in drinking-water. The report was based on literature reviews of studies published up to December 2021 in which original data on the occurrence of microplastics in air, water, food and beverages were reported and also experimental studies on their toxicity. WHO experts evaluated the quality of the studies of environmental monitoring and of toxicity, particularly with regard to the reliability and relevance of the data for characterizing risk. A key observation was that microplastics are ubiquitous in the environment and have been detected in environmental media with direct relevance for human exposure, including air, dust, water, food and beverages.

As described further in Appendix H, several *in vitro* and *in vivo* studies have shown that microplastics and nanoplastics were able to cause serious impacts on the human body, including physical stress and damage, apoptosis, necrosis, inflammation, oxidative stress and immune responses (Koelmans et al. 2019; Wright et al. 2017; Oliveira et al. 2019; Qiao 2019). However, the accurate assessment of human exposure remains a scientific challenge due to the lack of validated methods, certified reference materials, and standardization across the analytical procedures used (Brachner et al. 2020; Paul et al. 2020). Notably, most of the reported studies were conducted using polystyrene due to its ease in synthesis and processing into nanoparticles, while the most common commercial used of plastics are polyolefins (e.g., polyethylene and polypropylene), polyesters, and polyurethanes. Given the large variety in particle size, shape and chemical composition of plastics, the potentially hazardous effects of different types of microplastics and nanoplastics to human health remain largely unknown (Leslie et al. 2020).

Although the specific public health data is limited, humans, there is increasing public awareness and a consensus among stakeholders that plastics do not belong in the environment, and measures should be taken to mitigate exposure to microplastics (WHO 2022).

California’s Statewide Microplastics Strategy – SB 1263 (Chapter 609), was enacted in 2018. This Statewide Microplastic Strategy provides a multi-year roadmap for California to take a national and global leadership role in managing microplastics pollution. Multiple State agencies and external partners will work together to reduce the introduction of microplastics in California’s coastal ocean and other aquatic systems. Foundational to this Strategy is a recognition that the State must take decisive, precautionary action to reduce microplastic pollution, while scientific knowledge and understanding of microplastics sources, impacts, and successful reduction measures continue to grow.

In addition, DTSC has announced its intent to add Microplastics to its Candidate Chemicals List for regulation due to concerns about widespread exposures and potential for adverse impacts. New regulatory requirements result only when DTSC identifies and lists a Priority Product. As described in the 2024-2026 Priority Product Work Plan, one of the DTSC priorities is to reduce the release of microplastics to the environment during all stages of the consumer product life cycle. However, DTSC cannot evaluate products containing microplastics for possible regulation as Priority Products until microplastics are added to the Candidate Chemicals List (DTSC 2025).

Aside from these overarching approaches to managing microplastics, no specific regulatory thresholds have been identified for plastic products, specifically artificial turf. Nevertheless, in an abundance of caution, given the concerns surrounding off-site migration of microplastics during stormwater events or transfer of microplastics to humans and the environment from regular use and weathering, **MM HAZ-2** and **MM HAZ-7** would be required to limit the use of plastics and to implement structural, operational, and educational controls for the purposes of limiting the generation and dispersal of microplastics. Studies at Kalmar Municipality (Sweden), and Søholt in Silkeborg Municipality (Denmark) have demonstrated the effectiveness of these measures in minimizing the dispersion of microplastics (Regnell 2019; Silkeborg Municipality 2024). For example, the new facility at Søholt is designed according to the recommendations described in the new, joint European guide for the construction of artificial turf pitches (DS/CEN/TR 17519). The study at Silkeborg shows that recommendations described in the European Committee for Standardization (CEN) Report are sufficient to reduce the off-site dispersal of microplastics to less than 10 kg (22 lbs) per pitch per year. These results have been confirmed by subsequent studies Cardigan Mountain School and Princeton University in the U.S. Therefore, impacts would be *less than significant with the implementation of these mitigation measures*.

Mitigation Measures

- MM HAZ-1 Voluntary Compliance with Per- and Poly-Fluoroalkyl Substances (PFAS) Concentration Limitations.** The City, or its designated design and/or construction team, shall ensure that PFAS concentrations in all artificial turf materials and playground materials voluntarily comply with the California Assembly Bill (AB) 1817 regulatory threshold of 50

parts per million (ppm) for organic fluorine content.⁴ Compliance shall be ensured through a requirement for a manufacturer(s) guarantee(s) that their product(s) meet this threshold concentration, backed by product testing for both individual PFAS and total organic fluorine for each batch of materials purchased.

MM HAZ-2 *Use of Alternative Infill Materials.* The City, or its designated design and/or construction team, shall identify and use alternative infill materials that do not contain PFAS or microplastic components and reduce the heat island effect of artificial turf. These alternative infill materials could include, but shall not be limited to, walnut shell, olive pits, coconut, woodchips, cork, or other certified organic/plant-based alternatives, which shall be used in place of traditional crumb rubber or other plastic-based infill.

MM HAZ-3 *Voluntary Compliance with the Synthetic Turf Council Guidelines.* All artificial turf installations shall voluntarily meet the requirements set forth in the Guidelines for Designers and Procurement Specialists (KIMO and Fidra 2019) as well as the Suggested Guidelines for the Essential Elements of Synthetic Turf Systems issued by the Synthetic Turf Council (2011), as they relate to construction and installation, maintenance, and performance for the purposes of maximizing drainage and minimizing shedding of artificial grass blades.

MM HAZ-4 *Containment and Drainage Controls.* The City, or its designated design and/or construction team, shall incorporate an engineered containment barrier and subdrain filtration system designed to capture and prevent the migration of infill and/or synthetic fibers into adjacent stormwater systems. The drainage system shall meet the standards set out in the CEN Report (DS/CEN/TR 17519). To ensure any infill and/or synthetic fiber being carried by rainwater following through a drainage system is captured before the water leaves boundaries of

⁴ California AB 1817 bans PFAS in most clothing (including outdoor apparel) and textiles starting on January 1, 2025. It defines textiles and textile articles broadly, as those products which are ordinarily used in households and businesses, including, but not limited to, apparel, accessories, handbags, backpacks, draperies, shower curtains, furnishings, upholstery, beddings, towels, napkins and tablecloths. Exempted items include carpets, rugs, treatments containing PFAS for use on converted textiles or leathers and protective equipment used in critical functions, such as firefighting or for industrial applications of textiles. AB 1817 prohibits the sale of items with PFAS at 100 parts per million (ppm), or more, as measured in total organic fluorine in 2025. This threshold will drop to 50 ppm from 2027. Outdoor apparel made for severe wet conditions has an extension until 2028, but beginning January 1, 2025, manufacturers will have to disclose the presence of PFAS on their products with the statement “Made with PFAS chemicals.”

the field perimeter drain include silt traps to capture it.⁵ These drainage systems typically comprise a filter bucket that provides primary filtration of heavier silts and a secondary micro-filter that captures any remaining small particles. Both the filter bucket and secondary micro-filter should be easily removable for maintenance.

