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GRANT ELEMENTARY SCHOOL CAMPUS MASTER PLAN PROJECT DRAFT EIR

for Santa Monica-Malibu Unified School District

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PLACEWORKS

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Abbreviations and Acronyms

ABBREVIATIONS AND ACRONYMS

AAQS	ambient air quality standards
AB	Assembly Bill
ACM	asbestos-containing materials
ADT	average daily traffic
amsl	above mean sea level
AQMP	air quality management plan
AST	aboveground storage tank
BAU	business as usual
bgs	below ground surface
BMP	best management practices
CAA	Clean Air Act
CAFE	corporate average fuel economy
CalARP	California Accidental Release Prevention Program
CalEMA	California Emergency Management Agency
Cal/EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
cfs	cubic feet per second
CGS	California Geologic Survey
CMP	congestion management program

Abbreviations and Acronyms

CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
Corps	US Army Corps of Engineers
CSO	combined sewer overflows
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	environmental impact report
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	greenhouse gases
GWP	global warming potential
HCM	Highway Capacity Manual
HQTA	high quality transit area
HVAC	heating, ventilating, and air conditioning system
IPCC	Intergovernmental Panel on Climate Change
L_{dn}	day-night noise level
L_{eq}	equivalent continuous noise level
LBP	lead-based paint
LCFS	low-carbon fuel standard
LOS	level of service
LST	localized significance thresholds
M_W	moment magnitude
MCL	maximum contaminant level
MEP	maximum extent practicable

Abbreviations and Acronyms

mgd	million gallons per day
MMT	million metric tons
MPO	metropolitan planning organization
MT	metric ton
MWD	Metropolitan Water District of Southern California
NAHC	Native American Heritage Commission
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
O_3	ozone
OES	California Office of Emergency Services
PM	particulate matter
POTW	publicly owned treatment works
ppm	parts per million
PPV	peak particle velocity
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RMP	risk management plan
RMS	root mean square
RPS	renewable portfolio standard
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SIP	state implementation plan
SLM	sound level meter
SoCAB	South Coast Air Basin
SO_X	sulfur oxides
SQMP	stormwater quality management plan
SRA	source receptor area [or state responsibility area]
SUSMP	standard urban stormwater mitigation plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board

Abbreviations and Acronyms

TAC	toxic air contaminants
TNM	transportation noise model
tpd	tons per day
TRI	toxic release inventory
TTCP	traditional tribal cultural places
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	urban water management plan
V/C	volume-to-capacity ratio
VdB	velocity decibels
VHFHSZ	very high fire hazard severity zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WQMP	water quality management plan
WSA	water supply assessment

Abbreviations and Acronyms

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1. Executive Summary

1.1 INTRODUCTION

This Draft Environmental Impact Report (DEIR) addresses the environmental effects associated with the implementation of the proposed Grant Elementary School Campus Master Plan Project (Proposed Project). The California Environmental Quality Act (CEQA) requires that local government agencies consider the environmental consequences before taking action on projects over which they have discretionary approval authority. An Environmental Impact Report (EIR) analyzes potential environmental consequences in order to inform the public and support informed decisions by local and state governmental agency decision makers. This document focuses on impacts determined to be potentially significant in the Initial Study/Notice of Preparation (IS/NOP) completed for the Proposed Project (see Appendix B).

This DEIR has been prepared pursuant to the requirements of CEQA and the Santa Monica–Malibu Unified School District's (SMMUSD or District) CEQA procedures. The District, as the lead agency, has reviewed and revised all submitted drafts, technical studies, and reports as necessary to reflect its own independent judgment, including reliance on City of Santa Monica technical personnel and review of all technical subconsultant reports.

Data for this DEIR are derived from on-site field observations; discussions with affected agencies; analysis of adopted plans and policies; review of available studies, reports, data, and similar literature; and specialized environmental assessments (aesthetics, air quality, cultural resources, energy, geological resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, and transportation).

1.2 ENVIRONMENTAL PROCEDURES

This DEIR has been prepared pursuant to CEQA to assess the environmental effects associated with implementation of the Proposed Project as well as anticipated future discretionary actions and approvals. CEQA established six main objectives for an EIR:

1. Disclose to decision makers and the public the significant environmental effects of proposed activities.
2. Identify feasible ways to avoid or reduce environmental damage.
3. Prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.
4. Disclose to the public reasons for agency approval of projects with significant environmental effects.
5. Foster interagency coordination in the review of projects.
6. Enhance public participation in the planning process.

1. Executive Summary

An EIR is the most comprehensive form of environmental documentation in CEQA and the CEQA Guidelines; it is intended to provide an objective, factually supported analysis and full disclosure of the environmental consequences of a project with the potential to result in significant, adverse environmental impacts.

An EIR is one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Before approving a project, the lead agency must consider the information in the EIR; determine whether the EIR was prepared in accordance with CEQA and the CEQA Guidelines; determine that it reflects the independent judgment of the lead agency; adopt findings concerning the project's significant environmental impacts and alternatives; and adopt a statement of overriding considerations if significant impacts cannot be avoided.

1.2.1 EIR Format

Chapter 1. Executive Summary: Summarizes the background and description of the Proposed Project, the format of this EIR, Project alternatives, any critical issues remaining to be resolved, and the potential environmental impacts and mitigation measures identified for the Proposed Project.

Chapter 2. Introduction: Describes the purpose of this EIR, background on the Proposed Project, overview of the IS/NOP process, the use of incorporation by reference, and Final Environmental Impact Report (FEIR) certification.

Chapter 3. Project Description: Contains a detailed description of the Proposed Project, including its objectives, its area and location, approvals anticipated to be required as part of the Proposed Project, necessary environmental clearances, and the intended uses of this EIR.

Chapter 4. Environmental Setting: Includes a description of the physical environmental conditions in the vicinity of the Proposed Project's Site, from local and regional perspectives. This provides the baseline physical conditions from which the lead agency determines the significance of the Proposed Project's environmental impacts.

Chapter 5. Environmental Analysis: Each environmental topic is analyzed in a separate section that discusses the thresholds used to determine if a significant impact would occur; the methodology to identify and evaluate the potential impacts of the Proposed Project; the existing environmental setting; the potential adverse and beneficial effects of the Proposed Project; the level of impact significance before mitigation; the mitigation measures for the Proposed Project; the level of significance after mitigation is incorporated; and the potential cumulative impacts of the Proposed Project and other existing, approved, and proposed development in the area.

Chapter 6. Other CEQA Considerations: Describes the significant unavoidable adverse impacts of the Proposed Project and any significant irreversible environmental changes associated with the Proposed Project; the potential impacts of the Proposed Project that were determined not to be significant by the IS/NOP and were therefore not discussed in detail in this EIR; and the ways in which the Proposed Project

would cause increases in employment or population that could result in new physical or environmental impacts.

Chapter 7. Alternatives to the Proposed Project: Describes the alternatives and compares their impacts to the impacts of the Proposed Project. Three alternatives to the Proposed Project are the No Project Alternative, One-Story Building Along Pearl Place, and Alternate Location on Pearl Street. This chapter also discusses alternatives that were considered but rejected from further evaluation.

Chapter 8. List of Preparers: Lists the people who prepared this EIR and organizations that were contacted during the preparation of this EIR.

Appendices: The appendices for this document comprise these supporting documents:

- Appendix A: Grant Elementary School Campus Master Plan
- Appendix B: Initial Study/Notice of Preparation (IS/NOP)
- Appendix C: IS/NOP Comments
- Appendix D: Air Quality and Greenhouse Gas Emissions Data
- Appendix E: Health Risk Assessment
- Appendix F1: Historic Resources Inventory Report
- Appendix F2: Historic Resources Technical Report
- Appendix F3: Cultural and Paleontological Assessment
- Appendix G: Energy
- Appendix H: Geotechnical Investigation Report
- Appendix I: Phase I Environmental Site Assessment
- Appendix J: Noise Modeling Measurements
- Appendix K: Access and Pedestrian Safety Analysis

1.2.2 Type and Purpose of This DEIR

This DEIR has been prepared as a "Project EIR," defined by Section 15161 of the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3). This type of EIR examines the environmental impacts of a specific development project and should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the Proposed Project including planning, construction, and operation.

1.3 PROJECT LOCATION

Grant ES is at 2368 Pearl Street (Assessor's Parcel Number 4273-009-900) in the city of Santa Monica, Los Angeles County, California (see Figure 3-1, *Regional Location*). The District-owned property is a 6.01-acre rectangular parcel that includes the existing Grant Elementary School campus (Grant ES campus or campus). The campus is in an Institutional zone in an urban area and surrounded on all four sides by single-family residential properties (Figure 3-2, *Local Vicinity)*.

The Grant ES campus is approximately half a mile south of Interstate 10 (I-10) and two miles east of the Pacific Coast Highway and Santa Monica State Beach. It is bounded by Pearl Street to the north, 24th Court to the east, Pearl Place to the west, and 24th Street and residential properties to the south (Figure 3-3, *Aerial Photograph*).

1.4 PROJECT SUMMARY

The Proposed Project, which involves implementation of a Campus Master Plan, would be constructed in three phases on approximately 5.41 acres of the 6.01-acre campus. Redevelopment and modernization of Grant ES includes the demolition and removal of some existing structures, renovation of three remaining structures, construction of two new buildings, new and reconfigured playfields and playgrounds, and two new and reconfigured parking lots.

Ten existing modular and relocatable classroom buildings (P70 through P79), one modular building (playground restrooms), shade structures, and a portion of one permanent classroom building (Building B) would be selectively demolished and removed as part of the Proposed Project, for a total of 76,415 square feet of demolition. The remaining buildings would remain as is. The Proposed Project would include renovation and expansion of the existing library (Building F), which would be combined with Building G to create a new Library and Maker space; interior renovation of the transitional kindergarten and kindergarten classrooms (Building A); and improvements to the Central Garden. The Proposed Project would include the construction of two new classroom buildings to replace the 10 portable classrooms that would be removed. Improvements to outdoor recreational areas and relocation and reconfiguration of the parking lot would also be implemented.

1.5 SUMMARY OF PROJECT ALTERNATIVES

CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to a project that could feasibly attain the basic objectives of a project and avoid or lessen the environmental effects of a project. While the District considered various options and recommendations during the scoping process, the final selection of alternatives was based on CEQA Guidelines Section 15126.6(f), which states that the selection of alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.

Based on the criteria listed in Chapter 7, *Alternatives*, the following three alternatives have been determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the Proposed Project but may avoid or substantially lessen any of the significant effects of the project. These alternatives are summarized in the following sections.

- **Alternative 1**: No-Project Alternative
- **Alternative 2**: One-Story Building Along Pearl Place
- **Alternative 3**: Alternate Location on Pearl Street

1.5.1 No Project Alternative

The CEQA Guidelines require the analysis of a No Project Alternative. Under CEQA, the No Project Alternative must consider the effects of not approving the Proposed Project. The No Project Alternative describes the environmental conditions that exist at the time that the environmental analysis commences and what would reasonably be expected in the foreseeable future if the Proposed Project were not approved (CEQA Guidelines Section 15126.6(e)(2)).

Under the No Project Alternative, the District would not approve any portion of the Proposed Project on the Grant ES campus, and none of the mitigation measures identified in this DEIR would be necessary. No demolition would take place under the No Project Alternative, and the existing structures on the campus would be retained. Under the No Project Alternative, it is assumed that the reasonably foreseeable future at the campus would be the continued occupation of the existing buildings and use of the playgrounds on the Grant ES campus in their current condition. Grant ES would not be redeveloped and modernized, and existing buildings would be used by students as needed (portable buildings and Buildings A, B, F, and G) or remain unoccupied. The school would continue to operate under its current conditions, and no changes would take place.

1.5.2 One-Story Building Along Pearl Place

Under Alternative 2, *One-Story Building Along Pearl Place,* a one-story building would be constructed along Pearl Place instead of the proposed two-story classroom building that would be constructed during Phase 3 of the Proposed Project. However, to provide the same number of classrooms, the proposed building would be extended in length up to Pearl Street, requiring the full removal of Building B, which is a contributor to the Grant ES historic district. This alternative would still include the removal of 10 portable classrooms, construction of the new 10,626-square-foot, one-story classroom building with six classrooms south of Building C, and reconfiguration of the playfield and parking lots (see Figure 7-2, *One-Story Building Along Pearl Place*).

The additional removal of the northern portion of Building B would result in 3,285 square feet of additional demolition on the campus compared to the Proposed Project. Because of the extended length of the proposed building under Alternative 2, the total developed square footage of this alternative would be similar to the Proposed Project. Total construction efforts and timeline in Phase 3 would increase under this alternative due to the additional required demolition; however, development of the proposed new building would be similar to the Proposed Project. Additionally, with the implementation of the same number of classrooms within the proposed one-story building, operational improvements of this alternative would be similar to the Proposed Project.

1.5.3 Alternate Location on Pearl Street

Under Alternative 3, *Alternate Location on Pearl Street*, the proposed two-story classroom building that would be constructed along Pearl Place during Phase 3 of the Proposed Project would be located on the northern boundary of the campus, along Pearl Street (see Figure 7-3, *Alternate Location on Pearl Street*). The proposed

building along Pearl Street would be similar in size and would contain the same number of classrooms as the Proposed Project. However, this Alternative would require the demolition of Building A and approximately 1,000 square feet from the north portion of Building B. As described in Section 5.3, *Cultural Resources*, of this DEIR, the northern addition of Building B was constructed in 1954 and is not a contributor to the Grant ES historic district. Building A is also not considered a contributor to the historic district. The demolition of Building A and the northern portion of Building B would result in approximately 1,870 square feet of additional demolition on the campus compared to the Proposed Project.

This alternative would still include the removal of 10 portable classrooms, construction of the new 10,626-square-foot, one-story classroom building with six classrooms located south of Building C, and reconfiguration of the playfield and parking lots. This alternative would also result in an additional recreation space along the western boundary of the campus (see Figure 7-3, *Alternate Location Along Pearl Street*). Total construction efforts and timeline in Phase 3 would increase under this alternative due to the additional required demolition; however, development of the proposed new building would be similar to the Proposed Project, and operational improvements of this alternative would be similar to the Proposed Project.

1.6 ISSUES TO BE RESOLVED

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

1. Whether this DEIR adequately describes the environmental impacts of the project.
2. Whether the proposed land use changes are compatible with the character of the existing area.
3. Whether the identified goals, policies, or mitigation measures should be adopted or modified.
4. Whether there are other mitigation measures that should be applied to the project besides the mitigation measures identified in the DEIR.
5. Whether there are any alternatives to the project that would substantially lessen any of the significant impacts of the proposed project and achieve most of the basic project objectives.

1.7 AREAS OF CONTROVERSY

On January 13, 2023, SMMUSD issued an IS/NOP for the Proposed Project. The scoping period for this IS/NOP was between January 13, 2023, and February 12, 2023, during which interested agencies and the public could submit comments about the Proposed Project. A scoping meeting was held on February 7, 2023, where an overview of the Proposed Project and CEQA process were presented. The District received three comment letters from agencies and two comment cards from members of the public during the public comment period and scoping meeting. Additional verbal comments were received during the scoping meeting. Written comments received during circulation of the IS/NOP are included in Appendix C of this DEIR.

The following issues are of particular concern to agencies and interested members of the public during the environmental review process. While all comments raised that are applicable to the CEQA process are addressed in this DEIR, this list is not necessarily exhaustive, but attempts to capture the concerns that are likely to generate the greatest interest based on the input received during the scoping process.

- Impacts to the Historic District on the Campus: Addressed in Section 5.3, *Cultural Resources*
- Construction Noise Impacts: Addressed in Section 5.10, *Noise*
- Construction Traffic Impacts: Addressed in Section 5.12, *Transportation*

1.8 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION

Table 1-1, *Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation,* summarizes the conclusions of the environmental analysis contained in this DEIR. Impacts are identified as potentially significant, less than significant, or no impact, and mitigation measures are identified for all significant impacts. The level of significance after imposition of the mitigation measures is also presented.

1. Executive Summary

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.1 AESTHETICS			
Impact 5.1-1: The Proposed Project would not conflict with applicable zoning and other regulations governing scenic quality.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
Impact 5.1-2: The Proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
5.2 AIR QUALITY			
Impact 5.2-1: The Proposed Project would not conflict with or obstruct the South Coast AQMD AQMP.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
Impact 5.2-2: Construction and operation associated with the Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant in exceedance of South Coast AQMD's threshold criteria.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
Impact 5.2-3: The Proposed Project would not expose sensitive receptors to substantial pollutant concentrations during construction or operation.	Less Than significant	No mitigation measures or conditions of approval are required.	N/A
5.3 CULTURAL RESOURCES			
Impact 5.3-1: Development of the Proposed Project would not impact an identified historic resource pursuant to Section 15064.5.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
Impact 5.3-2: The Proposed Project would not cause a substantial adverse change in the significance of an archaeological resources pursuant to section 15064.5.	Potentially Significant	**CUL-1** Prior to issuance of any permits allowing ground-disturbing activities for the Proposed Project (for each individual phase of the Proposed Project), the District shall ensure that an archaeologist who meets the Secretary of the Interior's standards for professional archaeology has been retained for the Project and will be on-call during all grading and other significant ground-disturbing activities that would occur beneath the existing artificial fill. The Qualified Archaeologist shall ensure that the following measures are followed for the Project:	Less than Significant

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• Prior to the initiation of any earthmoving activity in which native soil is disturbed, the Qualified Archaeologist, or their designee, shall provide worker environmental awareness protection training to construction personnel regarding regulatory requirements for the protection of cultural (prehistoric and historic) resources. As part of this training, construction personnel shall be briefed on proper procedures to follow should unanticipated cultural or paleontological resources be made during construction. • In the event that a prehistoric archeological site (such as any unusual amounts of stone, bone, or shell) or a historic-period archaeological site (such as concentrated deposits of bottles or bricks, amethyst glass, or other historic refuse), is uncovered during grading or other construction activities, all ground-disturbing activity within 50 feet of the discovery shall be halted. The District shall be notified of the potential find and a qualified archeologist shall be retained to investigate its significance. • If significant Native American cultural resources are discovered for which a treatment plan must be prepared, the project applicant or the archaeologist on call shall contact the applicable Native American tribal representative(s). If requested by the Native American tribe(s), the project applicant or archaeologist on call shall, in good faith, consult on the discovery and its disposition (e.g., avoidance, preservation, reburial, return of artifacts to tribe). • Any previously undiscovered resources found during construction will be recorded on appropriate California Department of Parks and Recreation 523 forms and evaluated for significance under all applicable regulatory criteria. If the archaeologist determines that the find does not meet the California Register of Historic Resources standards of significance, construction may proceed. If the find is determined to be significant by the qualified archaeologist (i.e.,	

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with the District to follow accepted professional standards such as further testing for evaluation or data recovery, as necessary. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, and analyzes and interprets the results.	
5.4 ENERGY			
Impact 5.4-1: Implementation of the Proposed Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
Impact 5.4-2: The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
5.5 GEOLOGY AND SOILS			
Impact 5.5-1: Buildout of the Proposed Project would not directly or indirectly destroy a unique paleontological resource.	Potentially Significant	**GEO-1** Prior to the commencement of any on-site excavation or grading activities that would occur beneath the existing artificial fill, the District shall retain a qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP 2010) (Qualified Paleontologist). The Qualified Paleontologist shall provide technical and compliance oversight of all work as it relates to paleontological resources, shall be responsible for ensuring the employee training provisions are implemented during ground-disturbing activities for the Proposed Project, and shall report to the campus in the event potential paleontological resources are encountered. A Paleontological Resources Management Plan (PRMP) shall be prepared by the Qualified Paleontologist that incorporates all	Less Than Significant