MM HAZ-5 *Shoe Cleaning Grates and Scraper Mats.* Consistent with the standards set out in the CEN Report (DS/CEN/TR 17519) shoe cleaning grates/scraper mats shall be installed along the entrances to the artificial turf fields. The grates/mats should be set in recessed bases that will retain any infill or synthetic fibers. To prevent the bases from filling with water, they shall contain a drain fitted with a silt trap to capture infill. Shoe cleaning stations, with signage encouraging athletes to use them (see MM HAZ-7), should be positioned at the main points of egress from the field. If mounted outside the artificial turf field, they should be positioned on a recessed-paved area that is designed to retain the infill and synthetic fibers.

MM HAZ-6 *Long-Term Maintenance and Monitoring.* The City shall prepare and implement a long-term maintenance and monitoring plan to minimize wear and tear of artificial turf consistent with the standards set forth in the Guidelines for Designers and Procurement Specialists (KIMO and Fidra 2019) as well as the Guidelines for the Maintenance of Infilled Synthetic Turf Sports Fields (2013) issued by the Synthetic Turf Council. At a minimum this plan shall require:

- Routine maintenance including regular inspections and minor repairs, maintenance of proper infill levels, and grooming of the surface;
- Semi-Annual Comprehensive Maintenance, including professional field inspection and corrective action, decompaction of infill, redistribution and level of the infill, deep cleaning, metal removal, weed and pest treatment, and/or partial removal and reinstallation of infill material; and

⁵ For example, the SPORTFIX CLEAN filtration system effectively captures and retains microplastics such as SBR rubber, EPDM granulate (infill material) and synthetic grass fibers from artificial sports pitches. The channel body made of 100% recycled composite filled with CARBOTEC 60 filter substrate can reliably retain the smallest of plastic particles down to 0.45 micrometers (μm). Installed around the perimeter of the playing field, the system collects surface water along with microplastics transported by run-off, wind or broken off during play. The infill material and synthetic fibers are prevented from entering sewer networks or other watercourses, minimizing the risk of plastic pollution within the environment.

- Record-keeping of maintenance activities and inspections, available upon request.

MM HAZ-7 *Educational Signage.* The City shall install educational signage at the artificial turf field to inform users about the potential direct and indirect environmental impacts of microplastics and proper use of the artificial turf fields necessary to prevent shedding of synthetic fibers and/or displacement of infill and synthetic fibers.

Significance after Mitigation

With the implementation of **MM HAZ-1** through **MM HAZ-7**, impacts regarding hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials would be *less than significant*.

Impact Description (HAZ-2)

Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involved in the release of hazardous materials into the environment?

HAZ-2 Construction of the proposed Project has the potential to create a hazard to the public or the environment through reasonably foreseeable upset and accidental conditions involving the release of hazardous materials during excavation, trenching, and grading. Impacts would be *less than significant with mitigation*.

As previously described in Impact HAZ-1, the proposed Project would involve the use, transport, and disposal of hazardous materials (e.g., fuels, solvents, paints, oils, grease, fertilizers, pesticides). While construction, operation, and maintenance activities associated with the proposed Project would not require large quantities of hazardous materials, the presence of materials has the potential to create a hazard through upset and/or accidental conditions. However, the use and handling of materials would be done in accordance with existing regulations and manufacturers specifications to reduce the likelihood of a release.

Further, the historic uses of the site and surrounding area have the potential to contain contaminated soils that may release hazardous materials during ground-disturbing activities. As described in *Hazardous Materials Release Listing* of the Phase I ESA, there are three identified RECs and one Controlled REC (CREC) associated with the site and surroundings:

- The inactive Pacific Railroad tracks, located in the northwestern portion of the Project site, have the potential to include contaminants related to wood preservatives (e.g., creosote and arsenic) and heavy metals. Given the historical use of the railroad, the

Phase I ESA concluded that such contaminants have likely impacted the subsurface of the Project site and is considered to represent an REC.

- As previously described, the Colorado Yards site was previously occupied by Fisher Lumber Company. Treated wood is often associated with chromium, copper, and arsenic. Due to the probable outside storage of treated wood products, the Phase I ESA concludes that contaminants have likely impacted the subsurface at the Project site and is considered a REC.
- One historical dry cleaner was identified on an adjacent property that used PCE-containing equipment. Although no releases were reported, the operation of dry cleaning facilities near the site could have resulted in PCE contamination of the soils at the Project site. The listing is considered a REC.
- The Snyder Diamond site is listed as a LUST site, closed in 2024 with a NFA designation. Gasoline and diesel impacted groundwater and remediation occurred. Based on reported groundwater flow direction (southwest or downgradient of the Project site), extent of groundwater contamination, and closure with an NFA, the site is not considered to represent a REC for the Project site but is a CREC.

Construction of the proposed Project would involve approximately 45,000 cubic yards of grading and the demolition of eight existing buildings. As such, the proposed Project has the potential to encounter contaminated soils, such as soils containing PCE, heavy metals, arsenic, and creosote, as well as other hazardous materials associated with the age of the building, including asbestos and lead, which could be released into the environment during ground disturbance and demolition activities. Therefore, the proposed Project would have a potentially significant impact requiring implementation of feasible mitigation measures.

As described in detail below, **MM HAZ-8 (ACM, LBP, PCBs, and Molds)**, **MM HAZ-9 (Inadvertent Discovery)**, **MM HAZ-10 (Soil Management Plan)**, **MM HAZ-11 (Soil Vapor Management)**, and **MM HAZ-12 (Soil Vapor Extraction [SVE] Equipment)** would establish mandates for the identification, management, transport, and/or disposal of contaminated soils to avoid or reduce the adverse impacts that may occur through an accident condition during demolition. Implementation of these mitigation measures would ensure impacts would be *less than significant with mitigation*.

Mitigation Measures

- MM HAZ-8 ACM, LBP, PCBs, and Molds.** Prior to the issuance of a demolition permit, the City shall conduct a comprehensive survey of ACM, LBP, PCBs, and molds. If such hazardous materials are found to be present, the City shall follow all applicable local, State, and Federal codes and regulations, as well as applicable best management practices, related to the treatment, handling, and disposal of ACM, LBP, PCBs, and molds to ensure public safety.

MM HAZ-9 *Inadvertent Discovery.* If previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction at a development site, construction activities in the vicinity of the contamination shall cease immediately. A qualified environmental specialist (e.g., a licensed Professional Geologist [PG], a licensed Professional Engineer [PE] or similarly qualified individual) shall conduct an investigation to identify and determine the level of soil and/or groundwater contamination. If contamination is encountered, a Human Health Risk Management Plan shall be prepared and implemented that: (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development; and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures could include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the type of contamination, appropriate oversight agencies shall be notified. If needed, a Site Health and Safety Plan that meets OSHA requirements shall be prepared and in place prior to commencement of work in any contaminated area.

MM HAZ-10 *Soils Management Plan.* Prior to approval of the first grading plan or issuance of the first demolition permit, whichever occurs first, the City shall submit a soils management plan and a transportation plan to the appropriate cleanup agency (e.g., Los Angeles RWQCB, DTSC, or SMFD) for review and approval. The soils management plan and transportation plan shall include the following tasks.

Soils Management Plan

Affected soils shall be either directly loaded into awaiting trucks for immediate offsite disposal or temporarily stockpiled on plastic sheeting prior to load-out and offsite disposal. If temporarily stockpiled, soil removed from the excavations shall be placed next, or as close as possible, to the area of excavation from which it came.

Prior to load-out, the construction contractor shall prepare waste profiles and example waste manifests for approval by the receiving facilities. Soil and material segregation, stockpile handling, truck loading, and storm water management practices shall be followed during the remedial action according to the following.

Soil and Material Segregation

Overburden soils shall be screened with an organic vapor analyzer (OVA) in accordance with SCAQMD Rule 1166. Any significant quantities of construction debris encountered during excavation shall be segregated and disposed in accordance with Federal, State, and local regulations. Soil cuttings during the installation of soldier piles shall be disposed offsite with any affected soils from the deep excavation.

Stockpile Management

The stockpiled soils for load-out shall be segregated by waste classification:

- Nonhazardous waste.
- VOC-contaminated nonhazardous waste with OVA readings greater than 50 parts per million (ppm) but less than 1,000 ppm.
- VOC-contaminated nonhazardous waste with OVA readings of 1,000 ppm or greater. These soils shall be immediately sprayed with water or suppressant and placed in a sealed container (roll-off bin) or directly loaded into a suitable transport truck, moistened with water, and covered with a tarp for offsite transportation to the appropriate disposal facility, as specified in the SCAQMD Rule 1166 Mitigation Plan.

The temporary stockpiles containing affected soils shall be managed as follows:

- The temporary stockpiles for non-VOC contaminants shall be placed on plastic sheeting and kept moist during working hours and covered with plastic sheeting at the end of the day to control dust.
- The VOC-contaminated stockpiles shall be placed on plastic sheeting and immediately covered with plastic sheeting. The edges of the plastic shall have an overlap of at least 24 inches. The plastic shall be secured at the base of the stockpile and along the seams of overlapping plastic sheeting with sandbags or equivalent means. The stockpiles shall remain covered until load-out.
- Daily inspections of the stockpiles shall be conducted to verify the integrity of the stockpile covers. Any gaps, tears, or other

deficiencies shall be corrected immediately. Daily records shall be kept of stockpile inspections and any repairs made.

- If necessary, commercial vapor suppressants and sealants shall be prepared and applied to VOC-contaminated soil in accordance with the manufacturer's recommendations.
- During stockpile generation and removal, only the working face of the stockpile shall be uncovered.

Decontamination Methods and Procedures

Each piece of equipment used for the excavation of affected soils shall have a clean-out bucket or continuous edge across the cutting face of its bucket. No excavation of affected soil shall be permitted with equipment utilizing teeth across the cutting edge of its bucket.

Entry to the contaminated areas (i.e., work exclusion zones) shall be limited to avoid unnecessary exposure and related transfer of contaminants. In unavoidable circumstances, any equipment or truck(s) that come into direct contact with affected soil shall be decontaminated to prevent the onsite and offsite distribution of contaminated soil. The decontamination shall be conducted within a designated area by brushing off equipment surfaces onto plastic sheeting. Trucks shall be visually inspected before leaving the site, and any dirt adhering to the exterior surfaces shall be brushed off and collected on plastic sheeting. The storage bins or beds of the trucks shall be inspected to ensure the loads are properly covered and secured. Excavation equipment surfaces shall also be brushed off prior to removing the equipment from contaminated areas.

Movement of affected soils from the excavation area to temporary stockpiles shall be conducted using enclosed transfer trucks, if possible. If affected soils must be moved within an open receptacle (e.g., loader bucket), the travel path for the loader shall be scraped following this activity, with scraped soils placed in the temporary stockpile for load-out.

Sampling equipment that comes into direct contact with potentially contaminated soil or water shall be decontaminated to assure the quality of samples collected and/or to avoid cross-contamination. Disposable sampling equipment intended for one-time use shall not be decontaminated, but shall be packaged for appropriate offsite disposal. Decontamination shall occur prior to and after each

designated use of a piece of sampling equipment, using the following procedures:

- Nonphosphate detergent and tap-water wash, using a brush if necessary.
- Tap-water rinse.
- Initial deionized/distilled water rinse.
- Final deionized/distilled water rinse.

Truck Loading

Trucks may be loaded directly from the excavation or temporary stockpile based on truck availability and excavation logistics. Trucks shall be routed, and stockpile areas shall be located to avoid having trucks pass through impacted areas. The truckloads shall be wetted and tarped prior to exiting the site. All soil hauled from the site shall comply with the following:

- Materials shall be transported to an approved treatment/disposal facility.
- No excavated material shall extend above the sides or rear of the truck/trailer.
- Trucks/trailers carrying affected soils shall be completely tarped/covered to prevent particulate emissions to the atmosphere. Prior to covering/tarping, the surface of the loaded soil shall be moistened.
- The exterior of the trucks/trailers shall be cleaned off prior to leaving the site to eliminate tracking of material offsite.

Storm Water Management

The good housekeeping practices prescribed in the City's Urban Runoff Mitigation Plan (SMMC Section 7.10.060) shall be implemented during soil excavation activities to contain and control storm water runoff that might convey contaminated or excessive sediments. If rainfall is expected, the areas around open excavations shall be graded and bermed to prevent storm water from flowing into the area of excavation. Any standing water that collects in the bottom of excavated areas shall be removed and handled in accordance with

Federal, State, and local regulations. The water shall be sampled and analyzed either as standing water in the excavation or following containment in a temporary above-ground storage tank. Depending on the volume of water and the sampling results, options for handling the standing water could include:

- Pumping the standing water into temporary above-ground storage tanks for reuse onsite for dust suppression.
- Pumping the standing water through filters and a carbon adsorption filter (if required based on analytical results) prior to discharge to a storm drain, subject to approval by the City of Santa Monica Water Resources Protection Programs Division.
- Pumping the standing water into vacuum trucks for transport and disposal at a recycling facility.