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		available geologic data for the Proposed Project to determine the necessary level of effort for monitoring based on the planned rate of excavation and grading activities, the materials being excavated, and the depth of excavation. The PRMP shall establish the ground rules for the entire paleontological resource mitigation program. The Qualified Paleontologist will implement the PRMP as the project paleontologist, program supervisor, and principal investigator. The PRMP shall incorporate the results of the paleontological resources assessments, geotechnical investigation, and the final engineering/grading plans for the project including pertinent geological and paleontological literature, geologic maps, and known fossil locality information. The PRMP shall detail processes and procedures for paleontological monitoring, fossil salvaging (if needed), reporting, and curation (if needed). The PRMP shall also require the Qualified Paleontologist to prepare a report of the findings of the monitoring efforts after construction is completed. The PRMP shall also require the Qualified Paleontologist to obtain a curatorial arrangement with a qualified repository (e.g., Los Angeles County Natural History Museum) prior to construction if significant paleontological resources are discovered and require curation. A paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials, shall work under the direction of the Qualified Paleontologist and shall be on-site during excavations into native sediments of older alluvium below a depth of five feet and native sediments of young alluvium below a depth of 20 feet, or at a depth otherwise indicated by the Qualified Paleontologist in the PRMP. Drilling or pile driving activities, regardless of depth, have a low potential to produce fossils meeting significance criteria because any fossils brought up by the auger during drilling will not have information about formation, depth, or context. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor shall	

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery shall be delineated with a 50-foot radius buffer, or other distance to be determined by the Qualified Paleontologist. Fossil remains collected during the monitoring and salvage portion of the program shall be cleaned, repaired, sorted, and catalogued. Once documentation and collection of the find is completed, the paleontological monitor will allow grading to recommence in the area of the find. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in a scientific institution with permanent paleontological collections, such as the Los Angeles County Natural History Museum. A final Paleontological Monitoring and Data Recovery Report shall be completed that outlines the results of the monitoring program. This report shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.	
5.6 GREENHOUSE GAS EMISSIONS			
Impact 5.6-1: The Proposed Project would not generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
Impact 5.6-2: The Proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
5.7 HAZARDS AND HAZARDOUS MATERIALS			
Impact 5.7-1: 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.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
Impact 5.7-2: The Proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions	Potentially Significant	**HAZ-1** Prior to demolition or renovation activities, the existing buildings proposed for demolition or renovation will be inspected by a qualified environmental specialist for the presence of hazardous building	Less Than Significant

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
involving the release of hazardous materials into the environment.		materials, including asbestos containing materials asbestos-containing materials (ACMs), lead-based paints (LBP), and polychlorinated biphenyls (PCBs). If hazardous building materials are detected, abatement and removal of these materials will be conducted in accordance with applicable federal, state, and local guidelines as follows: • In the event that ACM and LBP are found on the campus, notice shall be provided to South Coast Air Quality Management District (AQMD), and any demolition activities likely to disturb ACM and LBP shall be carried out by a contractor trained and qualified to conduct lead- or asbestos-related construction work in conformance with South Coast AQMD, California Department of Industrial Relations, Department of Toxic Substances Control (DTSC), and other applicable requirements. If found, ACM and LBP will be disposed of at an appropriately permitted facility. • If PCBs are found on the campus, these materials shall be managed in accordance with the Metallic Discards Act of 1991 (Public Resources Code, sections 42160-42185) and other state and federal guidelines and regulations. Demolition plans and contract specifications will incorporate any necessary abatement measures in compliance with the Metallic Discards Act, particularly section 42175, Materials Requiring Special Handling, for the removal of PCB-containing materials. • Once hazardous building materials are removed, a follow-up inspection shall be performed of the existing buildings prior to demolition or renovation to confirm that the hazardous items have been removed to an acceptable level per DTSC requirements before commencing with demolition activities. **HAZ-2** The District will retain a licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer with more than 2 years of experience conducting hazardous material and	

1. Executive Summary

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		contamination assessments to conduct soil sampling. The soil sampling will be conducted prior to any disturbance of the area(s) suspected of potential contamination to evaluate shallow soil conditions with respect to lead-based paint residues from on-site structures built prior to 1990 and chemicals commonly used at drycleaners including chlorinated solvents due to historic uses at nearby properties. If the soil sampling identifies the presence of contaminated soils, the contractor shall prepare and implement a contaminated soils removal action workplan for removal of affected soils on-site. Affected soils shall be excavated and disposed of off-campus at a landfill permitted to accept such waste, and the campus shall be cleaned to an acceptable level per DTSC requirements. After the District confirms that the affected soils have been removed, through the collection of soil samples in the excavation areas, the excavation shall be backfilled and compacted with clean soil, and the contractor will prepare a Completion Report that documents the removal and presents analytical results for the confirmation samples.	
Impact 5.7-3: The Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.	Potentially Significant	Implementation of Mitigation Measures HAZ-1 and HAZ-2 is required.	Less Than Significant
Impact 5.7-4: The Proposed Project would not be located on a site which is included on a list of hazardous materials complied pursuant to Government Code 65962.5 and, as a result, would create a significant hazard to the public or the environment.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
Impact 5.7-5: Development of the Proposed Project would affect the implementation of an emergency responder or evacuation plan.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.8 HYDROLOGY AND WATER QUALITY			
Impact 5.8-1: The Proposed Project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
Impact 5.8-2: The Proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Proposed Project may impede sustainable groundwater management of the basin.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
5.9 NOISE			
Impact 5.9-1: Construction activities would result in temporary noise increases in the vicinity of the proposed project in excess of existing established standards. Operational activities would not result in permanent or temporary increase in ambient noise levels in excess of existing established standards.	Potentially Significant	**N-1** The SMMUSD construction contract bid shall require the chosen construction contractor(s) to prepare a Construction Noise Control Plan. The details of the Construction Noise Control Plan shall be included as part of the permit application drawing set and as part of the construction drawing set. The Construction Noise Control Plan shall include, but not be limited to the following: • The District would need to provide one sign posting along the street frontage of each construction area and notifications to neighbors within a 500-foot radius of construction activities. The notifications must include a description of the activities while under construction and the dates and times that these activities would take place. The notifications must also include the contact information of the permit holder (i.e., the District) and the City contact. The District would be required to follow Santa Monica Municipal Code section 4.12.110 and to respond in the event of a noise or vibration complaint. • At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours, as well as the telephone numbers of the District's and contractor's authorized representatives that are assigned	Significant and Unavoidable

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the District. • During the entire active construction period, equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment regarding design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds). • Require the contractor to use impact tools (e.g., jack hammers and hoe rams) that are hydraulically or electrically powered wherever such alternatives are available in the market. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools. • During the entire active construction period, stationary noise sources shall be located as far from sensitive receptors as possible, and they shall be muffled and enclosed within temporary sheds, or insulation barriers or other measures. • During the entire active construction period, noisy operations shall be combined so that they occur in the same time period as the total noise level produced would not be significantly greater than the level produced if the operations were performed separately (and the noise would be of shorter duration). • Select haul routes that avoid the greatest amount of sensitive use areas. • Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes.	

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws. • Incorporate sound blankets at least 8 feet tall between the line of sight of active construction areas and classrooms that are in session and are the nearest/adjacent to the construction activity, which could result in an additional reduction in noise of at least 12 dBA, reducing noise levels to on-site classrooms from 58 dBA to 46 dBA. • During construction activities in proximity to off-site sensitive receptors, a sound wall will be provided along the campus boundary during various phases of construction to attenuate construction noise, which can provide up to 6 dBA reduction in noise levels to the off-campus receptors.	
Impact 5.9-2: The project would create a noticeable increase in short-term groundborne vibration and groundborne noise.	Potentially Significant	**N-2** Vibratory compaction that is within 25 feet of any surrounding residential structure shall use a static roller in lieu of a vibratory roller. Specifically, use of a static roller is predicted to generate vibration levels of approximately 0.05 in/sec PPV at a distance of 25 feet (New Zealand Transport Agency 2012). At a distance greater than 25 feet, a vibratory roller would no longer exceed 0.20 in/sec PPV for the off-site sensitive receptors. If demolition, grading, and building construction is necessary within 20 feet or less from historical structures on-site, construction vibration monitoring shall be conducted to document conditions at the campus prior to, during, and after vibration-generating demolition, grading, and building construction. The construction vibration monitoring shall be implemented by a historic architect meeting the Secretary of the Interior's Professional Qualification Standards to	Less Than Significant

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		include the following tasks: • Performance of a photo survey, elevation survey, and tile/crack monitoring survey for the historical structures within the school. Surveys shall be performed prior to and in regular intervals during of all vibration-generating activities within 20 feet or less of the historical structures on-site (the FTA Historical Structures Screening Distance to 0.12 in/sec PPV). • Conduct a post-construction survey on the structure following the completion of vibration-generating activities and applicant to make appropriate repairs in accordance with the Secretary of the Interior's Standards where damage has occurred as a result of construction activities.	
5.10 TRANSPORTATION			
Impact 5.10-1: The Proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
Impact 5.10-2: The Proposed Project would not conflict or be inconsistent with CEQA Guidelines 15064.3, subdivision (b).	Potentially Significant	**T-1** Before the start of construction of phase, the SMMUSD shall work with the City of Santa Monica Public Works Department to develop and implement a Construction Management Plan that is specific to the needs of each phase. The Construction Management Plan shall include a Temporary Traffic Control Plan (TTCP) to address anticipated impacts to or closures of public rights-of-way. The Construction Management Plan (including the TTCP) shall be submitted to the City Public Works Department for approval prior to construction of each phase of the Proposed Project. The TTCP shall demonstrate appropriate traffic handling during construction activities for all work that could impact the traveling public (e.g., the transport of equipment and materials to the campus area). The TTCP shall minimize hazards through industry-accepted traffic control practices. At a minimum, the TTCP shall require the contractor to do the following:	Less Than Significant

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• Obtain transportation permits necessary for oversize and overweight load haul routes and follow regulations of the applicable jurisdiction for transportation of oversized and overweight loads; • Provide adequate signage and traffic flagger personnel, if needed, to control and direct traffic for deliveries, if they could preclude free flow of traffic in both directions or cause a temporary traffic hazard; prohibit deliveries of heavy equipment and construction materials during periods of heavy traffic flow (i.e., 30 minutes before or after school start and end times); • Develop a Traffic Education Program to assist in educating parents, students, and staff on drop-off/pick-up procedures specific to each phase of construction that includes informational materials regarding student drop-off and pick-up procedures via regular parent/school communication methods and posted on the school website; • Utilize portable message signs and information signs at construction sites as needed; • Coordinate with the responsible agency departments, including the City of Santa Monica Public Works and Planning Departments, and the City of Santa Monica Fire Department no less than 10 days prior to the start of the work for each phase including specifying whether any temporary vehicle, pedestrian, or bicycle construction detours are needed, if construction work would encroach into the public right-of-way, or if temporary use of public streets surrounding the campus is needed; and • Review all existing emergency access and evacuation plans and identify procedures for construction area evacuation in the case of an emergency declared by local authorities. • Additionally, the District shall ensure that the construction contractor follows all applicable requirements and regulations established in the City of Santa Monica Procedures and	

1. Executive Summary

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

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Requirements for Temporary Traffic Control Plans to ensure the TTCP is prepared to City standards and approved as necessary.	
Impact 5.10-3: The Proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Less Than Significant	No mitigation measures or conditions of approval are required.	N/A
Impact 5.10-4: The Proposed Project would not result in inadequate emergency access.	Potentially Significant	Implementation of Mitigation Measures T-1 is required.	Less Than Significant

2. Introduction

2.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. This Draft Environmental Impact Report (DEIR) has been prepared to satisfy the requirements set forth in CEQA and the CEQA Guidelines for the Grant Elementary School Campus Master Plan Project (Proposed Project). An environmental impact report is a public informational document that provides decision makers and the public with an analysis of the environmental effects of a project, to identify potentially significant environmental impacts, and if found, develop mitigation measures and alternatives to the project, if feasible to reduce those impacts, and if not, to adopt a statement of overriding conditions should the lead agency still wish to proceed with the project. To that end, the EIR must analyze and disclose significant environmental impacts that cannot be avoided; growth-inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present, and reasonably foreseeable future projects. Compliance with CEQA applies to California government agencies at all levels: local, regional, and state agencies, boards, commissions, and special districts (such as school districts and water districts).

The lead agency means "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment" (Public Resources Code [PRC] Section 21067). The Santa Monica–Malibu Unified School District (SMMUSD or District) is the public agency that will be carrying out the Proposed Project.

PRC Section 21080(a) states that analysis of a project's environmental impacts is required for any "discretionary projects proposed to be carried out or approved by public agencies…." In this case, the SMMUSD has determined that an EIR is required to determine whether there is substantial evidence that construction and operation of the Proposed Project would result in environmental impacts and impose feasible mitigation for any discovered potentially significant environmental impacts or cumulatively considerable impacts.

2.2 NOTICE OF PREPARATION AND INITIAL STUDY

The SMMUSD determined that an EIR would be required for this Proposed Project and issued an Initial Study/ Notice of Preparation (IS/NOP) on January 13, 2023 (see Appendix B). Comments received during the IS/NOP's public review period, from January 13, 2023 to February 12, 2023, are in Appendix C. A scoping meeting was held on February 7, 2023, where an overview of the Proposed Project and CEQA process were presented. The comments received during the public review period and a summary of the comments presented at the scoping meeting are provided in Appendix C of this DEIR.

The NOP process helps determine the scope of the environmental issues to be addressed in the DEIR. Based on this process and the Initial Study for the Proposed Project, certain environmental categories were identified as having the potential to result in significant impacts. Environmental issues that were considered to have Potentially Significant Impacts are addressed in this DEIR; issues identified to result in Less Than Significant Impact or No Impact are addressed in the IS/NOP (see Appendix B) and Chapter 6, *Other CEQA Considerations*.

2.3 PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

This DEIR has been prepared to satisfy the requirements of CEQA and the CEQA Guidelines. An EIR is a public informational document that provides decision makers and the public with an analysis of the environmental effects of the Proposed Project and indicates possible ways to reduce or avoid environmental damage through the identification of mitigation measures and/or alternatives to the Proposed Project. The EIR must also disclose potentially significant environmental impacts that cannot be avoided; growth-inducing impacts; effects found not to be significant; and significant cumulative impacts associated with past, present, and reasonably foreseeable future projects.

The intent of this DEIR is to provide sufficient information on the potentially significant environmental impacts of the Proposed Project to allow the SMMUSD to make an informed decision on whether to carry out the Project, including identification of mitigation measures and project alternatives that would substantially lessen or avoid potentially significant environmental impacts caused by the Proposed Project. Specific discretionary actions of public agencies concerning the Proposed Project are described in Section 3.7, *Required Permits and Approvals*.

This DEIR has been prepared in accordance with requirements of the:

- California Environmental Quality Act (CEQA) of 1970, as amended (PRC Sections 21000 et seq.)
- State Guidelines for the Implementation of the CEQA of 1970 (CEQA Guidelines), as amended (California Code of Regulations, Sections 15000 et seq.)

SMMUSD and the responsible agencies described in section 3.7.2, *Other Required Permits and Approvals*, may use this EIR in their decision-making or permitting processes will consider the information in this EIR along with other information that may be presented during the CEQA process. In addition, this EIR is the primary reference document in the formulation and implementation of a Mitigation Monitoring and Reporting Program (MMRP) for the Proposed Project.

In accordance with CEQA, public agencies are required to make appropriate findings for each potential environmental impact identified in the EIR that cannot be mitigated to a less than significant level. If the lead agency (and responsible agencies using this CEQA document for associated permits or approvals) decides that the benefits of a project outweigh any identified significant environmental effects that cannot be mitigated to below a threshold of significance, the lead agency must adopt a Statement of Overriding Considerations that states the reasons supporting its actions despite the project's significant and unavoidable environmental impacts. The actions involved in the implementation of the Proposed Project are described in Section 3.7, *Required*

Permits and Approvals. Other agencies, including responsible and trustee agencies, that may have discretionary approval over the Proposed Project or components of it are also described in in that section.

2.4 SCOPE OF THIS DEIR

The scope of the DEIR was determined based on the IS/NOP, comments received in response to the IS/NOP, and comments received at the scoping meeting conducted by the District. Pursuant to Sections 15126.2 and 15126.4 of the CEQA Guidelines, the DEIR should identify any potentially significant adverse impacts and recommend mitigation that would reduce or eliminate these impacts to a less-than-significant level. The information in Chapter 3, *Project Description*, establishes the basis for analyzing future, project-related environmental impacts.

2.4.1 Impacts Considered Less Than Significant

During preparation of the IS/NOP, SMMUSD determined that 10 environmental impact categories were not significantly affected by the Proposed Project. These categories are addressed in Chapter 6, *Other CEQA Considerations*, and in more detail in the IS/NOP (Appendix B).

- Agriculture and Forestry Resources
- Biological Resources
- Land Use/Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

2.4.2 Potentially Significant Adverse Impacts

Through the IS/NOP process, SMMUSD determined that further analysis was needed of 10 environmental factors to determine whether the Proposed Project would result in potentially significant impacts. These topics are evaluated in detail in Chapter 5, *Environmental Analysis*, of this DEIR.

- Aesthetics
- Air Quality
- Cultural Resources
- Energy
- Geology And Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials

- Hydrology and Water Quality
- Noise
- Transportation

2.4.3 Unavoidable Significant Adverse Impacts

Unavoidable adverse impacts may be considered significant on a project-specific basis, cumulatively significant, and/or potentially significant. Mitigation measures would reduce the level of impact, but the following impacts would remain significant, unavoidable, and adverse after mitigation measures are applied:

- **Impact 5.9-1** Construction-related activities would result in temporary noise increases in the vicinity of the Proposed Project in excess of established standards. [Threshold N-1]

2.4.4 Incorporation by Reference

Some documents are incorporated by reference into this DEIR, consistent with Section 15150 of the CEQA Guidelines, and they are available for review at the SMMUSD's Office.

- City of Santa Monica Municipal Code, November 2022
- City of Santa Monica General Plan, 2015
- Grant Elementary School Campus Master Plan, September 2020 (Appendix A)
- Santa Monica-Malibu Unified School District, Districtwide Educational Specifications, March 2019

2.5 FINAL EIR CERTIFICATION

This DEIR is being circulated for a 45-day review period, from October 30, 2023, to December 13, 2023. Interested agencies and members of the public are invited to provide written comments on the DEIR. In compliance with Sections 15085(a) and 15087(a)(1) of the CEQA Guidelines, the SMMUSD, serving as the lead agency, has published a Notice of Completion (NOC) and Notice of Availability (NOA) of the DEIR, that indicate that the DEIR and all associated technical appendices can be viewed at the following locations:

- Santa Monica–Malibu Unified School District, 1717 4th Street, Santa Monica, CA 90401
- Grant Elementary School Administrative Office, 2368 Pearl Street, Santa Monica, CA 90405

In addition, the DEIR is available online at the SMMUSD website: https://www.smmusd.org/Page/5592

The NOC/NOA has been transmitted to the Office of Planning and Research State Clearinghouse, Los Angeles County Clerk, all property owners within 500 feet of the campus, and those who previously requested such notice. Any public agency or members of the public wishing to comment on the DEIR must submit their comments in writing or send them via email with the subject heading "Grant Elementary School Campus Master Plan Project" to the following addresses prior to the end of the public review period:

- **Mail:** Carey Upton, Chief Operations Officer
  Santa Monica-Malibu Unified School District
  1717 4th Street
  Santa Monica, California 90401

- **Email:** Cupton@smmusd.org

Upon completion of the 45-day review period, the SMMUSD will review all written comments received and prepare written responses for each. The FEIR will include all received comments, the SMMUSD's responses to those comments, and any changes to the DEIR that result from comments. The DEIR and FEIR will be presented to the SMMUSD's Board of Education for potential certification as the environmental document for the Proposed Project. All persons who comment on the DEIR will be notified of the availability of the FEIR and the date of the public hearing.

2.6 MITIGATION MONITORING

PRC Section 21081.6 requires that agencies adopt an MMRP for any project for which it has made findings pursuant to PRC Section 21081. Such a program is intended to ensure the implementation of all mitigation measures adopted through the preparation of the EIR.

The MMRP for the Proposed Project will be completed after the FEIR and prior to consideration of the Proposed Project by the SMMUSD Board of Education.

2. Introduction

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3. Project Description

3.1 OVERVIEW

Santa Monica–Malibu Unified School District (SMMUSD or District) proposes to renovate and modernize the existing Grant Elementary School (Grant ES) campus. The Grant Elementary School Campus Master Plan (Proposed Project) is designed to redevelop the campus facility to align with the Districtwide Educational Specifications (SMMUSD 2019). The Proposed Project would create new and renovated facilities that would support modern project-based learning at Grant ES; expand instructional strategies currently in place in the District; and address future learning that is flexible, adaptable, and project centered in its delivery. The Proposed Project is required to undergo an environmental review pursuant to the California Environmental Quality Act (CEQA).

In April 2019, the SMMUSD Board of Education adopted Districtwide Educational Specifications that provide guidance on developing future learning environments to support new developments in technology and the expectations of the twenty-first-century work force (SMMUSD 2019). The Districtwide Educational Specifications were developed through a comprehensive, year-long process that engaged District leadership, educational leadership, teachers, staff, user groups, maintenance and operations personnel, students, and community to arrive at an informed and well-represented set of goals and objectives for the design of future learning environments at SMMUSD. This process was overseen by an Educational Specifications Steering Committee that consisted of educators and leadership and focused on defining the District vision for future learning and the environments that support that vision.

The Districtwide Educational Specifications shift the instructional design of the past—defined by a traditional teacher-at-the-front-of-the-classroom style of learning—to one that provides for rotational learning in the classroom, incorporating a variety of project-based learning experiences that allow simultaneous individualized, small group, and large group instruction. Learning spaces would be adapted with enhanced flexibility, mobility, and access to technology and resources in real time, where instructors and students may shift seamlessly between programs and instructional opportunities. The Districtwide Education Specifications also call for larger classrooms, more and larger multipurpose rooms, and several new shared spaces that do not currently exist. The redesigned campus would have more square feet of interior space.

Following adoption of the Districtwide Educational Specifications, the District assessed the Grant ES campus and identified priority and future improvements to be performed in accordance with the Districtwide Educational Specifications guidance. The campus assessment was a result of collaboration between SMMUSD administration leadership; Grant ES administration, faculty, staff, and parents; and the campus community at large. These improvements provide the basis for the long-range Grant Elementary School Campus Master Plan (September 1, 2020), included as Appendix A, which presented a draft long-term "test fit" for the campus to

implement the goals of the Districtwide Educational Specifications. The long-term test fit was further assessed alongside other District priorities and realities, budget, scheduling, phasing, and the historical resources analysis.

During the campus planning process, the Board of Education passed Board Policy 7113, Historic Resources, in January 2022. This prompted a historical resources inventory to be completed by Architectural Resources Group (ARG 2022). This analysis preceded the CEQA process and has been incorporated into this draft environmental impact report (DEIR).

The primary goal of these planning efforts was to understand and scope candidate projects that could be implemented with existing Measure SMS bond funds, passed by Santa Monica taxpayers in 2018, while establishing those improvements as the first series of projects that would be implemented as part of the long-term redevelopment of the campus. The result is the Proposed Project, which constitutes the Grant Elementary School Campus Master Plan evaluated in this DEIR. The Campus Master Plan is the basis for development of the Proposed Project, which was reduced to meet a shorter, more realistic project scope and time frame.

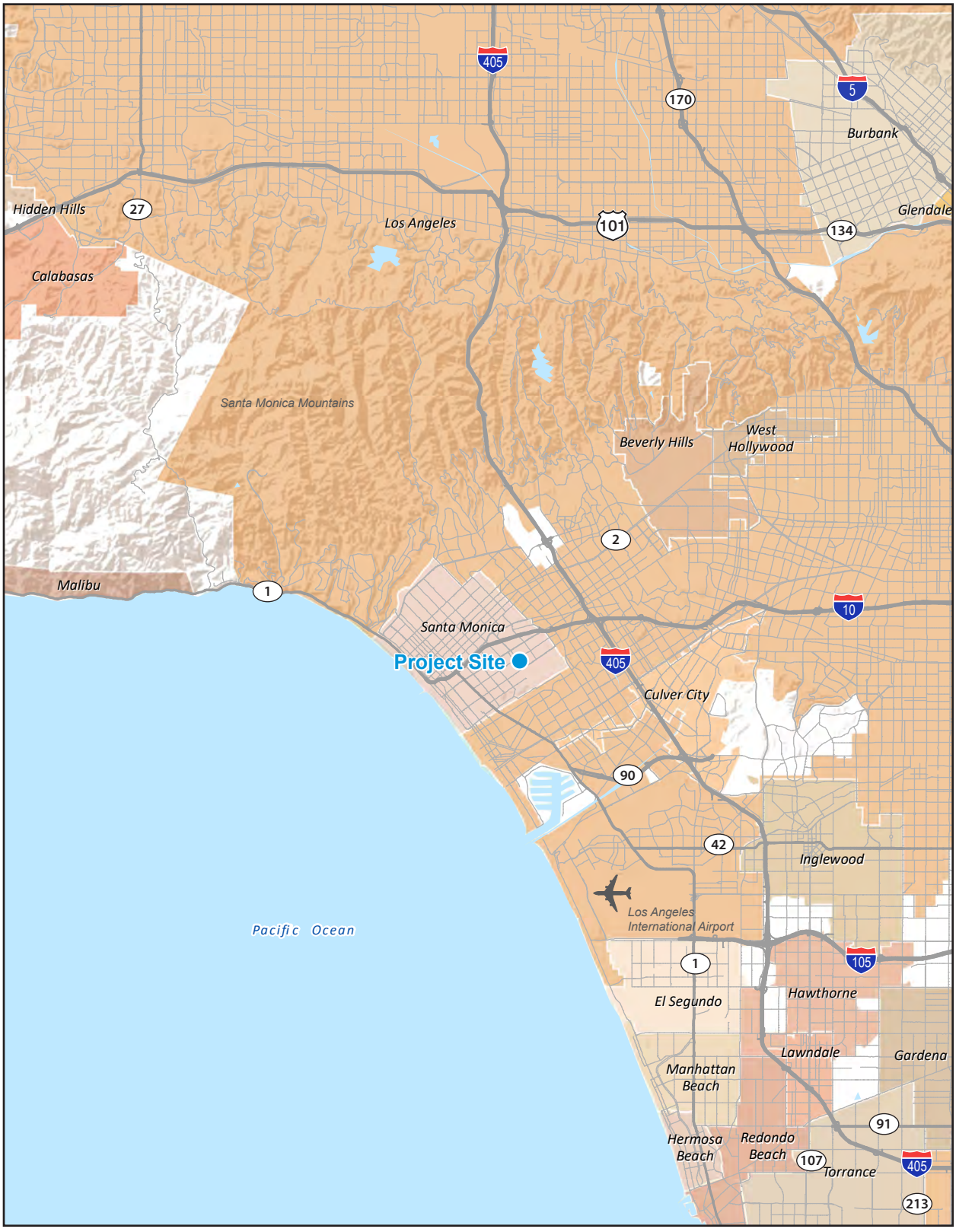
3.2 PROJECT LOCATION

The Grant ES campus is at 2368 Pearl Street (Assessor's Parcel Map Number [APN] 4273-009-900) in the Sunset Park neighborhood of the city of Santa Monica, Los Angeles County, California (see Figure 3-1, *Regional Location*). The Proposed Project would occur over 5.41 acres of the 6.01-acre District-owned campus. The campus is approximately 0.5 mile south of Interstate 10 (I-10); two miles east of Pacific Coast Highway (PCH) and Santa Monica State Beach; and is bounded by Pearl Street to the north, residences across 24th Court (alley) to the east, residences across Pearl Place South (alley) to the west, and a residential neighborhood immediately to the south (Figure 3-2, *Aerial Photograph*). Pico Boulevard is approximately 0.25 mile to the north, and Ocean Park Boulevard is approximately 0.1 mile to the south. Grant ES is in an urban area surrounded by residential neighborhoods on all four sides. Direct access to the campus is provided by Pearl Street, and vehicular student drop-off/pick-up is along Pearl Street.

3.2.1 Surrounding Land Uses

Grant ES is surrounded by dense urban residential neighborhoods immediately to the north, east, west, and south. The properties surrounding the campus are zoned Single-Family Residential. Multifamily residential and properties south of the campus along Ocean Park Boulevard are zoned medium-density residential (Santa Monica 2015). Clover Park is approximately 500 feet east of Grant ES.

Figure 3-1 - Regional Location



Note: Unincorporated county areas are shown in white.

0 3
Scale (Miles)

Source: Generated using ArcMap, 2023.

3. Project Description

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Figure 3-2 - Aerial Photograph

Grant ES Campus Boundary

0 200
Scale (Feet)

Source: Nearmap, Inc., 2022.

3. Project Description

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3.2.1 General Plan and Existing Zoning

The City of Santa Monica General Plan Land Use designation for the campus is Institutional/Public Lands. The zoning designation for the campus is Institutional/Public Lands (PL) (see Figure 3-3a, *General Plan Land Use*, and Figure 3-3b, *Zoning Designations*). As stated in Santa Monica Municipal Code (SMMC) Section 9.15.010, permitted uses include public or semipublic facilities, including municipal offices, schools, libraries, museums, performance spaces, cemeteries, corporation yards, utility stations, and similar uses. This zoning designation is consistent with the Land Use and Circulation Element's Institutional/Public Lands land use designation. The campus is not within the Coastal Zone.

3.3 PROJECT OBJECTIVES

The following project objectives have been established based on the SMMUSD Districtwide Educational Specifications for the design of future learning environments at Grant ES:

1. Provide properly sized learning environments to accommodate students and a variety of 21st century learning activities at the Grant ES campus.
2. Advance educational facilities to support 21st century learning and properly support the enrollment at the Grant ES campus.
3. Improve learning at Grant ES by replacing undersized and inflexible facilities with larger, flexible spaces that accommodate modern, diverse learning styles and allow for variable uses, such as rotational learning in the classroom and project-based learning that allows simultaneous individualized, small group, and large group instruction.
4. Provide enhanced, modern support spaces—such as libraries, cafeteria, labs, maker spaces, and other student services—that promote "whole child" development.
5. Organize the campus to provide safe student circulation.
6. Reorganize open space and foster intracampus circulation.
7. Provide safe and secure schools.
8. Maintain the campus's existing student capacity.

3.4 EXISTING CONDITIONS

Originally built in 1936, Grant ES serves students from preschool, transitional kindergarten, kindergarten, and grades 1 through 5. The campus consists of 9 permanent buildings (Buildings A through K), which include 4 classroom buildings, an administration/classroom building, an auditorium building, a library, a computer lab/classrooms building, and a cafeteria/classrooms building; 11 modular and relocatable buildings (P70 through P79 and one playground restroom); a 32,600-square-foot, irregularly shaped field; playgrounds; and shade structures, basketball courts, and parking lots (see Table 3-1, *Characteristics of Existing Buildings*; Figure 3-4,

3. Project Description

Existing Site Plan; and Figure 3-5, *Photographs of the Existing Campus*). The campus has a total of 34 classrooms for preschool through 5th grade; special education; science, art, and music; and after-school programs. The campus includes approximately 2.8 acres of athletic fields, courts, and playgrounds (see Table 4-1, *Existing Recreational Facilities*). The existing athletic facilities, such as the athletic fields and basketball courts, are available for community use through the Civic Center Act and a joint-use agreement between the District and the City. When the school facilities are not in use and are not scheduled for school-sponsored or other District-related events, certain community organizations and members are permitted to use school facilities for their events by obtaining a Civic Center Act permit from the SMMUSD.

Table 3-1 Characteristics of Existing Buildings

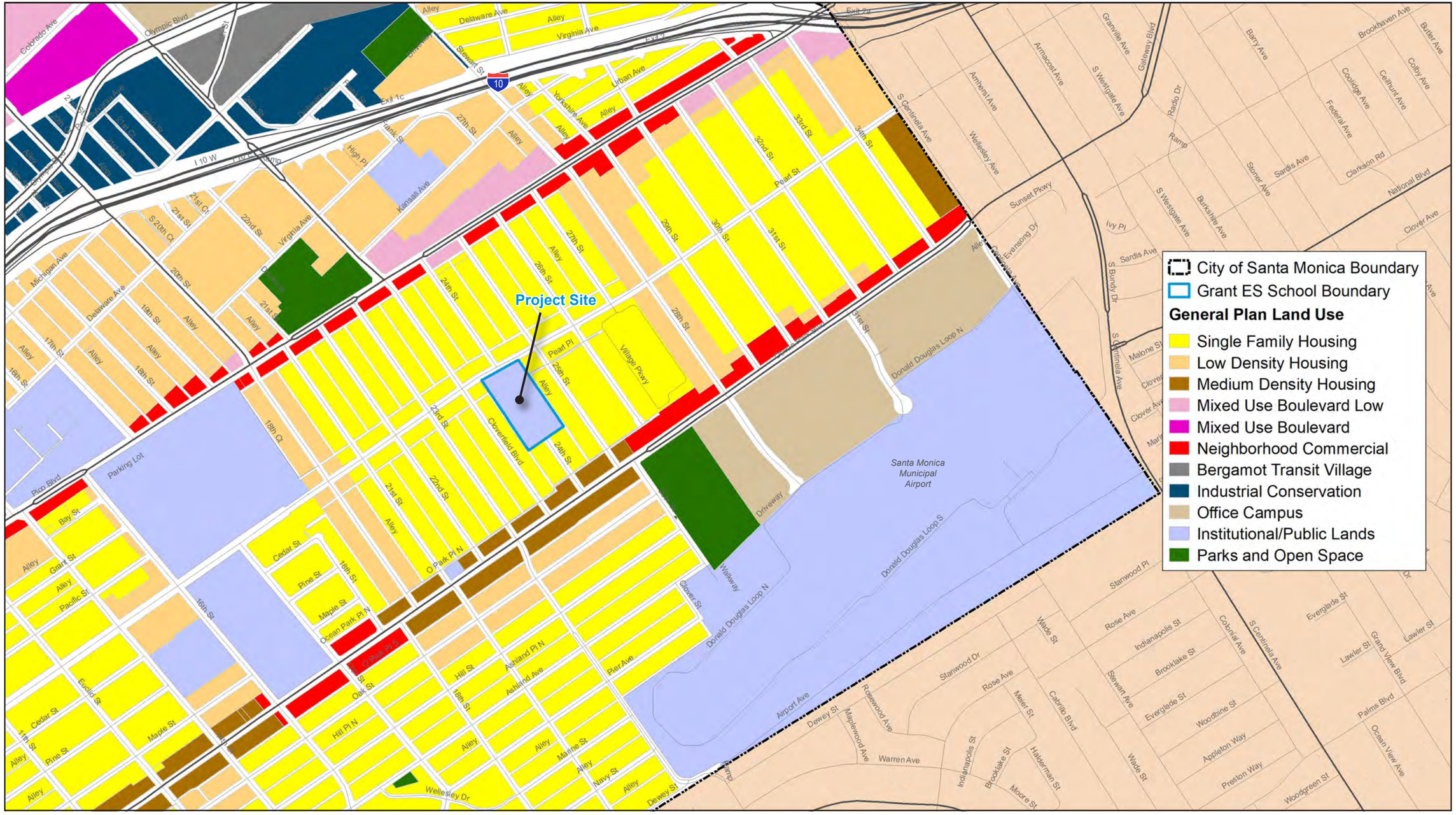
Building Name	Year Built	Current Use	Number of Classrooms	Building Square Feet	Building Type	Building Height	Number of Stories
A	1954	Classrooms	4	4,415	Permanent	12 ft 1 in	1
B	1940 1954	Classrooms	5	6,830	Permanent	16 ft 2 in (Original) 12 ft 1 in (addition)	1
C	1936	Classrooms	4	5,815	Permanent	16 ft 2 in	1
D	1936	Administration/Classrooms	2	5,110	Permanent	30 ft 7 in	1
E	1945	Auditorium	-	5,105	Permanent	22 ft 8 in	2
F	1968	Library	-	3,125	Permanent	15 ft	1
G	1940	Computer Lab/Classrooms	1	2,830	Permanent	16 ft 2 in	1
H	1945	Cafeteria/Classrooms	6	13,965	Permanent	20 ft	1
K	1945	Administration/Classrooms	2	3,370	Permanent	18 ft 6 in	1
P70–P75	1992	Classrooms	6	5,760	Portables	-	1
P76–P79	1999	Classrooms	4	3,860	Portables	-	1

Source: ARG 2022.

Permitted events may include community and/or City use of the playfields, common areas, and classrooms, as permitted in the 2022 "Master Facility Use Agreements with the Santa Monica-Malibu Unified School" (City of Santa Monica 2022a). The primary program is the Playground Partnership that allows parents and minors to use the recreational facilities as park on weekends, holidays, and during breaks. Recreational activities that occur on Grant ES through the Civic Center Act permit during non-school hours include the American Youth Soccer Organization, Childcare Recreation Enrichment Sports Together enrichment and camps, and playground access.

Grant ES is a neighborhood school and most of the students reside within a few miles of the campus. Though many students are dropped off by vehicle, a large percentage of the students walk, bike, or skate to school. Students who walk or bike/skate to school enter the campus from the north. The campus has six bike racks near the main entrance on Pearl Street.