Transportation Plan

All affected soils shall be transported offsite for lawful management and disposal. Prior to load-out, the construction contractor shall prepare waste profiles for the receiving facility using analytical data from the previous environmental site assessment.

MM HAZ-11 *Soil Vapor Monitoring.* During soil disturbance activities with the potential to disturb PCE-contaminated soil, soil vapor monitoring shall be conducted by the construction contractor using a photoionization detector (PID) 10.6 or 11.7 eV lamp. Use of the PID shall ensure employee exposure to PCE and other VOCs are within the exposure limits set forth by CCR Title 8 §5155. *Airborne Contaminants.* In the event that the OSHA exposure limits are exceeded, work within the confined space would be temporarily stopped until the use of a soil vapor extraction (SVE) vacuum blower reduces it to below this limit (see MM HAZ-12).

MM HAZ-12 *SVE Equipment.* Use of an SVE vacuum blower (e.g., regenerative blowers, rotary lobe blowers, rotary claw blowers, or centrifugal fan blowers) shall be implemented during construction within confined spaces, as necessary, to ensure employee exposure to PCE and other VOCs are within the exposure limits set forth by CCR Title 8 §5155. *Airborne Contaminants.*

Significance after Mitigation

With the implementation of **MM HAZ-8** through **MM HAZ-12**, impacts regarding upset and accident conditions involving release of hazardous materials into the environment would be *less than significant*.

Impact Description (HAZ-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?

HAZ-3 **The proposed Project could emit hazardous emissions or result in the handling of hazardous or acutely hazardous materials, substances, or waste within a 0.25-mile radius of an existing or proposed school. However, compliance with Federal, State, and local regulations would ensure that any such impact would be *less than significant without mitigation*.**

As described in Impact HAZ-1 and Impact HAZ-2, construction and operation of the proposed Project would involve the use of hazardous materials that has the potential to release hazardous materials within one-quarter mile of an existing school. Crossroads School is located approximately 900 feet east, Beginnings Learning Center is located approximately 0.25 miles northeast, and Santa Monica Montessori School is located approximately 0.25 miles northeast, of the Project site. However, as also described in Impact HAZ-1 and Impact HAZ-2, the use and handling of hazardous materials would be required to comply with existing Federal, State, and local regulations as well as manufacturers specifications. Compliance with such regulations would limit the adverse effects of hazardous materials that may be near sensitive uses. Impacts would be *less than significant without mitigation*.

Impact Description (HAZ-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 create a significant hazard to the public or the environment?

HAZ-4 **The proposed Project is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, which could create a significant hazard to the public and environment. However, implementation of feasible mitigation measures would ensure the impact is *less than significant with mitigation*.**

As described in *Hazardous Materials Site Listing*, WSP obtained an EDR Map Report to identify previous release(s) of hazardous materials and/or known contamination at the Project site and in the surrounding vicinity. The Project site is listed in the following

hazardous materials databases: HWTS, HAZNET, RCRA NONGEN/NLR, and CERS HAZ WASTE. The existing Park property was listed for the disposal of 33.71 tons of Other Organic Solids (CA Waste Code: 352) in 2006. The former Fisher Lumber site was listed for the disposal of laboratory waste chemicals, detergent and soap, and unspecified organic liquids between 2014 and 2015. In addition, in 2015, the property was listed as disposing off-spec, aged, or surplus organics. One violation was reported in September 2023 for failure to label hazardous waste containers, with a return to compliance in October 2023. No other violations were listed. Based on the database listing and information available in the EDR, there was no evidence of releases reported and the database listings for the Project site are not considered to represent a REC for the Project site. As such, the impacts associated with the Project site are considered to be *less than significant*.

As described above, adjacent properties are listed in several databases associated with hazardous material use, including historical cleaners and LUSTs. The EDR Historical Cleaners Database lists Crescent Cleaners & Laundry (Crescent Cleaners, Crescent Water Laun-DBY) as a historical cleaner using PCE-containing equipment. As discussed in Impact HAZ-2, construction activities associated with the proposed Project have the potential to encounter PCE-contaminated soils, and, if not handled properly, may adversely affect the public and environment. Therefore, the proposed Project is considered to have a potentially significant impact. Implementation of **MM HAZ-9 (Inadvertent Discovery)**, **MM HAZ-10 (Soil Management Plan)**, **MM HAZ-11 (Soil Vapor Management)**, and **MM HAZ-12 (SVE Equipment)** would reduce impacts to a less than *significant level with mitigation*.

Lastly, the EDR environmental database records search identified Snyder Diamond (S&D Enterprises, S and D Enterprises, 1X Snyder, Louise, H) as a LUST site with gasoline- and diesel-contaminated soil and groundwater. However, the site has undergone remediation and was granted a Closure/NFA case status. Further, the groundwater flow direction is away from the Project site (i.e., the Project site is considered upgradient). Therefore, the listed property is not considered to represent an environmental concern and the impact associated with exposure to contaminated media from the off-site Snyder Diamond property is considered to be *less than significant*.

3.4.6 Cumulative Impacts

Cumulative development within the City would have the potential to expose the surrounding environment to hazards and hazardous materials through development or redevelopment of properties that may be contaminated from either historical or ongoing uses. Approved and pending projects in the vicinity (refer to Figure 3.0-1) are expected to transport, use, and store hazardous materials. However, the severity of potential hazards for individual projects would depend upon the location, type, and size of development and the specific hazards associated with individual sites. The majority of projects located in proximity to the Project site are relatively small-scale redevelopment projects (e.g., 1- to 2-unit additions to existing residential uses). If ACM, LBP, PCBs, or mold are found to be present in buildings planned

for demolition or renovation, or if soil and groundwater contamination are found to be present on sites of planned and future development, these conditions would require appropriate abatement and/or remediation consistent with all applicable Federal, State, and local regulations. Similarly, the transport of hazardous materials would be subject to applicable Federal, State, and local regulations intended to reduce the risk of accidental spills, leaks, fire, or other hazardous conditions.

As described in Chapter 2.0, *Project Description*, the Project site is a potential location for an underground stormwater harvesting tank as part of the City's Sustainable Water Infrastructure Project (SWIP). As described in the [IS/MND for the Sustainable Water Infrastructure Project](#) and [Addendum \(State Clearinghouse Number 2016071056\)](#), construction of the tank would require approximately 30-foot excavation of a 0.53-acre area, with the reservoir depth at approximately 15-foot below the surface. In addition, it is estimated that approximately 17,800 cubic yards of soil will be exported off-site. Therefore, as with the proposed Project, the SWIP has the potential to encounter contaminated soils, such as soils containing PCE, heavy metals, arsenic, and creosote, which could be released into the environment during ground disturbance and demolition activities. However, each project—including the proposed Project and the SWIP—would be required to comply with the laws and regulations related to the inadvertent discovery of hazardous materials (refer to Section 3.2.2, *Regulatory Setting*). In the event that contaminated soils are encountered during the construction of the SWIP an investigation would be conducted to identify and determine the level of soil and/or groundwater contamination and a range of contingency measure – including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof – would be implemented. Depending on the type of contamination, appropriate oversight agencies shall be notified.

With implementation of **MM HAZ-1** through **MM HAZ-12** potential impacts associated with hazards and hazardous materials would be reduced, and the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact involving hazards and/or hazardous materials.

4.0 OTHER CEQA CONSIDERATIONS

4.1 Introduction

This chapter presents the evaluation of additional environmental impacts analyses required by the California Environmental Quality Act (CEQA) that are not covered within the other chapters of this Environmental Impact Report (EIR) for the proposed Memorial Park (Park) Redevelopment and Expansion Project (Project). The following sections include a discussion of environmental topics in which there will not be impacts and/or all impacts are insignificant; growth inducing impacts and removal of obstacles to growth; and significant irreversible effects. In particular, CEQA Guidelines Section 15126 requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. The analysis provided in Chapter 3.0, *Environmental Impact Analysis*, of this EIR and the following information address the requirements of CEQA Guidelines Section 15126.

4.2 Environmental Topics not Evaluated in this EIR

CEQA Guidelines Section 15128 requires a statement briefly indicating the reasons that various possible significant effects of the proposed Project were determined not to be significant and, therefore, were not discussed in detail in this EIR.

CEQA Guidelines Section 15063(c) states (in pertinent part) that one of the purposes of an Initial Study is to assist in the preparation of an EIR by:

- Focusing the EIR on the effects determined to be significant;
- Identifying the effects determined not to be significant; and
- Explaining the reasons for determining that potentially significant effects would not be significant.

Appendix A includes the Initial Study that the City prepared for the proposed Project. As described in the Initial Study, the proposed Project was found to have potentially significant impacts to Air Quality, Cultural Resources and Tribal Cultural Resources, Greenhouse Gases and Climate Change, and Hazards and Hazardous Materials. As such, each of these resources was evaluated in Chapter 3.0, *Environmental Impact Analysis*, with impact analyses supported by technical studies including an emissions estimate using the California Emissions Estimator Model (CalEEMod) (see Appendix C), Human Health Risk Assessment (HRA) (see Appendix D), Cultural Resources Study (see Appendix E), Historic Architectural Analysis (see Appendix F), Phase I Environmental Site Assessment (ESA) (see Appendix G), and technical memorandum addressing hazardous materials in artificial turf (see Appendix H). The Initial Study also determined that the proposed Project would not

result in impacts and/or would result in less than significant impacts involving the following topics, which consequently, were not evaluated further in this EIR:

- Aesthetics/Shadows
- Agriculture and Forestry Resources
- Biological Resources
- Construction Effects
- Energy
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Neighborhood Effects
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Wildfire

The Initial Study includes: a description of the existing setting for each environmental topic; the threshold questions used to determine whether the proposed Project would have a significant impact regarding each environmental topic; and an analysis of direct and indirect impacts as well as potential cumulative impacts associated with the proposed Project.

4.3 Significant Irreversible Environmental Changes Resulting from the Project

CEQA Guidelines Section 15126.2(d) requires an analysis of irreversible environmental changes, or the use of nonrenewable resources during all phases of a project and/or irreversible damage that can result from environmental accidents associated with a project.

As discussed in Section 3.1, *Air Quality* and Section 3.3, *Greenhouse Gases and Climate Change*, the proposed Project would result in criteria air pollutant emissions and GHG emissions due to the consumption of nonrenewable, fossil fuel-based energy resources.

Specifically, construction worker trips and the transport/delivery of construction materials and equipment, as well as the use of construction equipment, would involve consumption of petroleum-based, nonrenewable energy resources. Also, many of the construction materials that would be used as part of the proposed Project (e.g., steel framing in buildings and plastics used in artificial turf fields) are derived from petroleum resources and/or involve the use of petroleum resources during manufacturing processes and/or the transport/delivery of them. Similarly, employee, visitor, supply delivery, maintenance, and utility/service (e.g., solid waste hauler) trips and use of maintenance equipment, would involve the use of petroleum-based, nonrenewable resources. Nevertheless, as discussed in the Initial Study (see Appendix A), the proposed Project would be subject to a number of

State and local requirements adopted for the purpose of reducing energy consumption, such as:

- California Green Building Standards (CalGreen), as amended by the Santa Monica Municipal Code (SMMC) Chapter 8.106 Green Building Standards Code;
- California Energy Code, as amended by SMMC Chapter 8.36, Energy Performance Approach Reach Code (Energy Reach Code);
- SMMC Chapter 8.108, Green Building, Landscape Design, Resource Conservation and Construction and Demolition Waste Management Standards; and
- SMMC Chapter 9.28.160, Electric Vehicle (EV) Charging Stations Ordinance (EV Charger Reach Code).

Compliance with State and local requirements adopted for the purpose of reducing energy consumption would ensure that the proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Additionally, the proposed Project would include photovoltaic solar panels, where appropriate and feasible. The implementation of the proposed Project would result in a *less than significant* impact and would not make a cumulatively considerable contribution to a significant cumulative impact regarding energy consumption.

4.4 Growth-Inducing Impacts

As required by CEQA Guidelines Section 15126.2(e), this EIR must include a discussion of the ways in which the proposed Project could be growth inducing. A project may be growth inducing if it directly or indirectly fosters economic or population growth or the construction of additional housing, removes obstacles to population growth, taxes community service facilities to the extent that the construction of new facilities would be necessary, or encourages or facilitates other activities that cause significant environmental effects. In general, a project may foster physical, economic, or population growth in a geographic area if it meets any one of the criteria identified below:

- The project removes an impediment to growth (e.g., the establishment of an essential public service, or the provision of new access to an area);
- The project results in the urbanization of land in a remote location (leapfrog development);
- The project establishes a precedent-setting action (e.g., a change in zoning or general plan amendment approval); and/or
- Economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base or employment expansion).