Figure 3-3a - General Plan Land Use



Source: Generated Using ArcMap, Inc.; City of Santa Monica, 2022

3. Project Description

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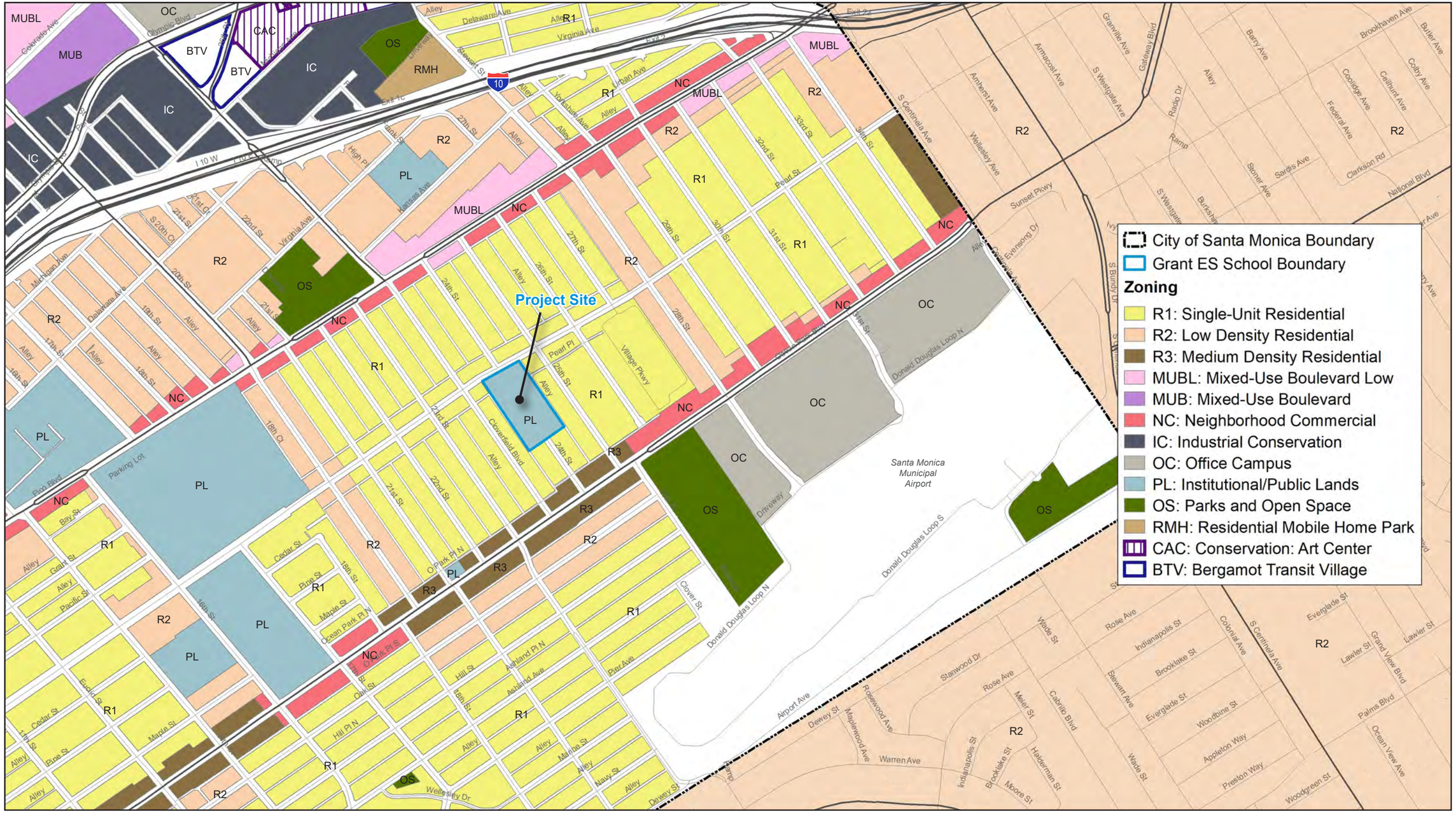
Figure 3-3b - Zoning Designations



Source: Generated Using ArcMap, Inc.; City of Santa Monica, 2022

3. Project Description

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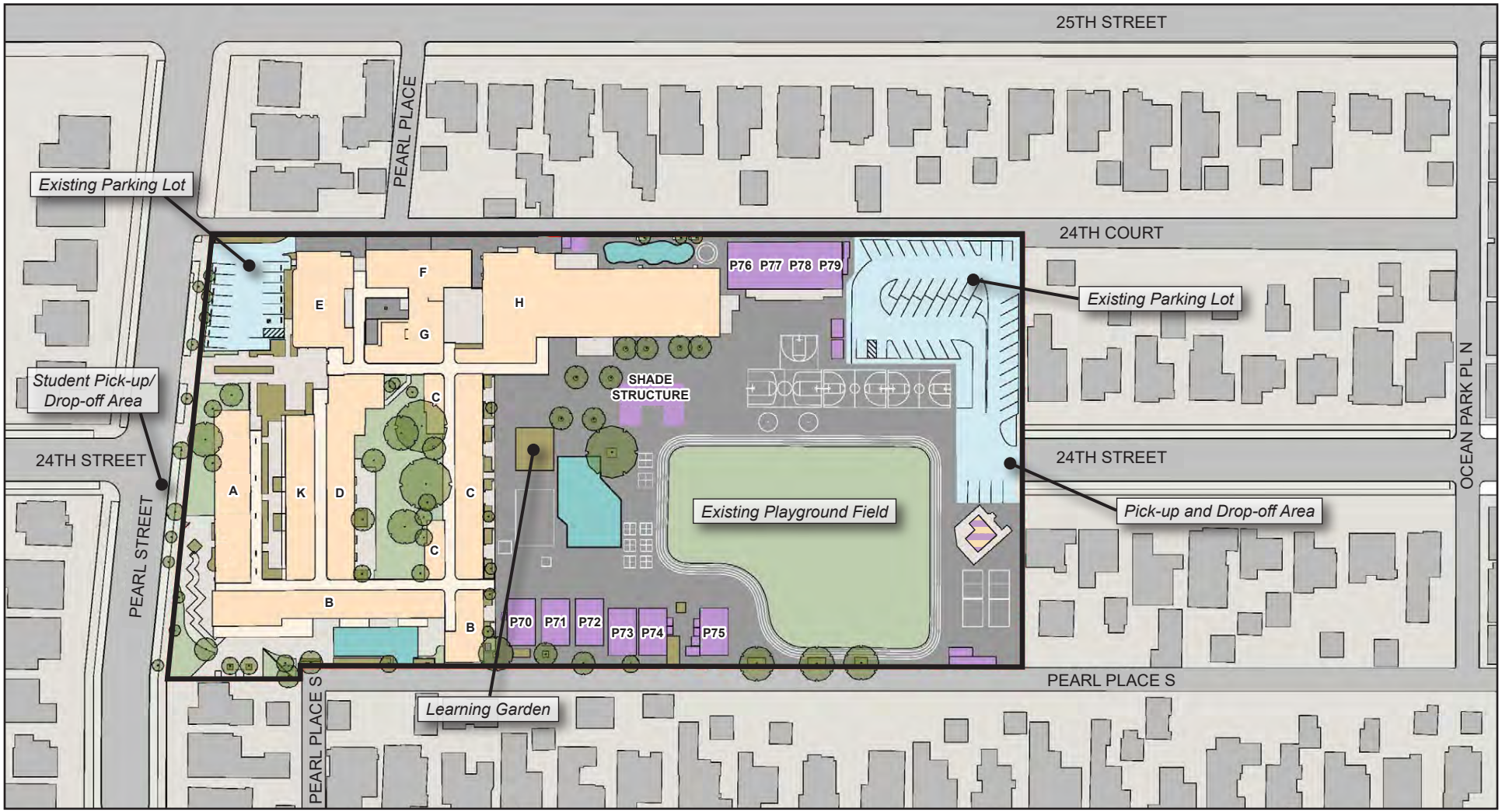
Figure 3-4 - Existing Site Plan



Source: Johnson Favaro, 2022.

3. Project Description

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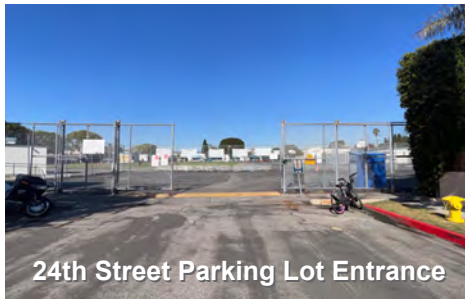
Figure 3-5 - Photos of the Existing Campus



Source: SMMUSD, 2022.

3. Project Description

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The City's Safe Routes to Schools program aims to make active transportation to school a customary part of everyday life and includes the "Bike It! Walk It! Bus It!" events that take place twice a year to encourage safety training for students and their parents; outreach and events; and infrastructure improvements. In October 2022 the event had 3,315 total participants, including 481 student, parents, and staff from Grant ES; in May 2023, the event had 2,607 total participants, including 468 from Grant ES. Additionally, during the 2022-2023 school year, Grant ES students had 48 enrollees in the Metro GoPass TAP card program for public transit, and a total of 2,175 total boardings were recorded for 2022-2023.

A visitor and administrative parking lot with 14 parking stalls is in front of the auditorium (Building E), near the main entrance, and occupies the northeast corner of campus facing Pearl Street. An L-shaped staff parking lot with 48 parking stalls is at the southeast corner of the campus adjacent to the basketball courts and is accessed from 24th Street. School deliveries occur off the 24th Court Alley adjacent to the kitchen, along with trash and recycle pick-up at a service yard level with the alley.

The current student drop-off/pick-up (DOPU) operations occur primarily at two locations:

- **Pearl Street DOPU.** The south side of Pearl Street (curbside) between 24th Court and Cloverfield Boulevard. The Pearl Street DOPU area is limited to preschool and TK-K students. Vehicles queue on the south (eastbound) side of Pearl Street between Cloverfield Boulevard and 24th Court during DOPU hours.

- **24th Street DOPU.** 24th Street at the southern end of the school. The 24th Street DOPU is utilized by grades 1 through 5 students and is accessed primarily via Ocean Park Boulevard. The two-lane collector street ends at the gated entrance into the southern portion of the campus. On-street parking is allowed on either side of 24th Street. Vehicles enter the campus driveway and follow the counterclockwise vehicular pattern in the existing staff parking lot and exit back onto 24th Street.

Pedestrian Access. Students who walk or bike to school enter the campus at the northern end. Marked crosswalks are on the north and east legs of the 24th Street/Pearl Street intersection. Marked crosswalks are provided on all legs of Pearl Street's intersections with Cloverfield Boulevard and 25th Street. To facilitate safe pedestrian crossings from the neighborhood to the school, crossing guards are at all three intersections in the morning and afternoon.

Detailed descriptions of each building and ancillary features, including parking, are provided in Chapter 4, *Environmental Setting*. The tallest structure on the campus is Building D (Administration/Classrooms) at 30 feet, 7 inches.

3.4.1 Operational Schedule

School hours would remain the same as existing hours, from 8:00 a.m. to 3:00 p.m., with staff and students arriving on campus between approximately 7:00 a.m. and 8:00 a.m., and leaving between approximately 3:00 p.m. and 5:00 p.m. After-school activities and staff work at the campus until 6:00 p.m., Monday through Friday during the school year.

Operation of the school facilities for community use typically occur outside normal school operating hours, generally after 3:00 p.m. on weekdays and after 8:00 a.m. on Saturdays and Sundays. Indoor activities are typically completed by 9:00 p.m. but can be permitted until 10:00 p.m., and all outdoor activities are completed by sunset on both weekdays and weekends. The existing field does not have field lighting. Parking for community uses is be provided in the school's on-site surface parking lots and surrounding neighborhood streets. The hours, frequency, and types of these uses would not change with operation of the Proposed Project. However, these hours and uses could change during construction of the Proposed Project.

3.4.2 Campus History

The historical resources inventory identified a historic district at Grant ES that is eligible for listing in the California Register of Historical Resources and for designation as a City of Santa Monica historic district under SMMC Chapter 9.56.100, Landmarks and Historic Districts Ordinance (ARG 2022). The historic district is further discussed in Chapter 4, *Environmental Setting*, and Chapter 5.3, *Cultural Resources*, of this DEIR. Significance is derived from the synergy between contributing buildings and site features; no one building or site feature on the campus appears to be individually eligible when evaluated independently of the larger historic district. Buildings B, C, D, E, G, H, and K; the Central Garden, the landscaped courtyard bounded by Buildings B, C, D, and G; covered breezeways and corridors connecting the buildings; and the paved forecourt and flagpole at the north end of the campus as approached from Pearl Street are contributing elements of the historic district. However, other buildings and site/landscape features do not contribute to the historic district (see Figure 3-6, *Historic District Boundary*, and Table 4-5, *Features in the Historic District*). All other buildings and features on campus were determined ineligible for listing at the federal, state, and local levels (ARG 2022).

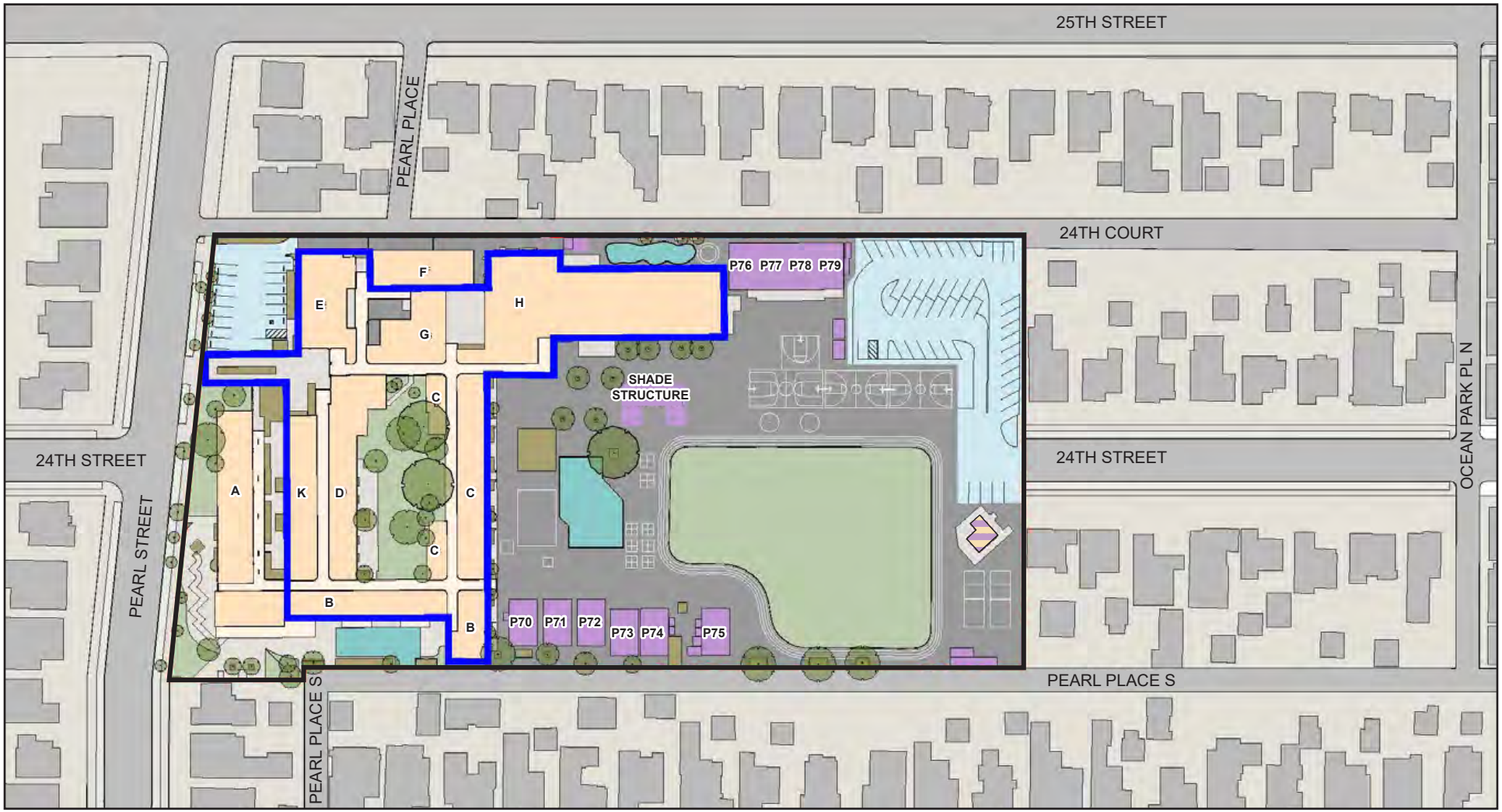
As part of the Grant ES design process, the District met with the Santa Monica Conservancy during Grant ES design-review meetings to discuss the Proposed Project design and ensure compatibility with the identified historical elements. These meetings resulted in various revisions to the Proposed Project's design, including a reduced maximum building height. The District met with the Conservancy on July 28, August 18, and September 30, 2022. The District also held three community meetings on June 21, 2021; March 10, 2022; and February 7, 2023, presenting the ongoing design process and options.

3.5 PROJECT CHARACTERISTICS

"Project," as defined by CEQA Guidelines, means:

> ... the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (1)…enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100–65700. (14 Cal. Code of Reg. Section 15378[a])

Figure 3-6 - Historic District Boundary



Source: Johnson Favaro, 2022.

3. Project Description

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3.5.1 Description of Proposed Project

The Proposed Project, which involves implementation of the Grant ES Campus Master Plan, would be constructed in three phases. Redevelopment and modernization of Grant ES includes the demolition and removal of some existing structures, renovation of the three structures to remain, construction of two new buildings, new and reconfigured playfields and playgrounds, and two new and reconfigured parking lots. As listed in Table 3-2, *Summary of Building Removal and Demolition*, 10 existing modular and relocatable classroom buildings (P70 through P79), one modular building (playground restrooms), shade structures, and a portion of one permanent classroom building (Building B) would be selectively demolished and removed as part of the Proposed Project, for a total of 76,415 square feet of demolition. The rest of the buildings would remain as is. Figures 3-7a through 3-7c, *Proposed Project's Site Plan*, show each phase and ultimate buildout of the Proposed Project. Each phase of the Proposed Project is dependent on funding availability. Phase 1 is funded, and design is complete; Phases 2 and 3 would occur in the future, anticipated to be complete by 2030.

Table 3-2 Summary of Building Removal and Demolition

Name	Square Footage
Phase 1	
No demolition during Phase 1	0
Phase 1 Demolition Square Footage	**0**
Phase 2	
Six Portable Classrooms (P70–P75)	5,760 (960 x 6)
Playground Restrooms (Modular Building)	400
Existing Parking Lot and Playground	61,350
Shade Structures	1,500
Phase 2 Demolition Square Footage	**69,010**
Phase 3	
Four Portable Classrooms (P76–P79)	3,860 (965 x 4)
Building B – One Kindergarten Classroom	1,810
Building B – One Special Education Classroom	1,735
Phase 3 Demolition Square Footage	**7,405**
Total Demolition Square Footage	**76,415**

Source: SMMUSD 2023.

Phase 1

Phase 1 of the Proposed Project would include renovation and expansion of the existing library (Building F), renovation of the transitional kindergarten and kindergarten classrooms (Building A), and improvements to the Central Garden. The existing 3,190-square-foot library would be expanded and renovated to add 250 square feet of space to the west side of the library in a currently paved area. Buildings G (Computer Lab/Classrooms) and F (Library) would be combined by removing the eastern wall of Building G and western wall of Building F, to create a new Library and Maker space totaling approximately 5,955 square feet. Phase 1 would not require any building removal.

3. Project Description

The renovated library would include new openings in existing walls for doors/windows; new floor framing; new ceiling and casework; upgraded lighting; new electrical and data systems; and modifications to the heating, ventilation, and air conditioning (HVAC) system. The renovated library would accommodate approximately 60 students and provide ample sitting and standing positions for staff, maintaining visibility and clear lines of sight. It would include multipurpose and collaborative areas to support presentations and provide access to tablets for students.

The existing early childhood education classrooms in Building H would be consolidated into new transitional kindergarten classrooms in Building A. The four existing elementary classrooms in Building A would be consolidated into three early education classrooms (two preschool classrooms and one transitional kindergarten classroom) separated by internal restrooms. Each classroom would include new vertically retracting doors that would lead to new outdoor classrooms and a new transitional kindergarten play yard directly north of the building. This component of the Proposed Project would be limited to interior renovations, and Building A would not be expanded (see Figure 3-7a*, Proposed Project's Site Plan: Phase 1*).