The proposed Project involves the redevelopment and expansion of Memorial Park to better meet the recreational needs of existing residents in the city. The Project site currently receives: water service and sewage treatment/disposal service from the City's Public Works Department, Water Resources Division; solid waste disposal and recycling services from the City's Public Works Department, Resource Recovery and Recycling Division; police protection services from the City of Santa Monica Police Department (SMPD); and fire protection and emergency response services from the Santa Monica Fire Department (SMFD). The proposed Project would not involve an extension or increase in capacity of water or sewer mains that provide water and sewage treatment/disposal services to the Project site. In addition, given that the Project site is located within existing service areas, the proposed Project would not involve an expansion in the service area of the City's Public Works Department, Water Resources Division, City's Public Works Department, Resource Recovery and Recycling Division, SMPD, and/or SMFD.

The proposed Project would include the construction of a Class I shared use path along Colorado Avenue to accommodate pedestrians and bicyclists and a new access driveway from 14th Street. These street frontage and multimodal amenities would not extend or increase the capacity of the existing roadways that afford access to the Project site (e.g., Colorado Avenue or Olympic Avenue).

The Project site is located with an existing, urbanized area that is surrounded by existing urban development. Therefore, the proposed Project would not result in the urbanization of land in a remote location (i.e., leapfrog development).

The proposed Project would include the expansion of, and enhancements to, existing recreational amenities at the Park. Following the completion of the proposed Project, the new facilities and programs offered at Memorial Park would not generate any increase in employees. The new facilities would simply replace existing facilities where robust programming already exists. Therefore, the proposed Project would not substantially increase population thereby creating a corresponding demand for new housing the provision of which could result in an adverse physical impact to the environment.

Although the proposed Project would expand and enhance existing recreational opportunities at the Park, it would not result in the introduction of a new use that could substantially alter existing business opportunities on, or within the vicinity of, the Project site. As previously described, the Park is located within an existing urbanized area that is fully built out with existing commercial, industry, residential, and other development/uses that are unlikely to capitalize on new economic opportunities that could result from the proposed Project, which would create a corresponding significant impact to the physical environment.

Therefore, the proposed Project is unlikely to result in growth inducement that has the potential to adversely affect the physical environment.

5.0 PROJECT ALTERNATIVES

5.1 Introduction

This section of the Environmental Impact Report (EIR) describes the potential project alternatives for the proposed Memorial Park (Park) Redevelopment and Expansion Project (Project). California Environmental Quality Act (CEQA) Guidelines Section 15126.6(a) requires an EIR to “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.”

CEQA Guidelines Section 15126.6(f) states that “[t]he range of alternatives required in an EIR is governed by a ‘rule of reason’” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives must avoid or substantially reduce one or more of the significant effects of the project. Further, the EIR must examine in detail only the alternatives that the Lead Agency determines could feasibly attain most of the basic objectives of the project (CEQA Guidelines Section 15126.6[a] and [c]). When considering the feasibility of alternatives, the CEQA Guidelines Section 15126.6(c) states:

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.

The alternatives selected for review must adequately represent the spectrum of environmental concerns to permit a reasonable choice of alternatives. CEQA Guidelines Section 15126(e) also requires the analysis of a No Project Alternative. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed Project. Finally, the EIR must also provide the rationale for selecting or defining the alternatives to be evaluated, including the identification of any alternatives that were considered by the Lead Agency, but rejected as infeasible during the scoping process. Based on the alternatives analyzed, the Lead Agency must identify an environmentally superior alternative.

The alternatives analysis for this EIR is presented in the following three sections:

- Section 5.2, *Project Objectives*, describes the objectives of the proposed Project.

- Section 5.3, *Alternatives Analysis*, identifies alternatives considered but discarded from further evaluation, describes those alternatives selected for full evaluation, and discusses potential impacts resulting from the selected alternatives.
- Section 5.4, *Identification of the Environmentally Superior Alternative*, concludes with the selection of an environmentally superior alternative, based on the Project Alternative configuration with the fewest significant impacts while meeting the greatest number of Project Objectives.

The analysis of Project Alternatives in this EIR provides a sufficient level of detail for the City of Santa Monica's (City's) consideration of adoption. When considered with the information contained in the body of this EIR, the analysis contained in these Project Alternatives adequately characterizes the potential associated impacts.

5.2 Project Objectives

As stated in Section 2.5, *Project Objectives*, of this EIR, the City has identified the following objectives for the proposed Project:

- **Improve Park and Recreational Amenities:** Enhance the City of Santa Monica's park system by providing safe, accessible, and high-quality recreational amenities for residents of all ages and abilities;
- **Address Community Needs:** Provide recreational uses that would meet the highest priority needs of the community, including the need for flexible and year-round field space for diamond field sports;
- **Ensure Neighborhood Compatibility:** Design Memorial Park to be compatible with, and sensitive to, the surrounding land uses and environment;
- **Strengthen Community Programs:** Maintain and expand community programs, such as the Police Activities League (PAL), the gymnasium, and fitness facilities;
- **Integrate Components from Active Transportation Plans:** Implement actions identified in the City of Santa Monica's Land Use and Circulation Element, Pedestrian Action Plan, and Bicycle Action Plan that promote active transportation, connectivity, accessibility, and safety; and
- **Promote Sustainability:** Build new and modern energy-efficient amenities and water saving features that are sustainable and meet the latest building and energy codes.

5.3 Alternatives Analysis

This section discusses alternatives to the proposed Project, including alternatives which were considered and discarded. The alternatives were selected based on their ability to substantially reduce or eliminate the potential environmental impacts associated with the proposed Project. Given that the proposed Project would not result in any significant and unavoidable impacts, alternatives selected for full analysis include those that would reduce potential impacts deemed to be less than significant with mitigation, yet would also meet most of the basic Project Objectives. These alternatives include:

- Alternative 1: No-Project Alternative (as required by CEQA Guidelines 15126.6[e])
- Alternative 2: Use of Natural Grass Turf Fields and Non-Plastic Playground Equipment
- Alternative 3: Reduced Development Alternative

Alternatives Considered and Discarded

The Project Objectives—except for the “Ensure Neighborhood Compatibility”—involve general goals that apply to the City’s parks and recreational system in general, rather than Memorial Park in particular. Therefore, enhancements to, and redevelopment of, existing City parks and recreational facilities besides Memorial Park could theoretically actualize many of the Project Objectives. However, the City selected Memorial Park to achieve these Project Objectives given the following:

- The existing facilities and programs at Memorial Park – particularly existing diamond field facilities – can be enhanced to better meet the community needs, as compared to what could be feasibly accomplished at other existing City parks, which lack the space, configuration, or infrastructure necessary to support such facilities. By redesigning the existing park rather than on an alternative site, land use compatibility impacts would be minimized. Further, redeveloping an existing site minimizes the potential for displacement of existing residents and land uses.
- Related to the point above, the City-owned former Fisher Lumber / Colorado Yards site (Assessor’s Parcel Number [APN] 4283-010-902) is located adjacent to Memorial Park and provides an opportunity to *expand* the facilities at Memorial Park.
- Memorial Park is centrally located in the City and is readily accessible to residents due to its proximity to existing transportation infrastructure (e.g., Class II bike lanes along 14th Street, Big Blue Bus routes, and Metro Line E station) that could be enhanced or otherwise complemented with the establishment of new amenities, thereby facilitating the use of active and multimodal forms of transportation.