Phase 2

Phase 2 of the Proposed Project would require approximately 69,010 square feet of demolition, which includes the removal of six portable classrooms (P70 to P75), playground restrooms, and shade structures, and reconfiguration of the existing playground and parking lot. It would include the construction of a new 10,626-square-foot, one-story classroom building with six classrooms that would include a rooftop learning garden and outdoor science lab. The existing classrooms in the modular buildings P70 to P75 and some classrooms in Building B would be relocated to this new building. Similar to the existing classrooms, each new classroom would have the capacity for 20 students in transitional kindergarten, 24 students in kindergarten, an instructor, and an aide/volunteer. First- and second-grade classrooms would have the capacity for 24 students, an instructor, an aide/volunteer, a guest speaker or co-learning instructor and special education aides.

The existing L-shaped playfield would be reconfigured to a standard rectangular playfield (approximately 34,400 square feet) and centrally located in the southern portion of the campus.

Phase 2 of the Proposed Project would include the removal of the L-shaped surface parking lot in the southeast portion of the campus fronting 24th Court, 24th Street, and residences and development of two new parking lots (approximately 17,500 square feet each) at the southeast and southwest corners of the campus along 24th Court and Pearl Place. Each parking lot would contain 40 parking spaces, and they would be separated by the improved playfield at the southern end of the campus (see Figure 3-7b, *Proposed Project's Site Plan: Phase 2*).

Figure 3-7a - Proposed Project Site Plan - Phase 1

Source: Johnson Favaro, 2022.

3. Project Description

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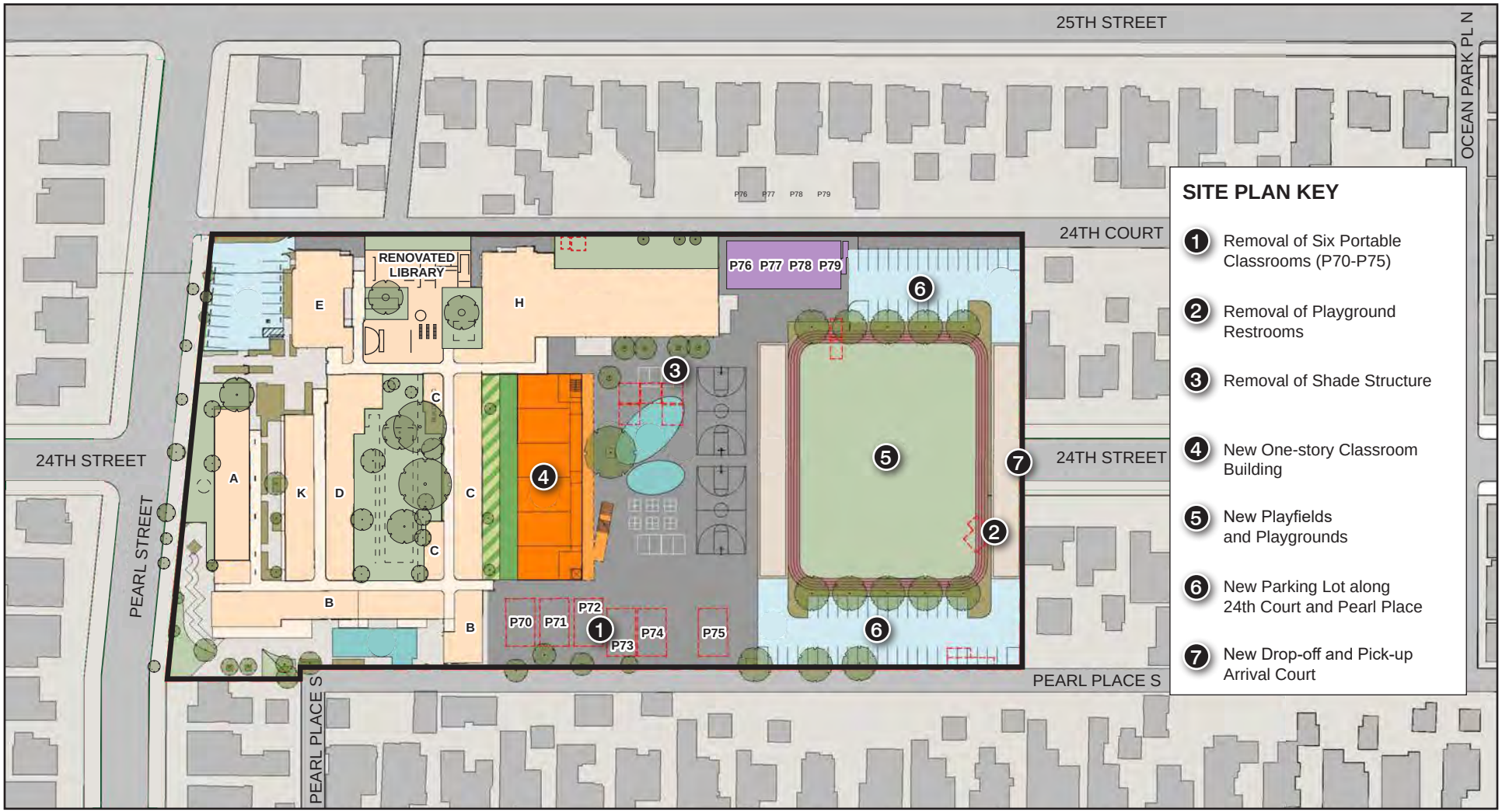
Figure 3-7b - Proposed Project Site Plan - Phase 2



Source: Johnson Favaro, 2022.

3. Project Description

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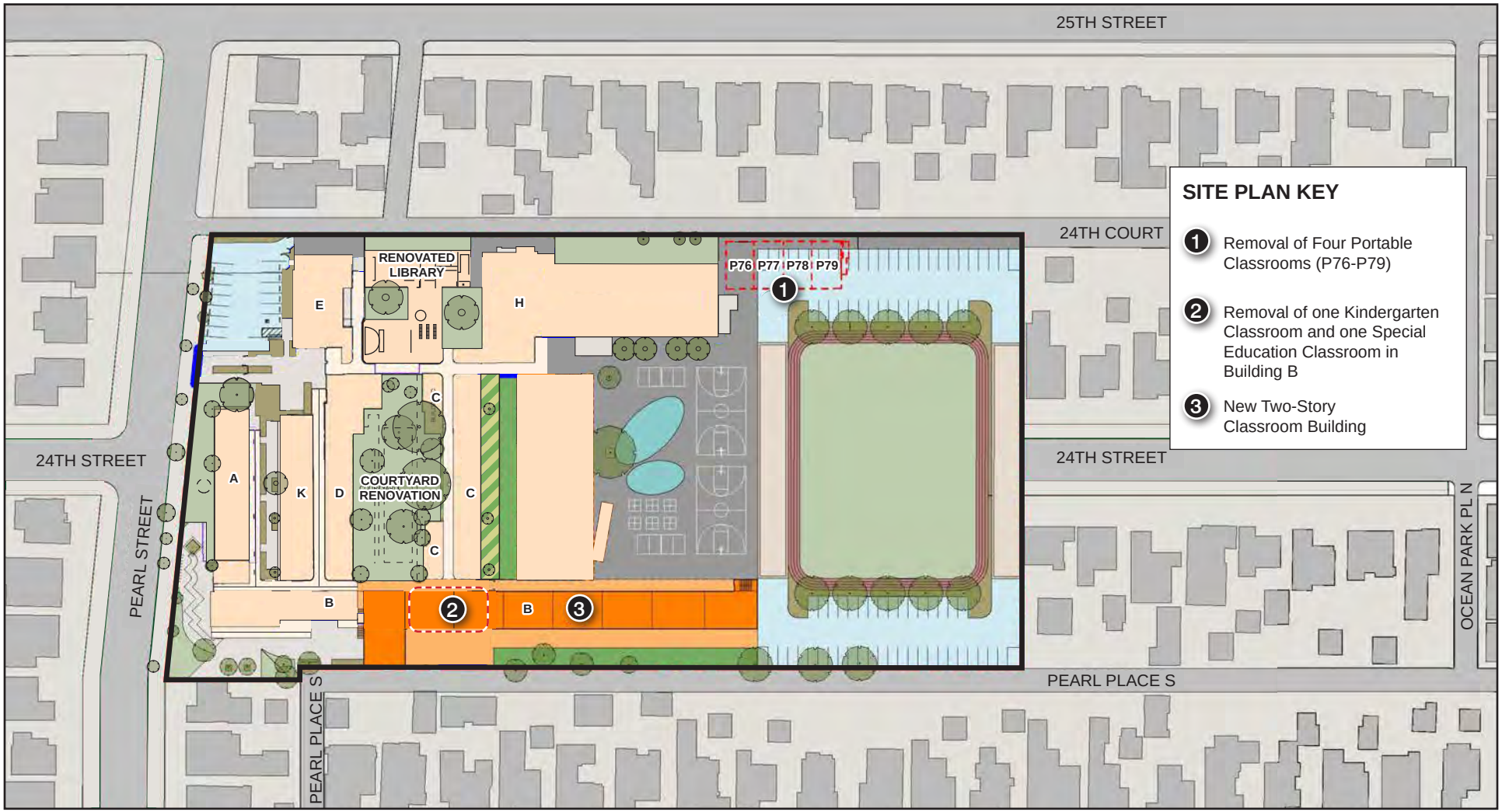
Figure 3-7c - Proposed Project Site Plan - Phase 3



Source: Johnson Favaro, 2022.

3. Project Description

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Phase 3

Phase 3 of the Proposed Project would require approximately 7,405 square feet of demolition, including the removal of four portable classrooms (P76 to P79) and one kindergarten classroom and one special education classroom from the southern end of Building B. A new, 23,645-square-foot, two-story classroom building (34-foot maximum height) would be developed to replace the removed portion of Building B (see Figure 3-7c*, Proposed Project's Site Plan: Phase 3*). The new classroom building would include one teaming studio, three transition kindergarten classrooms, and four kindergarten classrooms on the ground floor. The second floor would include eight upper-elementary classrooms. Third- through fifth-grade classrooms would each have capacity for 30 students, an instructor, and an aide/volunteer. The two new buildings would provide for 21 new classrooms.

Summary of Proposed Project Features

As shown in Table 3-3, *Summary of Proposed Project's Total Development*, the Proposed Project would provide 21 new classrooms in two new buildings (net 12 new classrooms) as well as a new and reconfigured playfield and parking lots, for a total of 73,701 square feet of building space on the Grant ES campus. At completion, the Proposed Project would result in a total of 46 classrooms, from preschool through 5th grade, including special education, and dedicated outdoor play areas for preschool through kindergarten for a total of 120,091 square feet of building space (see Figure 3-8, *Full Buildout of the Proposed Project*). New building heights would not exceed 34 feet above natural grade.

Table 3-3 Summary of Total Proposed Project Development and Renovation

Building	Status	Classrooms	Square Footage	Maximum Height
RENOVATION AND IMPROVEMENTS				
Phase 1				
Library Renovation and Expansion (Buildings F and G)	Existing	-	5,955	No Change
Transitional Kindergarten and Kindergarten Classroom Renovation (Building A)	Existing	3[1]	4,415	No Change
Central Garden Renovation	Existing	-	7,625	N/A
Subtotal – Renovation and Improvements		**3**	**17,995**	
NEW CONSTRUCTION				
Phase 2				
New Elementary Classroom Building	New	6	10,626	32 feet
Reconfigured Playfields and New Open Space[2]	New	-	3,800	N/A
Relocated Parking Lots Along 24th Court and Pearl Place	New	-	35,000	N/A
Phase 2 Development Square Footage	**-**	**-**	**49,426**	**-**
Phase 3				
New Two-Story Classroom Building	New	15	23,645	34 feet
Phase 3 Development Square Footage	**-**	**-**	**23,645**	**-**
Subtotal – New Development		**21**	**91,066**	
EXISTING BUILDINGS TO REMAIN				
Building A	Existing	4	4,415	12 feet 1 inches

Table 3-3 Summary of Total Proposed Project Development and Renovation

Building	Status	Classrooms	Square Footage	Maximum Height
Building B	Existing	4	3,285	16 feet 2 inches (Original) 12 feet 1 inches (addition)
Building C	Existing	4	5,815	16 feet 2 inches
Building D	Existing	2	5,110	30 feet 7 inches
Building E	Existing	-	5,105	22 feet 8 inches
Building F	Existing	-	3,125	15 feet
Building G	Existing	-	2,830	16 feet 2 inches
Building H	Existing	5	13,965	20 feet
Building K	Existing	3	3,370	18 feet 6 inches
Subtotal - Existing Development to Remain		**22**	**47,020**	
TOTAL		**46**	**138,086**	

Source: SMMUSD 2023.
[1] Consolidating existing classrooms in Building A from 4 to 3.
[2] Includes outdoor classrooms.

3.5.2 Outdoor Facilities

The playfield would be reconfigured to a standard rectangular playfield and track centrally located in the southern portion of the campus. The overall U-shaped configuration on the campus would provide a more secure enclosure for the outdoor spaces at the center of campus. New security fences would separate the reconfigured playfield and playground from the proposed parking lots along 24th Court and Pearl Place. The new fences would be secured during school hours and open after school to allow for shared community uses.

3.5.3 Site Access

Vehicular Access

Currently, campus access from vehicular drop-off and pick-up for TK and K students is provided from Pearl Street and along 24th Street at the front of campus. The drop-off and pick-up area at the southern end of the campus is used by students from 1st to 5th grade and is accessed primarily via Ocean Park Boulevard. Drop-off and pick-up at this location typically progresses counterclockwise in the existing parking lot.

The Proposed Project would maintain the drop-off and pick-up area at the front of the campus along Pearl Street. The Proposed Project would include a new arrival court at the southern end of the campus, adjacent to the reconfigured playfield, that would connect the two new parking lots to 24th Street and would also be accessible to pedestrians. The new arrival court and the two proposed lots at the southern end of the campus would provide additional space for vehicles to enter through the new parking lots on either side of the campus and exit back onto 24th Street. All vehicles entering via 24th Street for DOPU operations can be accommodated on-site within the arrival court, eliminating queuing and/or on-street parking on 24th Street.

Figure 3-8 - Full Buildout of the Proposed Project

Existing Building

New Proposed Building

Source: Johnson Favaro, 2023.

3. Project Description

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Pedestrian Access

Pedestrian paths would be delineated to connect the sidewalk on Pearl Street to the entrance of the campus. Any walkways through the Pearl Street area would continue to maintain pedestrian treatments for added safety, including clearly marked crosswalks, stop signs, and crossing guards.

The Proposed Project would include an arrival court that connects the new south parking lots to 24th Street at the southeast and southwest corners of campus. The arrival court would provide a safer drop-off and pick-up area for students that are dropped off or picked up at the southern end of the Campus, since parking for school staff would be separated from daily drop-off and pick-up operations, and students who walk or bike to campus and arrive from 24th Street would have access to the campus from the south without having to cross vehicular circulation.

All classrooms at ground and second floors would be connected via covered outdoor walkways on the internal, campus-facing side of the east and west wings of the school buildings. Covered outdoor circulation would connect the east and west wings across the campus in three locations.

Parking

A visitor and administrative parking lot with 14 parking spaces is in front of the auditorium (Building E) near the main entrance and at the northeast corner of campus facing Pearl Street. An L-shaped staff parking lot with 48 parking spaces is at the southeast corner of the campus, adjacent to the basketball courts, and is accessed from 24th Street. Vehicular access to the campus would remain along Pearl Street and 24th Street. The existing parking lot in the northeastern portion of the campus would continue to be used for visitor and administrative parking.

The existing L-shaped parking lot in the southeast portion of the campus would be reconfigured into two new parking lots at the southeast and southwest corners of the campus. Each parking lot would include approximately 40 parking stalls and would provide staff and after-hours/weekend community parking for joint use purposes (e.g., soccer games). Overall, the Proposed Project would increase parking on the existing campus from 62 to 94 parking spaces and reduce the need for on-street parking.

Emergency Access

Emergency vehicle access would continue to be provided on all four sides of campus—Pearl Street, 24th Court, 24th Street, and Pearl Place. Additionally, emergency access would be provided from the arrival court and around the field and playground areas on the south side of campus.

3.5.4 Safety and Security

Most of the campus is currently secured, with buildings on its east and west wings facing internally. Parking lots are secured with gates at each of the two vehicle access locations. The west, south, and east sides of campus are lined with chain-link fencing to secure the perimeters. The front, northern side along Pearl Street uses buildings, fencing, and gates to maintain a secure perimeter. A forecourt area marked by low walls and gates in front of the main campus entrance and front office would be replaced to raise the wall and gate heights. Rolling

gates provide parking lot access and emergency access at the south of campus onto the playgrounds. Gates along 24th Court provide delivery access into the back of the kitchen. Perimeter fencing would be added to secure the new south parking lots and arrival court. Over the past 10 years, the entrance has been reconfigured twice to make the arrival and perimeter safer.

3.5.5 Landscaping

The Proposed Project would include new trees lining the east and west sides of the relocated field that would create a buffer from the relocated parking lots. The campus's historic core features a Central Garden with mature specimen trees that would be preserved. Walkways and seating for students and faculty would be provided in the courtyard to increase pedestrian circulation in this area of the campus. California native plantings would be provided in the central garden near the existing mature trees. Landscaping would be provided along the northern boundary of the campus and outside of Building A as part of the outdoor classrooms. The relocated and centralized outdoor area would connect to the existing kindergarten play area, which is designed for active play. The Proposed Project would require the removal and potential relocation of one tree (windmill palm) to accommodate an ADA ramp leading to Building D; however no sensitive tree species would be removed. Trees along the exterior of the campus would remain.

3.5.6 Sustainability Features

All renovated and new buildings developed under the Proposed Project would be designed using applicable "green building" practices, including the most current Building Energy Efficiency Standards (24 CCR Part 6) and California Green Building Standards (24 CCR Part 11). The Proposed Project would be developed with High Performance Schools Green Building Resolution Standards and would be consistent with the energy-related goals and actions of the Districtwide Plan for Sustainability (SMMUSD 2019). As part of implementation of the Strategic Energy Management Plan, the District would continue to install occupancy sensors in all classrooms and offices so that lights would shut off when unoccupied; establish lighting- and equipment-efficiency standards for all new equipment that meet or exceed Title 24 standards, where feasible; install Title 24–compliant or better HVAC units for District sites that require cooling; install wireless thermostats for new HVAC units to allow the District to implement energy saving strategies, such as thermostat lockout temperatures and occupied/unoccupied scheduling; install energy management systems (EMS) for remaining school sites to allow control at both the site and District level; and connect wireless thermostats to the EMS system. The campus currently contains solar panels on Buildings A, B, E, F, H, and K, which would remain as is. Additional bike racks would be installed to accommodate at least 10 percent of regular building occupants, with a goal to reach 20 percent capacity by 2030.

3.5.7 Utilities

Utility improvements would be constructed to serve the proposed buildings and modernization. The future on-campus utilities would connect to existing facilities on campus, and no major utility expansion would be required.

Electrical

The campus has two Southern California Edison electrical services, one of which is a 400A 120/240V, 1P, 3W switchboard outside between Building B and portable P70. The switchboard would be replaced as part of the Proposed Project.

Sewer

The existing campus has several points of connection to public sewer mains. Sewer mains generally run north to south on 24th Court and Pearl Place South alleys. In-depth analysis would be performed to determine necessary improvements for future phases of the Proposed Project.

Potable Water

The Proposed Project would upgrade faucet aerators with high-efficiency alternatives. The Proposed Project would replace domestic plumbing fixtures with high-efficiency fixtures, including 0.125 gallons per flush (gpf) models for urinals, 0.8 gpf models for tank toilets, and 1.1 or 1.26 gpf models for flush valve toilets.

3.6 PROJECT CONSTRUCTION

The Proposed Project would be constructed in three phases, with construction activities for Phase 1 anticipated to start as early as summer 2024. Though the exact dates for the later phases are not known, for purposes of evaluating potential impacts from implementation of the Proposed Project, construction activities for Phase 2 were assumed to start in summer 2025, and construction activities for Phase 3 were assumed to start as early as summer 2028 (as shown in Table 3-4, *Proposed Project Phasing)*.

Table 3-4 Proposed Project Phasing

Phase	Demolition	Demolition Square Footage	New Construction	New Building Square Footage	Timeline
1	• No demolition required in Phase 1	0	• Library Renovation and Expansion • Transitional Kindergarten and Kindergarten Classroom Renovation • Central Garden Improvements	250	Summer 2024 (12 months)
2	• Six Portable Classrooms (P70-P75) • Playground Restrooms • Shade Structures	69,010	• New One-Story Elementary Classrooms Building • New Playfields and Playgrounds • New Parking Lots Along 24th Court and Pearl Place	10,626	Summer 2025 (24 months)
3	• Four Portable Classrooms (P76-P79) • Building B – One Kindergarten Classroom • Building B – One Special Education Classroom	7,405	• New Two-Story Building	23,645	Summer 2028 (24 months)

Source: SMMUSD 2023.

The construction for Phase 1 would occur over approximately 12 months and include renovation and expansion of the existing library, renovation of the transitional kindergarten and kindergarten classrooms, and improvements to the central garden; no demolition would occur during Phase 1. The construction for Phases 2 and 3 are anticipated to occur over approximately 24 months each. The District would request an After-Hours Construction permit to allow for construction outside of the hours in SMMC Section 4.12.110(a), which limits the hours of construction to 8:00 a.m. to 6:00 p.m. on weekdays and 9:00 a.m. to 5:00 p.m. on Saturday and prohibits construction on Sundays and holidays. The After-Hours Construction permit would allow Proposed Project construction activities to begin at 7:00 a.m. The earlier arrival of contractors would allow them to be within the work area prior to student arrival/drop-off, improving pedestrian safety and reducing traffic congestion during construction activities. As required under the After-Hours Construction permit, the District is required to provide one sign posting along the street frontage of each construction area and notifications to neighbors within a 500-foot radius of construction activities. The notifications must include a description of the activities covered under the After-Hours Construction permit and the dates and times that these activities would take place. The notifications must also include the contact information of the permit holder (i.e., the District) and the City contact. The District would be required to follow SMMC Section 4.12.110 and any allowances made by the City under the After-Hours Construction permit.

School operation would continue during construction as under current conditions, and students would occupy existing buildings, including portable buildings, on the Grant ES campus during construction activities. Additionally, the library would be relocated to a portable building at the southwestern corner of campus. Table 3-4 provides details for each construction phase, including timing, amount of demolition, new construction, and infrastructure improvements for each phase.

3.6.1 Construction Phasing

The Proposed Project would be developed in three phases over approximately six years. Phase 1 is funded, and Phases 2 and 3 would depend on funding availability. The Proposed Project's activities in each phase are described.

Phase 1

Phase 1 of the Proposed Project would include renovation of the transitional kindergarten and kindergarten classrooms in Building A, expansion and renovation of the existing library in Buildings F and G, and improvements to the Central Garden. This phase would include building construction, architectural coatings, and landscaping. Phase 1 would not include building demolition or removal.

Phase 2

Construction activities would include building and asphalt demolition, minor grading, trenching for site utilities, building construction, architectural coatings, paving, and landscaping. As shown in Table 3-4, Phase 2 of the Proposed Project would remove six portable classrooms (P70 to P75), playground restrooms, and shade structures. Additionally, Phase 2 of the Proposed Project would include the construction of six new elementary classrooms in a new classroom building south of Building C with a rooftop learning garden/outdoor science

lab, new and reconfigured playfields and playgrounds, and new and reconfigured parking lots along 24th Court and Pearl Place.

Phase 3

Construction activities would include building and asphalt demolition, minor grading, trenching for site utilities, building construction, architectural coatings, paving, and landscaping. As shown in Table 3-4, Phase 3 of the Proposed Project would include removal of four portable classrooms (P76 to P79), removal of one kindergarten classroom in Building B, and removal of one special education classroom in Building B. Additionally, Phase 3 would include the construction of a new two-story building that would include transitional kindergarten and kindergarten classrooms on the ground floor and classrooms for 3rd through 5th grade on the second floor.

3.6.2 Construction Grading

Excavation would result in approximately 6,000 cubic yards of cut and fill throughout all three phases of the Proposed Project, as shown in Table 3-5, *Proposed Project Cut/Fill by Phase*, and no imported soils would be necessary.

Table 3-5 Proposed Project Cut/Fill by Phase

Phase	Cut (cy)	Fill (cy)	Project Phase Total (cy)
1	0	0	0
2	2,700	2,700	0
3	3,300	3,300	0
Total	**6,000**	**6,000**	**0**

Source: SMMUSD 2023.

3.6.3 Construction Traffic

Construction of the Proposed Project would temporarily generate additional traffic on the existing area roadway network. These vehicle trips would include construction workers traveling to the campus as well as delivery trips associated with construction equipment and materials. Delivery of construction materials to the campus would require several oversized vehicles that may travel at slower speeds than existing traffic. Construction traffic would be scheduled in concert with the operations of the school, ensuring that trucks are not moving in or out during drop-off or pick-up times. As described above, the District would request an After Hours Work permit to allow for construction outside of the hours identified in the SMMC (from 8:00 am to 6:00 pm on weekdays) to allow construction to begin at 7:00 a.m. The earlier arrival of contractors would allow them to be within the work area prior to student arrival/drop-off, improving pedestrian safety and reducing traffic congestion during construction activities. Construction workers would park in the designated staging area to provide adequate parking for all employees and visitors to the campus throughout the duration of construction activities.

3.6.4 Construction Staging

The limits of construction staging for each phase of the Proposed Project would be minimal and confined to each phase area. Additionally, a designated area for stockpiling activities would be available within the campus, away from school operations. This would serve as a meeting point for hauling operations and coordination with trucking entry, turnaround, and exit.

3.7 REQUIRED PERMITS AND APPROVALS

As required by CEQA Guidelines and to the extent the information is known to the District, this section provides a list of the agencies that are expected to use the environmental analysis of the Proposed Project in their decision-making. This section also lists the permits and other approvals required to implement the Proposed Project.

3.7.1 Lead Agency Approval

SMMUSD is the lead agency under CEQA and is carrying out the Proposed Project. In order to approve the Proposed Project, the SMMUSD Board must first certify the Final Environmental Impact Report and adopt, as applicable, a Mitigation Monitoring Reporting Program and findings. The Board will consider the information in the EIR when making its decision to approve or deny the Proposed Project, or in directing modifications to the Proposed Project in response to the EIR's findings and mitigation measures. The EIR is intended to disclose to interested parties and the public the Proposed Project's details, analyses of the Proposed Project's potential environment impacts, and identification of feasible mitigation or alternatives that would lessen or reduce significant impacts to less-than-significant levels.

3.7.2 Other Required Permits and Approvals

A public agency other than the lead agency that has discretionary approval power over a part of a project is known as a "responsible agency," defined by CEQA Guidelines section 15381. A state agency having jurisdiction by law over natural resources that are held in trust for the people of the State of California and are affected by a project is known as a "trustee agency," as defined by CEQA Guidelines Section 15386. The Proposed Project would not require approval from a trustee agency. The responsible agencies and their corresponding approvals for the Proposed Project may include the following.

State Agencies

Since the District is expected to seek State funding, the California Department of Toxic Substances Control would have to give Site Certification that the campus would not cause unacceptable exposures to hazardous substances.

City of Santa Monica

- Santa Monica Fire Department and Police Department (approval of site plan for emergency access)
- Public Works/Engineering (for grading permit)

3.7.3 Other Reviewing Agency Actions and Approvals

The following agencies would have ministerial review and approvals over the Proposed Project:

- Division of the State Architect (approval of construction drawings)
- Los Angeles Regional Water Quality Control Board (issuance of waste discharge requirements)
- South Coast Air Quality Management District

3.8 REFERENCES

Architectural Resources Group. 2022. Grant Elementary School Historic Resources Inventory Report Draft. https://www.smmusd.org/cms/lib/CA50000164/Centricity/Domain/4482/GrantES-HRIDraft012822.pdf.

Santa Monica, City of. 2015, July 24. Santa Monica Land Use and Circulation Element.

———. 2018a. *Local Coastal Plan 2018 Update*. https://www.smgov.net/Departments/PCD/Plans/Local-Coastal-Plan-2018-Update/

———. 2018b. *Master Facility Use Agreements with the Santa Monica-Malibu Unified School District*. https://publicdocs.smgov.net/WebLink/0/edoc/2355226/SR-04-10-2018-8A.pdf.

———. 2022. *Santa Monica Municipal Code*. https://library.qcode.us/lib/santa_monica_ca/pub/municipal_code.

Safe Routes to School National Partnership (SRTS Partnership). 2021. Keep Calm and Carry On to School: Improving Arrival and Dismissal for Walking and Biking. https://www.saferoutespartnership.org/sites/default/files/resource_files/keep_calm_and_carry_on_to_school_-_improving_arrival_and_dismissal_for_walking_and_biking.pdf.

Santa Monica-Malibu Unified School District. 2019. Districtwide Educational Specifications. http://fip.smmusd.org/pdf/SMMUSD-EDSPECS031519.pdf.

———. 2020, September. Grant Elementary School Campus Master Plan.

3. Project Description

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4. Environmental Setting

4.1 INTRODUCTION

This section provides a "description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published ... from both a local and a regional perspective," pursuant to provisions of the California Environmental Quality Act (CEQA) and the CEQA Guidelines Section 15125(a). The environmental setting provides the baseline physical conditions from which the lead agency would determine the significance of environmental impacts resulting from the Grant Elementary School Campus Master Plan Project (Proposed Project). Subsections of Chapter 5, *Environmental Analysis*, provide more detailed descriptions of the local, regional, state, and federal regulatory and environmental setting for specific topical areas.

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 Regional Location

The Grant Elementary School Campus (Grant ES campus or campus) is in the Sunset Park neighborhood of the City of Santa Monica, which is in the southwestern portion of Los Angeles County. Santa Monica is a coastal city that is bordered by the Pacific Palisades neighborhood and the Santa Monica Mountains to the north, the neighborhood of Venice to the south, the neighborhood of West Los Angeles to the east, and the Pacific Ocean to the west (see Figure 3-1, *Regional Location*).

Regional access is provided by Interstate 10 (I-10), which runs generally east-west through the city, and State Route 1 (SR-1) or Pacific Coast Highway, which runs along the western border of the city. A light rail line, Metro E line (Expo), with a stop approximately 0.75 mile from the campus, provides regional access and connects to other Metro lines (D, A, B lines) in Downtown Los Angeles, approximately 11 miles northeast.

4.2.2 Regional Planning Considerations

4.2.2.1 AIR QUALITY

South Coast Air Basin Air Quality Management Plan

The city is in the South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (South Coast AQMD). The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The South Coast AQMD is the air pollution control agency primarily responsible for preparing the Air Quality Management Plan (AQMP) in coordination with the California Air Resources Board (CARB), the Southern California Association of Governments (SCAG), and the US Environmental Protection Agency. The AQMP is a comprehensive air pollution control

program for making progress towards and attaining the established state and federal ambient air quality standards (AAQS).

The air pollutants emitted into the ambient air by stationery and mobile sources are regulated by federal and state law. These regulated air pollutants are known as criteria air pollutants and are carbon monoxide, volatile organic compounds, nitrogen oxides, sulfur dioxide, coarse inhalable particulate matter, fine inhalable particulate matter, and lead. Volatile organic compounds and nitrogen oxides are criteria pollutant precursors and go on to form secondary criteria pollutants, such as ozone, through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants depending on whether they meet AAQS for that pollutant. The SoCAB is designated nonattainment for ozone and fine particulate matter under the California and National AAQS, nonattainment for coarse particulate matter under the California AAQS, and nonattainment for lead under the National AAQS (US EPA 2023).

The Proposed Project's consistency with the applicable AAQS is discussed in Section 5.2, *Air Quality*.

4.2.2.2 GREENHOUSE GAS EMISSIONS

Current State of California guidance and goals for reductions in greenhouse gas (GHG) emissions are generally embodied in Executive Order (EO) S-03-05; EO B-30-15; Assembly Bill (AB) 32, The Global Warming Solutions Act (2006), Senate Bill (SB) 32, and AB 197; and SB 375, The Sustainable Communities and Climate Protection Act.

Executive Order S-03-05

EO S-03-05, signed June 1, 2005, set the following GHG reduction targets for the State of California:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, The Global Warming Solutions Act

AB 32 was passed by the state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the emissions reduction targets established in EO S-03-05. Based on the GHG emissions inventory conducted for its 2008 Scoping Plan, CARB approved a 2020 emissions limit of 427 million metric tons of carbon-dioxide-equivalent emissions for the state (CARB 2008). CARB is required to update the Scoping Plan every five years.

Executive Order B-30-15

In 2015, Governor Brown signed EO B-30-15 into law, establishing a GHG reduction target for year 2030, which was later codified under SB 32 (2016). The 2022 update to the Scoping Plan addresses the 2030 target of 40 percent below 1990 levels (CARB 2023).

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the EO B-30-15 goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires CARB to prioritize direct emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

Senate Bill 375

In 2008, SB 375 was adopted to connect GHG emissions reductions targets for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled and vehicle trips. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 17 regions in California managed by a metropolitan planning organization (MPO). In addition, SB 375 requires CARB to update the targets for the MPOs every eight years. The targets as set by CARB in 2018 for the SCAG region are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 (unchanged from the 2010 target) and a 19 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2018).

The Proposed Project's consistency with CARB's Scoping Plan is discussed in Section 5.6, *Greenhouse Gas Emissions*.

SCAG Regional Transportation Plan/Sustainable Community Strategy

SCAG is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. SCAG is the federally recognized MPO for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the southern California region's MPO, SCAG cooperates with South Coast AQMD, the California Department of Transportation, and other agencies in preparing regional planning documents. SCAG has developed regional plans to achieve specific regional objectives, as discussed below.

Regional Transportation Plan/Sustainable Communities Strategy

On September 13, 2020, SCAG adopted the 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), also known as Connect SoCal. The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. It is a requirement of the state of California and the federal government and is updated by SCAG every four years as demographic, economic, and policy circumstances change. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal

governments, nonprofit organizations, businesses, and local stakeholders. School districts, including SMMUSD, were not engaged in development of the RTP/SCS. The 2020-2045 RTP/SCS includes growth forecasts that estimate employment, population, and housing growth. These estimates are used by SCAG, transportation agencies, and local agencies to anticipate and plan for growth. Connect SoCal works to address residents' challenges by promoting job accessibility, enabling shorter commutes, making communities safer, and encouraging lower-cost housing developments. One of the key goals is to encourage development of diverse housing types in areas that are supported by multiple transportation options. The "Core Vision" in the RTP/SCS includes "…locating housing, jobs, and transit closer together…." "Connect SoCal will help residents thrive, providing better access to jobs, housing, schools, healthcare, recreation and everything in between."

The 2020-2045 RTP/SCS projects that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. Additionally, it is also projected that implementation of the plan will reduce vehicle miles traveled per capita for year 2045 by 4.1 percent compared to baseline condition for the year (SCAG 2020).

The Proposed Project's consistency with the applicable 2020-2045 RTP/SCS policies is analyzed in detail in Section 5.10, *Transportation.*

4.3 LOCAL ENVIRONMENTAL SETTING

4.3.1 Project Location

The Grant ES campus is at 2368 Pearl Street (Assessor's Parcel Number [APN] 4273-009-900) in the Sunset Park neighborhood of the City of Santa Monica, in southwest Los Angeles County, (see Figure 3-1). The 6.01-acre parcel contains the existing Grant ES campus, which is bounded by Pearl Street to the north, 24th Court (alley) to the east, Pearl Place South (alley) to the west, and a residential neighborhood immediately to the south (Figure 3-2, *Aerial Photograph*). The Proposed Project would take place over 5.41 acres of the 6.01-acre campus.

4.3.2 Surrounding Land Uses

Grant ES is surrounded by dense urban residential neighborhoods immediately to the north, east, west, and south. The properties surrounding the campus are zoned Single-Family Residential. Multifamily residential and properties south of the campus along Ocean Park Boulevard are zoned medium-density residential (Santa Monica 2015).

The surrounding residential neighborhood streets include Pearl Street, Pearl Place (alley), 24th Court (alley), and 24th Street. Pico Boulevard is approximately 0.25 mile to the north, and Ocean Park Boulevard is located approximately 0.1 mile to the south.

4.3.3 Grant Elementary School Existing Conditions

Originally built in 1936, Grant ES serves students from preschool, transitional kindergarten, kindergarten, and grades one through five. Currently, campus access for vehicular pick-up/drop-off is provided from Pearl Street

and along 24th Street at the front of campus. A limited number of students are dropped off at the rear of campus at the entrance to staff parking on 24th Street. The campus consists of 9 permanent buildings (Buildings A through K), which include 4 classroom buildings, an administration/classroom building, an auditorium building, a library, a computer lab/classrooms building, and a cafeteria/classrooms building; 11 modular and relocatable buildings (P70 through P79 and one playground restroom); a 32,600-square-foot, irregular-shaped field; playgrounds; and shade structures, basketball courts, and parking lots (see Table 3-1, *Characteristics of Existing Buildings*, Figure 3-4, *Existing Site Plan*, and Figure 3-5, *Photographs of the Existing Campus*). The campus has a total of 34 classrooms for preschool through 5th grade; special education; science, art, and music; and after-school programs. These buildings are concentrated in the northern part of the campus near Pearl Street and along the western and eastern perimeters, organized around a network of courtyards (see Figures 3-4 and 3-5).

All grades at the school begin at 8:00 a.m. with TK and K dismissed at 1:45 p.m., preschool at 2:30 p.m., and Grades 1 through 5 between 2:40 p.m. and 3:00 p.m. during the week, except for Wednesdays where preschool and TK-K are dismissed at 1:00 p.m. and the remaining students between 1:15 p.m. and 1:30 p.m.

The primary entrance to the campus includes a forecourt comprising a dual concrete walkway and concrete steps that lead to the building entrance. This space also contains low concrete buffer walls and planters and metal gates that restrict access to the site. The campus includes approximately 2.8 acres of athletic fields, courts, and playgrounds (see Table 4-1, *Existing Recreational Facilities*).

A visitor and administrative parking lot with 14 parking stalls is in front of the auditorium (Building E) and near the main entrance in the northeast corner of campus facing Pearl Street. An L-shaped staff parking lot with 48 parking stalls is at the southeast corner of the campus adjacent to the basketball courts and is accessed from 24th Street. School deliveries occur off the 24th Court adjacent to the kitchen, and trash and recycling are picked up at a service yard level with the alley.

The permanent buildings are stylistically similar—though not identical—and exhibit characteristics of the Public Works Administration (PWA) Moderne and Mid-century Modern styles. The following sections include an architectural description of each building.