Further, there are no existing, vacant sites within the City that currently are available for purchase or can be leased, are sufficient in size/dimensions, and/or are located within

proximity to existing infrastructure that facilitates active and alternative modes of transportation, to achieve all, or most of, the Project Objectives. Therefore, alternative Project sites were considered but ultimately discarded as being infeasible.

The City conducted public outreach to obtain feedback on the conceptual design of the Memorial Park Master Plan. The City prepared three conceptual designs for redevelopment that included alternative layouts, amenities, and programs that the City could develop or offer, based on initial feedback that the City received and for the purpose of further discussion. Based on additional feedback and other considerations (e.g., space available to provide certain amenities suggested as part of public outreach), the City further revised the conceptual plans and ultimately decided to pursue the Master Plan design that constitutes the proposed Project (refer to Chapter 2.0, *Project Description*). Therefore, the City considered the other conceptual designs presented during public outreach and either rejected them as being incapable of achieving important Project Objectives, or incorporated specific, desirable features of them into the design of the proposed Project. In addition, certain feasible features that were suggested during public outreach and in response to the Notice of Preparation (NOP) prepared for this EIR (e.g., use of natural grass turf fields instead of artificial turf, and play equipment that does not utilize plastic materials) are included in the project alternatives described below and compared to the proposed Project in terms of their environmental impacts and ability to meet the Project Objectives.

Alternative 1: No Project Alternative

The No Project Alternative assumes that the City would not pursue the proposed Project and, consequently, the existing development and uses at Memorial Park would remain. (See Section 2.4, *Project Site Existing Conditions*, for a description of the existing development and uses of Memorial Park.)

The No Project Alternative would not result in the criteria air pollutant and greenhouse gas (GHG) emissions associated with grading and construction of the proposed facilities or the long-term use of the proposed facilities. However, the No Project Alternative would not result in the replacement of existing facilities with more energy efficient ones and, consequently, would not promote sustainability to the same degree as the proposed Project.

The No Project Alternative would not involve grading and other ground disturbance activities and, consequently, would not result in the potential impacts to subsurface cultural resources – including archaeological and tribal cultural resources – that may exist on-site. Therefore, the implementation of **MM CR-1 (Cultural Resource Awareness Training)**, **MM CR-2 (Archaeological Construction Monitoring)**, **MM CR-3 (Inadvertent Discoveries)**, and **MM CR-4 (Native American Construction Monitoring)** would not be required.

Finally, the No Project Alternative would not involve the installation of synthetic turf fields or plastic playground equipment that could contain Per- and Poly-Fluoroalkyl Substances

(PFAS) material and/or would degrade over time resulting in the creation of microplastics and potential associated adverse effects to human health. Instead, the No Project Alternative would continue the use of the existing sports fields consist of natural grass turf. Therefore, the implementation of **MM HAZ-1 (Voluntary Compliance with PFAS Concentration Limitations)**, **MM HAZ-2 (Use of Alternative Infill Materials)**, **MM HAZ-3 (Voluntary Compliance with the Synthetic Turf Council Guidelines)**, **MM HAZ-4 (Containment and Drainage Controls)**, **MM HAZ-5 (Shoe Cleaning Grates and Scraper Mats)**, **MM HAZ-6 (Long-Term Maintenance and Monitoring)**, and **MM HAZ-7 (Educational Signage)** would not be required.

Alternative 2: Use of Natural Grass Turf Fields and Non-Plastic Playground Equipment

As stated in Section 2.6, *Project Description*, of this EIR, the proposed Project includes (in part) the construction and use of two combo fields located side-by-side along the northern portion of the Project site, fronting Colorado Avenue, which would be comprised of 100 percent synthetic turf playing surface. In addition, the proposed Project would include the installation of plastic playground equipment. Plastics used in the manufacturing of artificial turf and plastic playground equipment have the potential to contain PFAS material and/or microplastics that would degrade over time resulting in potential contamination of water and soil and potential adverse effects on human health (refer to Section 3.4, *Hazards and Hazardous Materials*). Further, these facilities/materials may not be recyclable and could require disposal in landfills when they must be replaced.

The implementation of Alternative 2 would avoid the potential adverse effects associated with the use of synthetic turf fields and plastic playground equipment by using natural grass turf fields and installing playground equipment that is made of non-plastic materials, such as engineered wood fiber, wood chips/bark, pea gravel, sand, and/or metal parts. Therefore, the implementation of **MM HAZ-1** through **MM HAZ-7** would not be required.

All other components of the proposed Project would be included in Alternative 2. This alternative likely would not substantially change the duration or methods of grading and construction and, therefore, would have substantially the same construction- and grading-related impacts regarding air quality, energy, GHG emissions, and cultural resources (i.e., archaeological and tribal cultural resources), as would result from the proposed Project. Further, all of the impacts associated with the operation of Memorial Park would be the same as those described for the Project. However, Alternative 2 likely would not reduce water usage to the same degree as the proposed Project. One study found that full-sized, 1.32 acre, natural grass sports fields can use up to 1.5 million gallons of water for irrigation per year depending on geographic location.¹ The University of California Santa Barbara (UCSB) found that an existing natural grass baseball field requires approximately 45,000

¹ U.S. Environmental Protection Agency (USEPA) WaterSense estimates that natural grass turf in warm-dry regional like Southern California require 40-60 inches of water per year. This equates to approximately 25,000 to 37,000 gallons per 1,000 square feet per year (USEPA 2025).

gallons of water per year and a proposed artificial turf field would require 12,000 gallons of water per year (California Coastal Commission 2023). However, this water savings could be overstated to some degree given the potential need for water to cool the field during the hot summer months (Western Resource Advocates 2022).

Alternative 3: Reduced Development Alternative

Alternative 3 would involve a partial buildout of the proposed Project by limiting development to the initial two phases of construction, as outlined in Section 2.6, *Project Description*. Under this alternative, construction activities would be reduced to the following:

- **Site preparation and demolition of existing facilities**, including the former Fisher Lumber site, tennis/pickleball courts, parking lot, children's playground, and the eastern youth baseball field.
- **Construction of recreational and community-focused features**, including the two Combo Fields (Fields 1 through 4), the covered parking lot and loading/drop-off area, rooftop tennis/pickleball courts, Community Hub Building, Children's Playground, grass field practice field, and streetscape and mobility enhancements along Colorado Avenue and a portion of 14th Street.

Alternative 3 would reduce the overall extent and intensity of construction, thereby minimizing associated environmental impacts. The shortened construction schedule and decreased site disturbance would lead to fewer construction vehicle trips and less frequent equipment operations, thereby lower energy consumption, air pollutant emissions, and GHG emissions. Additionally, the limited extent of grading and ground disturbance activities would reduce the potential impacts to subsurface cultural resources that may be present onsite. However, Alternative 3 would continue to require **MM CR-1** through **MM CR-4** to further reduce potential impacts to buried cultural and tribal cultural resources. Lastly, Alternative 3 would continue to involve the installation of synthetic turf fields and plastic playground equipment; thereby **MM HAZ-1** through **MM HAZ-7** would still be required to reduce potential impacts associated with PFAS and microplastics.

Alternative 3 would not include the implementation of Phases 3 and 4, thereby excluding the redevelopment of the Community Recreation Center, the Cove Skatepark, and the youth baseball and fast-pitch softball fields. As such, these existing facilities and recreational uses would be retained in their current conditions. The Community Recreation Center would not be redeveloped to meet current energy efficiency standards and include modern water conservation features that would further the sustainability objective of the proposed Project.

Identification of the Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires the analysis of alternatives to include identification of an environmentally superior alternative among the alternatives evaluated in the EIR. In general, the environmentally superior alternative as defined by CEQA should minimize adverse impacts to the project site and its surrounding environment.

As shown in Table 5-1, the No Project Alternative does not create new impacts (e.g., impacts from construction activities or increased hazards due to the use of artificial turf fields); therefore, it is the environmentally superior alternative when compared to the proposed Project and other alternatives. However, the No Project Alternative would not fulfill the City's Project Objectives regarding improvements to park and recreational amenities, addressing community needs, strengthening community programs, integrating active transportation components into the design of the Park, or promoting sustainability (e.g., by replacing older facilities with more energy efficient contemporary facilities).

Table 5-1. Impact Comparison of Project Alternatives to the Project

Environmental Topic	Project	Impact Level Compared to Project		
		No Project	Alternative 2 - Use of Natural Grass Turf Fields and Non-Plastic Playground Equipment ¹	Alternative 3 - Reduced Development Alternative
Air Quality	Less than Significant	No Impact	Similar	Less
Cultural and Tribal Cultural Resources	Less than Significant with Mitigation	No Impact	Similar	Less
Greenhouse Gases and Climate Change	Less than Significant	No Impact	Similar	Less
Hazards and Hazardous Materials	Less than Significant with Mitigation	No Impact	Less	Similar
Project Objectives Met?	Yes	No	Yes	Yes

Note: ¹ Although Alternative 2 would reduce the impacts related to hazards and hazardous materials, the use of natural grass fields instead of artificial turf fields would result in more severe impacts regarding water usage, as described below and shown in Table 5-2.

CEQA Guidelines Section 15126.6 states that if the environmentally superior alternative is the No Project Alternative, an EIR shall also identify an environmentally superior alternative from among the other alternatives. Of the other alternatives considered, Alternative 2 (Use

of Natural Grass Turf and Non-Plastic Playground Equipment) is considered to be the environmentally superior alternative.

As previously described, Alternative 2 would replace the two artificial turf combo fields and plastic playground equipment with two real grass combo fields and “eco-friendly” playground equipment, respectively. As such, this alternative would avoid significant impacts regarding the potential for artificial turf and/or plastic playground equipment to produce PFAS and/or microplastics, contaminate water and soil, and adversely affect human health. The implementation of **MM HAZ-1** through **MM HAZ-7** would no longer be required.

Although it would avoid potentially significant impacts related to hazards and hazardous materials, Alternative 2 has the potential to increase water demands compared to the proposed Project and the other alternatives. Specifically, the replacement of artificial turf with natural grass would require increased irrigation needs, which would likely be served from the City’s non-potable water sources, such as the Santa Monica Urban Runoff Recycling Facility (SMURRF). Assuming the two combo fields are 85,000-sf each, the natural grass fields would require approximately 15.6 acre-ft per year (AFY) (see Table 5-2). However, when compared to the existing conditions and the City’s non-potable water supply, the impacts associated with water demand resulting from Alternative 2 would be insignificant. First, the existing combo fields use approximately 14.4 AFY of water. As such, Alternative 2 would only require an additional 1.2 AFY of water compared to the existing conditions. Second, a water demand of 15.6 AFY would be approximately 2.8 percent of the City’s projected non-potable water supply of 560 AFY, as identified in the latest Annual Water Shortage Assessment Report (City of Santa Monica 2023). This analysis reflects the conservative assumption that the Sustainable Water Infrastructure Project (SWIP) would not be fully operational, which otherwise would increase the City’s total non-potable water supply from 560 AFY to 1,680 AFY.

Alternative 2 would meet the primary Project Objectives except for the community’s need for year-round field space. For example, the use of natural grass likely would periodically prevent the use of the fields during the rainy season, as saturated grass fields can lead to muddy and unsafe playing conditions. However, these conditions would be similar to existing conditions with the existing natural grass fields at Memorial Park.

Therefore, given that Alternative 2 would eliminate the need for **MM HAZ-1** through **MM HAZ-7** and given that Alternative 2 would accomplish the majority of the Project Objectives, Alternative 2 is considered to be the environmentally superior alternative

Table 5-2. Water Demand Comparison for the Combo Sports Fields

	Surface Type	Size (Square Feet)	Water Demand Factor Gallons/Day/ 1,000 Square Feet	Water Usage		
				Gallons/Day	Gallons/Year	Acre-Feet/Year
Proposed Project	Artificial Turf	170,000	38 ^a	6,460	2,357,900	7.2
No Project	Natural Grass	157,000	82 ^b	12,874	4,699,010	14.4
Alternative 2: Use of Natural Grass Turf Fields and Non-Plastic Playground Equipment	Natural Grass	170,000	82 ^b	13,940	5,088,100	15.6
Alternative 3: Reduced Development	Artificial Turf	170,000	38 ^a	6,460	2,357,900	7.2

^a Source: Vancouver Board of Parks and Recreation 2024. This water demand factor reflects the water usage for an artificial turf field that would be used for field hockey, which is a conservative approach compared to their general multi-sport artificial turf field.

^b Source: Environmental Impact Report for the Santa Monica Airport Park Draft EIR (2002). This water demand factor is conservative as it doesn't consider reductions in water demand for drought-tolerant species (City of Santa Monica 2002).

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