Building A (Classrooms)

Building A is a one-story building constructed in 1954. This building is approximately 4,415 square feet and 12 feet, 1 inch high and is designed in the Mid-century Modern style with a long, narrow, rectangular plan. This building is along the northern perimeter of the campus and contains classrooms.

Building B (Classrooms)

Building B is on the western perimeter of the campus and is connected to Buildings A, C, D, and K by a network of semi-enclosed corridors. Building B was constructed in 1940 and expanded in 1954. It is a one-story, 6,830-square-foot building that contains classrooms and is designed in the PWA Moderne style. The original building is 16 feet, 2 inches high, and the addition to the building is 12 feet, 1 inch high.

Building C (Classrooms)

Building C (with Building H) anchors the south end of the campus's complex of permanent buildings and is connected to Buildings B, G, and H by a network of semi-enclosed corridors. Building C was constructed in 1936 and is used for classrooms. It is designed in the PWA Moderne style and is one story and approximately 5,815 square feet with a height of 16 feet, 2 inches. Most of the building consists of a rectangular footprint; however, there are two small volumes that project from the north end of the building and give the building a U-shaped footprint.

Building D (Administration/Classrooms)

Building D is near the center of the campus's complex of permanent buildings and is connected to Buildings B, C, E, G, and K by a network of semi-enclosed corridors. It is prominently visible from the north along Pearl Street. Building D is approximately 5,110 square feet with a height of 30 feet, 7 inches and was constructed in 1936 and contains administrative offices and classrooms. It is designed in the PWA Moderne style, has both one- and two-story volumes, and is L-shaped.

Building E (Auditorium)

Building E is at the northeast corner of the campus and is connected to Buildings D, F, and G by a network of semi-enclosed corridors. Building E is approximately 5,105 square feet with a height of 22 feet, 8 inches; it was constructed in 1945 and is used as an auditorium. It is designed in the PWA Moderne style and is one story tall, irregular in shape, and visible from Pearl Street.

Building F (Library)

Building F is to the south of Building E. It is connected to Building E by a semi-exterior corridor and is directly appended to the east façade of Building G. The building was constructed in 1965 as an addition to Building G and is used as a library. It is one story, 3,125 square feet, 15 feet high, and rectangular in shape and is designed in the Mid-century Modern style.

Building G (Computer Lab/ Classrooms)

Building G is also to the rear (south) of Building E. It is connected to Building E by a semi-exterior corridor and is directly appended to the west façade of Building F. This building was constructed in 1940 and is used as a computer lab and classrooms. It is one story, 2,830 square feet, 16 feet, 2 inches high, and roughly L-shaped and is designed in the PWA Moderne style.

Building H (Cafeteria/Classrooms)

Building H (with Building C) anchors the south end of the campus's complex of permanent buildings and flanks its east perimeter. It is connected to Buildings F, G, and C by a network of semi-enclosed corridors. This building was constructed in 1945 and houses a cafeteria and classrooms. It is designed in the PWA Moderne style and is a one-story, 13,965-square-foot building with a height of 20 feet and an irregular footprint.

Building K (Classrooms)

Building K is near the front (north) of the campus between Buildings A and D. It is connected to Building D by a semi-enclosed corridor. This building was constructed in 1945 and is used as classrooms. It is designed in the PWA Moderne style and is a one-story, 3,370-square-foot building with a height of 18 feet, 6 inches and a long, narrow rectangular plan.

Modular, Relocatable, and Ancillary Buildings

The campus also contains several modular and relocatable buildings that have been installed at various points to accommodate growth and campus needs. These buildings are to the south of the permanent buildings described above, along the eastern and western perimeters of the campus. Specifically, six relocatable buildings flank the west edge of campus (P70 through P75) and four modular buildings flank its eastern edge (P76 through P79), all of which are used as classrooms.

Central Garden

The Central Garden is surrounded by Building D to the north, Building C to the south, Building B to the east, and building G to the west. The Central Garden is landscaped with grassy lawns, mature trees, and concrete patios with lunch tables.

Athletic Field/ Playground

The campus includes approximately 2.8 acres of athletic fields, courts, and playgrounds (see Table 4-1). Much of this space consists of an approximately 74,000-square-foot paved asphalt surface that is used for basketball and athletic courts and contains several shade structures. There is also playground equipment installed on artificial turf and a raised bed garden enclosed by a low wood-picket fence. The southwest corner of the campus contains a broad lawn. Bleachers are installed adjacent to the south edge of the lawn.

Table 4-1 Existing Recreational Facilities

Area	Acres
Field	0.74
Playground and Courts	1.70
Preschool Play Area	0.09
Kindergarten Play Area	0.27
Total	**2.80**

Source: SMMUSD 2023.

The existing athletic facilities such as the athletic fields and basketball courts are available for community use through the Civic Center Act and a joint-use agreement between the District and the City. When the school facilities are not in use and are not scheduled for school-sponsored or other District-related events, certain community organizations and members are permitted to use school facilities for their events by obtaining a Civic Center Act permit from the SMMUSD. Permitted events may include community and/or City use of the playfields, common areas, and classrooms, as permitted in the 2022 "Master Facility Use Agreements with the Santa Monica-Malibu Unified School" (City of Santa Monica 2022a). Recreational activities on the Grant ES

campus through the Civic Center Act permit include the American Youth Soccer Organization, Childcare Recreation Enrichment Sports Together enrichment and camps, and playground access.

4.3.3.1 STUDENT ENROLLMENT

Enrollment at Grant ES has been steadily decreasing since 2013, from a high of approximately 665 students to 550 in the 2022-2023 school year (see Table 4-2, *Grant Elementary School Student Enrollment by Grade Level*).

Table 4-2 Grant Elementary School Student Enrollment by Grade Level

Grade	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Transitional Kindergarten	Data Not Available	Data Not Available	Data Not Available	16	22	19	17	18	14	32
Kindergarten	93	93	93	102	95	89	92	78	75	73
1st Grade	105	90	95	90	101	96	91	88	88	83
2nd Grade	118	107	96	91	93	99	101	87	86	90
3rd Grade	110	119	117	96	85	92	104	92	90	92
4th Grade	115	111	116	114	98	83	91	101	85	100
5th Grade	124	115	111	116	114	94	86	93	105	80
Total	**665**	**635**	**628**	**625**	**608**	**572**	**582**	**557**	**543**	**550**

Source: California Department of Education 2023

The Grant ES student capacity is based on California Department of Education standards that assess the current capacity at a maximum enrollment of 915 students. This is a maximum where space is used as a classroom and is full of students. Based on the classroom maximums negotiated in the current collective bargaining agreement with the Santa Monica-Malibu Classroom Teachers Association, the maximum enrollment capacity at Grant ES is 809 students. However, neither of these maximum capacity numbers reflect current instruction practice or is anticipated based on actual enrollment trends. Based on the Districtwide Educational Specifications, the current campus could support up to a maximum of 675 students. The Proposed Project would not increase the campus capacity but would support the District's goals and objectives outlined in the Districtwide Education Specifications in the 2019 SMMUSD Education Master Plan (SMMUSD 2019).

4.3.3.2 EXISTING GRANT ES CAMPUS USES

The campus encompasses 6.01 acres (see Table 4-3, *Existing Campus Land Use*), with a total building area of 60,585 square feet, which includes approximately 50,965 square feet of permanent building area and 9,620 square feet of relocatable building area.

Table 4-3 Existing Campus Land Use

Area	Acres	Percentage
Building Footprint	1.39	23
Playground and Fields	2.80	47
Unprogrammed Landscape and Open Space	0.63	10
Pedestrian Circulation	0.53	9
Vehicular Circulation and Parking	0.66	11
Total	**6.01**	**100**

Source: SMMUSD 2023.

The campus has 34 classrooms for preschool through 5th grade; special education; science, art, and music; and after school programs (see Table 4-4, *Existing Facilities*). In addition, the campus includes athletic fields, courts, and playgrounds, which consists of paved asphalt surface that is used for basketball and athletic courts and contains several shade structures. There is also playground equipment installed on artificial turf and a raised-bed garden enclosed by a low wood-picket fence.

Table 4-4 Existing Facilities

Campus Facilities	Quantity
Preschool	1
Transitional Kindergarten	1
Kindergarten	4
1st Grade	4
2nd Grade	4
3rd Grade	4
4th Grade	3
5th Grade	3
Special Education	5
Core Classrooms	**29**
Before-/After-School Programs	3
Science	1
Art	2
Music	1
Multipurpose Auditorium	1
Multipurpose Cafeteria/Kitchen	1
Library	1
Specialized/Flexible Rooms	**10**

Source: SMMUSD 2023.

School hours would remain the same as existing hours, from 8:00 a.m. to 3:00 p.m., with staff and students arriving on campus between approximately 7:00 a.m. and 8:00 a.m. and leaving between approximately 3:00 p.m. and 5:00 p.m. After-school activities and staff work at the campus until 6:00 p.m. Monday through Friday during the school year.

Operation of the school facilities for community use typically occur outside normal school operating hours, generally after 3:00 p.m. on weekdays and after 8:00 a.m. on Saturdays and Sundays. Indoor activities are typically completed by 9:00 p.m. but can be permitted until 10:00 p.m., and all outdoor activities are completed by sunset on both weekdays and weekends. The existing field does not have field lighting. Parking for community uses is be provided in the school's on-site surface parking lots and surrounding neighborhood streets. The hours, frequency, and types of these uses would not change with operation of the Proposed Project. However, these hours and uses could change during construction of the Proposed Project.

4.3.4 General Plan and Zoning

4.3.4.1 CITY OF SANTA MONICA GENERAL PLAN

The City of Santa Monica General Plan Land Use designation for the Grant ES campus is Institutional/Public Lands (see Figure 3-3a, *General Plan Land Use*). As stated in the City's General Plan Land Use and Circulation Element, the Institutional/Public Lands designation is intended for any public or quasi-public facility, including schools, colleges, municipal offices, museums or performance spaces, corporation yards, utility stations, and similar uses. The campus is not within the City of Santa Monica's Local Coastal Program's Land Use Plan (LUP). The Proposed Project involves the renovation and modernization of the existing Grant ES campus and therefore would not require changes to the campus's land use designation.

4.3.4.2 CITY OF SANTA MONICA ZONING CODE

The Planning and Zoning regulations (Article 9 of the Santa Monica Municipal Code), in conformance with the General Plan, regulate land use development in the City of Santa Monica. In each zoning designation, the regulations specify the permitted and prohibited uses and the development standards, including setbacks, height, parking, and design standards, among others. The Proposed Project is in the Institutional/Public Land Zone that permits public or semi-public facilities, including municipal offices, schools, libraries, museums, or performance spaces, cemeteries, corporation yards, utility stations, and similar uses (see Figure 3-3b, *Zoning Designations*).

4.3.5 Aesthetics

Scenic vistas and view corridors provide the public with panoramic views of features such as mountains, forests, the ocean, or urban skylines. The City's scenic resources include the Santa Monica State Beach, the Pacific Ocean, Santa Monica Canyon, the Santa Monica Mountains National Recreational Area, Marine Park, and the bluffs overlooking the beach (City of Santa Monica 2015). The LUP also discusses scenic open space, such as the public landscape along Ocean Avenue and public art, as among the City's visual resources. The City's scenic vistas and view corridors include the hillside areas south of Ocean Park Boulevard, Palisades Park, Hotchkiss Park, and the east-west streets from the beach to Ocean Avenue. The City of Santa Monica has indicated that some of its scenic vistas can be considered a scenic resource as well. The closest scenic vista from the campus is the hillside homes south of Ocean Park Boulevard approximately 1.5 miles away.

The Grant ES campus and the surrounding areas are developed with urban land uses and development. There is no significant topography on the campus nor in the surrounding areas, as the area is generally flat. The

campus contains an existing developed elementary school that includes playgrounds, on-site parking, nine permanent buildings (named A through K), and multiple modular and portable buildings. The campus is surrounded by residential uses in all directions with one to two stories. There are trees in the landscaped quad along Pearl Street, in the athletic/playground area, and in the Central Garden surrounded by Buildings C and D.

The Grant ES campus currently emits light from building interiors that pass through windows, external building and security lights, and parking lot lights. There is no outdoor field lighting.

Please refer to Section 5.1, *Aesthetics*, for additional information concerning regulations governing scenic quality, light and glare, and an analysis of the project related impacts.

4.3.6 Cultural Resources

4.3.6.1 GRANT ES CAMPUS HISTORY

The original campus was constructed in 1905 about one-half-mile northwest of its present-day location. The school originally consisted of a one-room schoolhouse at 22nd Street and Virginia Avenue. A new, four-room school building was constructed at the original Grant School location in 1906. In 1924, the Grant School campus was expanded amid an increase in student enrollment. In 1936, the District elected to move the Grant School about one-half mile southeast of the original campus to its present-day location. The permanent buildings on the Grant ES campus were constructed between 1936 and 1965.

The campus development commenced under the auspices of the federal Works Progress Administration and continued through the early postwar era (1945 to 1968), a period of growth in Santa Monica. As shown in Table 3-1, *Characteristics of Existing Buildings*, Buildings B though E and G through K were constructed in the 1930s and 1940s; Buildings A and F and portions of Building B were constructed in the 1950s and 1960s; and additional portable classrooms were constructed on the campus in the 1990s.

The campus includes nine permanent buildings generally designed in the PWA Moderne and Mid-century Modern styles of architecture, consistent with the eras in which they were built. Buildings at the campus include four classroom buildings, an administration/classroom building, an auditorium building, a library, a computer lab/classrooms building, a cafeteria/classrooms building, and eight modular and relocatable buildings.

4.3.6.2 HISTORICAL RESOURCES INVENTORY

In February 2021, the District adopted Board Policy 7113 and the accompanying Administrative Regulation 7113, which were developed to identify and clarify treatment of historical resources present on properties within the District's jurisdiction. The Board Policy and Administrative Regulation require completion of a historic resources inventory (HRI) of a school campus prior to approval of either a master plan or design of a school facilities project at that campus. In 2022, the District commissioned an HRI of the Grant ES campus to determine whether there are historical resources present at Grant ES, and if so, to identify character-defining features and spaces to aid in matters related to site planning and facilities management at the campus moving forward. The campus HRI was prepared in conformance with Board Policy and Administrative Regulation 7113 as they relate to Grant ES.

4. Environmental Setting

Based on review of background materials, primary and secondary source research, public outreach, and development of appliable historic contexts and themes, the HRI concluded that a portion of the Grant ES campus appears eligible for listing in the California Register of Historical Resources under Criteria 1 and 3, and for local (City of Santa Monica) listing under Criteria 1, 4, and 5 as a historic district comprising multiple buildings and associated site/landscape features (see Table 4-5, *Features in the Historic District*, and Figure 3-6, *Historic District Boundary*). Significance is derived from the synergy between contributing buildings and site features; no one building or site feature on the campus appears to be individually eligible when evaluated independent of the larger historic district. Buildings B, C, D, E, G, and H; the Central Garden bounded by Buildings B, C, D, and G; and the paved forecourt and flagpole at the north end of the campus as approached from Pearl Street are contributing elements of the historic district; however, other buildings and site/landscape features do not contribute to the historic district. Grant ES does not appear eligible for listing in the National Register of Historic Places due to compromised integrity (Architectural Resources Group 2022). The historic district is further discussed in Section 5.3, *Cultural Resources*. The SMMUSD Board of Education was presented with the HRIs during the February 7, 2022, board meeting. The board provided direction to proceed with the campus plans and to proceed with the design of the first phase of the Proposed Project (SMMUSD 2023).

Table 4-5 Features in the Historic District

Current Feature Name	Year Built	Status	Building Style
Buildings			
Building A	1954	Noncontributor	Mid-century Modern
Building B	1940	Contributor	PWA Moderne
Building B (north addition)	1954	Noncontributor	Mid-century Modern
Building C	1936	Contributor	PWA Moderne
Building D	1936	Contributor	PWA Moderne
Building E	1945	Contributor	PWA Moderne
Building F	1968	Noncontributor	Mid-century Modern
Building G	1940	Contributor	PWA Moderne
Building H	1945	Contributor	PWA Moderne
Building K	1945	Contributor	PWA Moderne
Site Features			
Central Garden (Landscaped courtyard bounded by Buildings B, C, D, and G)	1936	Contributor	N/A
Covered breezeways and corridors connecting the buildings	Unknown	Contributor	N/A
Paved forecourt and flagpole at the north end of the campus	Unknown	Contributor	N/A

Source: ARG 2022.

Please refer to Section 5.3, *Cultural Resources*, for additional information concerning potential cultural impacts of the Proposed Project.

4.3.7 Energy

The campus is in Southern California Edison's service area for electricity. The campus's electricity demands are from uses such as heating, cooling, and ventilation of buildings; operation of electrical systems; lighting; and use of on-site equipment and appliances and would not change substantially during construction or operation activities. Southern California Gas Company provides gas services to Grant ES; the campus uses natural gas for building heating and water heating.

Please refer to Section 5.4, *Energy*, for additional information concerning potential cultural impacts of the Proposed Project.

4.3.8 Geology and Landforms

The Grant ES campus is situated in the southwestern block of the Los Angeles Basin (Basin). The Los Basin is a northwest-trending, alluviated lowland plain approximately 50 miles long and 20 miles wide. Mountains and hills that generally expose Late Cretaceous to Late Pleistocene-age sedimentary and igneous rocks bound the Basin along the north, northeast, east, and southeast. The Basin is at the northerly terminus of the Peninsular Ranges.

The Grant ES campus is underlain by artificial imported fill and Late Pleistocene age alluvial deposits. Artificial fill materials underlie existing pavements to a depth of approximately three feet below ground surface (bgs). The observed artificial fill is characterized as primarily fine to medium silty sand with minor clay. The campus has been previously developed and contains moderately dense fine to medium graded silty sands with small amounts of clay placed during prior development (Converse Consultants 2021).

A record search of the campus was obtained from the Los Angeles County Natural History Museum (NHMLA). Additional records from the University of California Museum of Paleontology database, the PaleoBiology Database, and print sources were also reviewed for fossil records near the campus (Cogstone 2023). The NHMLA did not report any fossil localities at the campus; however, there are several fossil localities near the campus. Two Pleistocene localities within one mile of the campus in Santa Monica produced ground sloth, horse, and American lion. The records search revealed that all the fossils previously recovered within a five-mile radius were a minimum of six feet deep in deposits mapped as Pleistocene at the surface.

Please refer to Section 5.5, *Geology and Soils*, for additional information concerning potential geological and paleontological impacts of the Proposed Project.

4.3.9 Hazards and Hazardous Materials

No evidence of recognized environmental conditions for the campus was identified during the Phase I Environmental Site Assessment (ESA). However, several of the buildings on the campus were constructed prior to 1980 (Buildings A, B, C, D, E, F, G, H, and K). There is potential for lead from lead-based paint to be present in structures built prior to 1978. Asbestos-containing materials may be present in structures built prior to 1990 (P70 to P75, and P76 to P79). No aboveground storage tanks, underground storage tanks, or septic tanks are recorded for the campus. Polychlorinated biphenyls (PCBs) were historically used as coolants,

insulating materials, and lubricants in electrical materials, such as transformers. PCBs were also used widely in caulking and elastic sealant materials, particularly from 1950 through the 1970s until PCBs were banned in 1979. Department of Toxic Substance Control guidance indicates that PCBs may exist in soil near exterior caulking in buildings meeting the age criteria and adjacent unpaved areas. No electrical or mechanical equipment suspected of containing PCBs was identified during reconnaissance for the Phase I ESA.

The Phase I ESA for the Grant ES campus identified properties within a one-mile radius of the campus that are listed on federal and/or local regulatory agency databases. The listed sites are considered unlikely to impact the campus.

Additional information regarding the Proposed Project's impacts on hazards and hazardous materials are provided in Section 5.7, *Hazards and Hazardous Materials*.

4.3.10 Hydrology

The city is part of the Santa Monica Groundwater Basin, which spans 50.2 square miles. The Basin is bounded by the Santa Monica Mountains to the north, the Ballona Escarpment to the South, the Newport-Inglewood fault to the East, and the Pacific Ocean to the West (Santa Monica 2021a). Due to the extensive faulting, there are five subbasins in the Santa Monica Groundwater Basin: Arcadia Subbasin, Charnock Subbasin, South Santa Monica or Coastal Subbasin, Crestal Subbasin, and Olympic Subbasin (City of Santa Monica 2018). The campus is in the Coastal Subbasin.

Approximately 4.64 acres (77 percent) of the campus is currently developed with hardscape and impervious surfaces, and 1.37 acres (23 percent) pervious areas such as landscaping and play fields.

Topography in the campus area is nearly flat and gradually descends south with elevations from 153 feet to 147 feet above mean sea level (Converse Consultants 2021). Currently, stormwater runoff is collected via swales and storm drain inlets and conveyed by an internal storm drain system that connects to the City's existing storm drains beneath 24th Court and Pearl Place.

Groundwater was not encountered to the maximum depth explored of 21 feet bgs. Historical groundwater levels, as interpreted from the USGS Beverly Hills 7.5 Minute Quadrangle, indicate historic high groundwater at approximately 40 feet bgs (Converse Consultants 2021).

The Grant ES campus is in Flood Zone Designation X (Zone X). Zone X is an area of minimal flood hazard, as defined by the Federal Emergency Management Agency (FEMA 2021).

Additional project impacts on hydrology and water quality are discussed in Section 5.8, *Hydrology and Water Quality*.

4.3.11 Noise

The campus is in a predominantly urbanized residential area with single-family homes directly across the roads to the north, east, south, and west. Noise within the campus is associated with the existing on-site school uses, including outdoor student activity, circulation-related noise (during drop off/pick up times), and property

maintenance. Noise around the campus is predominantly characterized by traffic noise on Pearl Street and other local roadways. Noise generated by surrounding residential and urbanized uses also contribute to the overall noise environment intermittently in the vicinity.

Project-related impacts from noise sources are discussed in Section 5.9, *Noise*.

4.3.12 Transportation

The campus is surrounded by residential uses and residential streets. Vehicular access to the campus (for staff and visitor parking) is provided via two surface parking lots. The parking lot located at the northeastern portion of the campus, at the intersection of 24th Court and Pearl Street is used for visitor and administrative parking. Additionally, the parking lot located at the southeastern portion of the campus, near 24th Court and 24th Street, is used for staff parking and student drop-off and pick-up. Pedestrian access to the campus is provided via Pearl Street and 24th Street. Deliveries occur off the 24th Court (alley) adjacent to the kitchen along with trash and recycle pick up at a service yard level with the alley. Bicycle parking is located on-campus fronting Pearl Street.

The current drop-off/pick-up (DOPU) operations occur primarily at two locations, at Pearl Street and 24th Street at the northern end of the campus, and at 24th Street at the southern end of the campus. The south side of Pearl Street (curbside) between 24th Court and Cloverfield Boulevard. The Pearl Street DOPU area is limited to preschool and TK-K students. Vehicles queue on the south (eastbound) side of Pearl Street, between Cloverfield Boulevard and 24th Court during DOPU hours. The 24th Street DOPU is utilized by Grades 1 through 5 students and is accessed primarily via Ocean Park Boulevard. The two-lane collector street ends at the gated entrance into the southern portion of the campus. On-street parking is allowed on either side of 24th Street. Vehicles enter the campus driveway and follow the counterclockwise circular vehicular pattern within the existing staff parking lot and exit back onto 24th Street.

Students who walk to bike to school enter the campus through the northern end of the campus. Marked crosswalks are present on the north and east legs of the 24th Street/Pearl Street intersection. Marked crosswalks are provided on all legs of Pearl Street's intersections with Cloverfield Boulevard and 25th Street. In order to facilitate safe pedestrian crossings from the neighborhood to the school, crossing guards are present at all three intersections in the morning and afternoon.

Safe Routes to School (SRTS) is a sustained effort to improve the health and wellbeing of children by helping families to feel confident walking, biking, and skating to school. The City's SRTS program aims to make taking active transportation to school a customary part of everyday life and includes the "Bike It! Walk It! Bus It!" events that take place twice a year, each fall and spring, to encourage safety training for students and their parents, outreach and events, and infrastructure improvements. In October 2022 the event had 3,315 total participants, including 481 from student, parents, and staff from Grant ES; and in May 2023, the event had 2,607 total participants, including 468 from Grant ES. Additionally, during the 2022-2023 school year, Grant ES students had 48 enrollees in the Metro GoPass TAP card program for public transit; and a total of 2,175 total boardings were recorded for 2022-2023.

A full traffic analysis was not required because the Proposed Project would not result in changes to student enrollment. Refer to Section 5.10, *Transportation*, for additional information concerning existing transportation facilities, pedestrian access and safety, and an analysis of project-related impacts.

4.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed where they are significant. It further states that this discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the project alone. Section 15355 of the CEQA Guidelines defines cumulative impacts as "...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts represent the change caused by the incremental impact of a project when added to other proposed or committed projects in the vicinity.

The CEQA Guidelines (Section 15130 [b][1]) state that the information used in an analysis of cumulative impacts should come from one of two sources:

A. A list of past, present, and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency.

B. A summary of projections contained in an adopted General Plan or related planning document designed to evaluate regional or area-wide conditions.

The cumulative impact analysis in this DEIR uses Method A. A summary of other cumulative development projects considered in the impact analysis is included in Table 4-6, *Cumulative Projects* (see Figure 4-1, *Cumulative Projects*). The District performed an assessment of six schools to determine campus updates required to align with the District's Educational Specifications. The result of this assessment was the development of six draft long-range campus plans for six different campuses, including Grant ES. Of those six projects, two are within one-half mile of the campus (see Table 4-7, *SMMUSD Projects in the City of Santa Monica*).

Table 4-6 Cumulative Projects

Project	Location	Project Components	Distance from Grant ES (mi)
SMC Art Complex Replacement Project	1900 Pico Blvd	Incorporate two parcels (APN 4284-034-014 and APN 4284-034-004) with a total lot area of approximately 1 acre for the proposed construction and operation of the SMC Art Complex Replacement Project consisting of approximately 31,877 gross square feet of floor area and 20 general purpose parking spaces.	0.43
2002 21st Street/2020 Virginia Ave Condominiums DR	2002 21st Street / 2020 Virginia Ave	Demolition of existing structures on the project site and construction of a new 19-unit multifamily residential development. The project would be constructed on four parcels currently occupied by 8 residential buildings and one detached garage. The new development would include two new two-story condominium buildings configured around a landscaped courtyard. The project includes a subterranean garage with 42 parking spaces, a landscaped courtyard on the ground level, and rooftop decks.	0.41
2200 Virginia Ave Pico Neighborhood Library	2200 Virginia Ave	Construction of an 8,690-square-foot library has a two-building design. The main, 7,872-square-foot facility will consist of children's, teen, adult,	0.32

Table 4-6 Cumulative Projects

Project	Location	Project Components	Distance from Grant ES (mi)
		and popular collections; a children's area; reading areas; public computers and study rooms; and customer support services.	
Edison Safe Routes to School: MANGo Phase II	Pico neighborhood	The Edison Language Academy Safe Routes to School Project is an exciting step toward implementing the Michigan Avenue Neighborhood Greenway (MANGo) long-term vision. The goals of the greenway improvements will aid students in walking and biking to and from the Edison Language Academy and improve the safety, comfort, and accessibility of bicycling within the Pico neighborhood. The project starts along 30th Street at Ocean Park Boulevard and connects west to Michigan Avenue through neighborhood streets.	0.36
Pico Neighborhood Plan	Pico neighborhood	Transportation safety improvement projects. Each project was designed to improve the ability to safely visit favorite destinations without the use of a personal vehicle. Transportation improvements include: • Pedestrian Crossing Improvements • Protected Bicycle Lane Connections • Safe Routes to School	0.21

Sources: Santa Monica 2023; SMMUSD 2023.

Table 4-7 SMMUSD Projects in the City of Santa Monica

Project	Location	Project Components	Distance from Grant ES (mi)
Franklin Elementary School Campus Plan	2400 Montana Avenue	• 24,685 sq ft increased classrooms and storage • Remove and demolish eight buildings and nine portables, construct three new buildings, and renovate two buildings and outdoor areas	1.95
Edison Language Academy	2402 Virginia Ave	• All existing facilities at Edison Language Academy were replaced with an entirely new campus. These changes included 27 classrooms for kindergarten through 5th grade, two preschool classrooms, a new library, and cafeteria. • New administrative and support facilities were constructed. Outdoor improvements include new community-accessible playfields and playgrounds, outdoor eating and learning areas, and new landscaping throughout the campus. • The Edison Language Academy project reflects Collaborative for High Performance Schools (CHPS) criteria by improved day lighting, improved air quality and natural ventilation, reduced water use, and stormwater treatment.	0.4
McKinley Elementary School Master Plan Project	2401 Santa Monica Boulevard	• Removal of existing modular classrooms • Demolitions of a portion of one permanent building • Renovation of existing library • Construction of one new building and one interim building • New parking lots • Reconfigured playgrounds and field	1.3

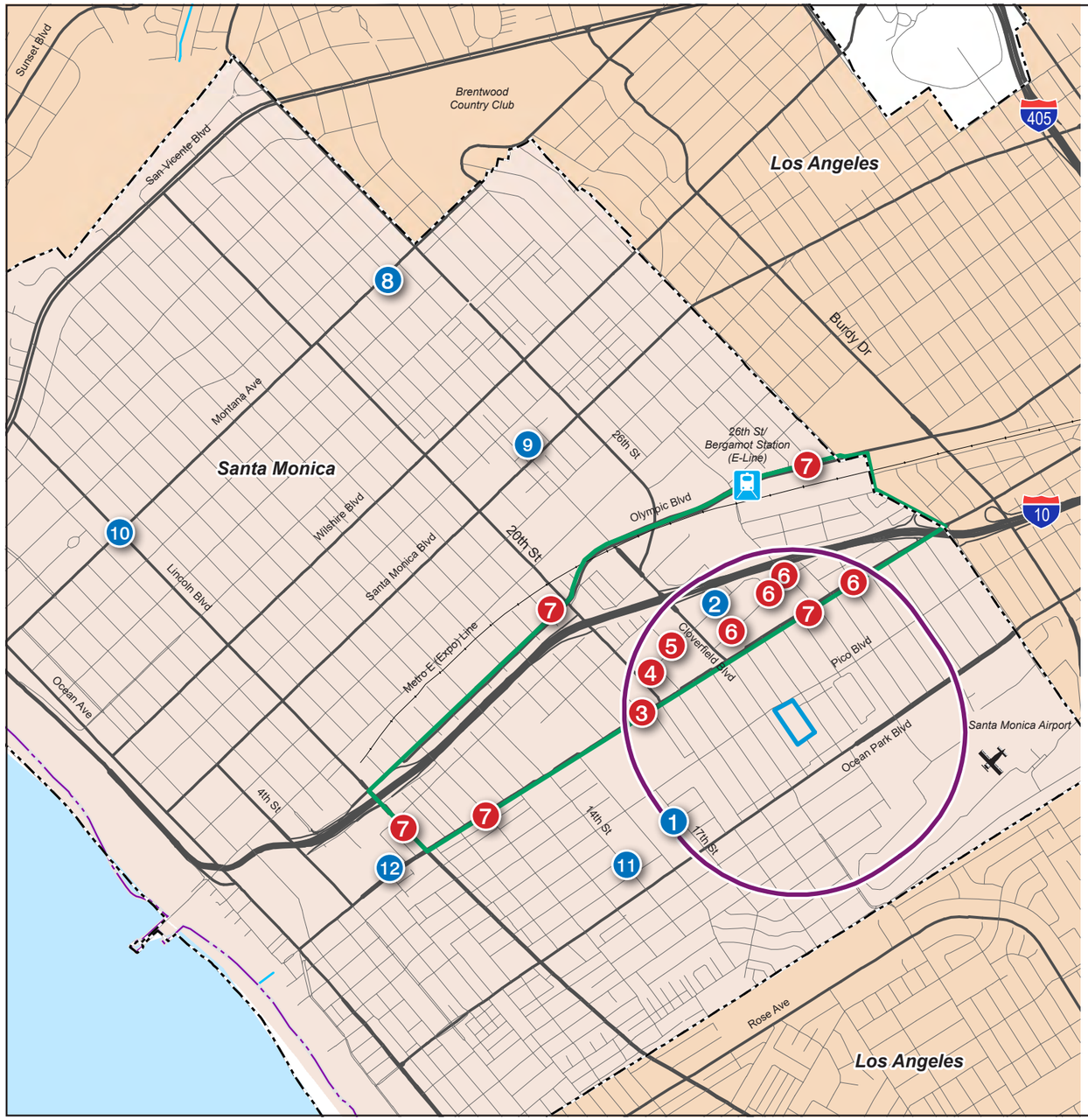
4. Environmental Setting

Table 4-7 SMMUSD Projects in the City of Santa Monica

Project	Location	Project Components	Distance from Grant ES (mi)
Roosevelt Elementary School Campus Master Plan	801 Montana Avenue	• Comprehensive modernization	2.4
John Adams Middle School Campus Improvement Project	2425 16th Street	• Demolition of one existing building • Renovation of six existing buildings • Upgrades to the existing library and courtyard • Construction of new building • New hardscape	0.55
Will Rogers Learning Community Campus Expansion and Improvement Project	2401 14th Street	• Addition of the property at 1515 Maple Street • Removal/demolition of 16 portable and permanent buildings • Construction of three new buildings • Renovation of eight existing buildings and outdoor spaces • Reconfiguration of outdoor and parking/transportation areas over an approximate span of 10 to 15 years	0.6
Santa Monica High School Master Plan (Phase 3 Exploration Building and Gold Gym Update)	601 Pico Boulevard	<u>Phase 3A</u> • 56,247 square feet of demolition • Addition of new classroom building and library • 58,077 square feet of new construction <u>Phase 3B</u> • 51,580 square feet of demolition • Addition of a new Gold Gym • 54,847 square feet of new construction	1.55

Sources: SMMUSD 2023.

Figure 4-1 - Cumulative Projects within a Half Mile of the Project Site



1. John Adams Middle School Campus Improvement Project (2425 16th St)
2. Edison Language Academy (2402 Virginia Ave)
3. SMC Arts Complex Replacement Project (1900 Pico Blvd)
4. 2002 21st Street/2020 Virginia Ave Condominiums DR
5. Pico Neighborhood Library (2200 Virginia Ave)
6. AT&T Antenna (2950 31st Street)
7. Edison Safe Routes to School: MANGo Phase II (PICO Neighborhood)
8. Pico Neighborhood Plan (PICO Neighborhood)
9. Franklin Elementary School Campus Plan (2400 Montana Ave)
10. McKinley Elementary School Master Plan Project (2401 Santa Monica Blvd)
11. Roosevelt Elementary School Campus Master Plan (801 Montana Ave)
12. Will Rogers Learning Community Campus Expansion and Improvement Project (2401 14th St)
13. Santa Monica High School Master Plan (Phase 3 Exploration Building and Gold Gym Update) (601 Pico Blvd)

Grant ES Campus Boundary — City Boundary — Half-Mile Radius — # City Projects — # SMMUSD Projects

Note: Unincorporated county areas are shown in white.

Source: Generated using ArcMap, 2023.

0 2,300
Scale (Feet)

4. Environmental Setting

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4.5 REFERENCES

California Department of Education. 2023. Data Quest. Grant Elementary School Enrollment Data. https://dq.cde.ca.gov/dataquest

CalRecycle. 2019. Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility. https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility.

CARB (California Air Resources Board). 2022, November 16. 2022 Scoping Plan for Achieving Carbon Neutrality. https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf.

Conserve Consultants. 2021, December. Geotechnical Investigation Report. Library and Classroom Renovations Project, City of Santa Monica, Los Angeles County, California.

FEMA (Federal Emergency Management Agency). 2021. FEMA Flood Map Service Center: Search by Address. https://msc.fema.gov/portal/search?AddressQuery=2401%20Santa%20Monica%20Blvd%2C%20Santa%20Monica%2C%20CA%2090404#searchresultsanchor.

ARG (Architectural Resources Group). 2022. Grant Elementary School Historic Resources Inventory Report Draft.

Santa Monica, City of. 2015, July 24. Santa Monica Land Use and Circulation Element.

———. 2018, December. Sustainable Water Master Plan Update. https://www.smgov.net/uploadedFiles/Departments/Public_Works/Water/SWMP.pdf.

———. 2021a, June. DEIR 6th Cycle 2021-2029 Housing Element Update. https://files.ceqanet.opr.ca.gov/265627-4/attachment/UfCaBXcd6MJ_Wm_oDlE-YiOURYjC2tQd8Wm_LVysQ_9d0mkJWZodUSY8xrSO-k-H6IefBX_Uw3YcfBQN0.

———. 2021b, June. 2020 Urban Water Management Plan. https://santamonica.gov/media/Users/smgov_5Calfredo_2Egonzalez/WRPP/2020_UWMP.pdf.

———. 2023, January 27 (accessed). Plans & Projects. https://www.smgov.net/Departments/PCD/Plans-Projects/.

SCAG (Southern California Association of Governments). 2020, September 3. Connect SoCal. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.

SMMUSD (Santa Monica-Malibu Unified School District). 2019. Districtwide Educational Specifications. http://fip.smmusd.org/pdf/SMMUSD-EDSPECS031519.pdf

———. 2023, January 27 (accessed). Facility Improvement Projects. https://www.smmusd.org/domain/4176.

4. Environmental Setting

South Coast AQMD (South Coast Air Quality Management District). 2022, December 2. 2022 Air Quality Management Plan. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=10.

———. 1993. *California Environmental Quality Act Air Quality Handbook*.

WRCC (Western Regional Climate Center). 2023. Western U.S. Climate Summaries: Santa Monica Pier, California (ID 047953). Accessed January 9, 2023. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7953.

5. Environmental Analysis

Each section of this chapter describes the physical and regulatory environmental setting of the Grant Elementary School Campus (Grant ES or campus) and surrounding vicinity, identifies thresholds of significance from which environmental impacts are determined, and identifies potentially significant environmental impacts resulting from implementation of the Grant Elementary School Campus Master Plan (Proposed Project). Where significant impacts are recognized, mitigation measures to reduce or avoid impacts are identified. This chapter has a separate section for each environmental issue area that was determined to need further study in the Draft Environmental Impact Report (DEIR). This scope was determined in the Initial Study/Notice of Preparation (IS/NOP) (see Appendix B), which were published for a 30-day public review from January 13, 2023, to February 12, 2023, and through public and agency comments received during the IS/NOP commenting period (see Appendix C). Environmental issues and their corresponding sections are:

- 5.1 Aesthetics
- 5.2 Air Quality
- 5.3 Cultural Resources
- 5.4 Energy
- 5.5 Geology and Soils
- 5.6 Greenhouse Gas Emissions
- 5.7 Hazards and Hazardous Materials
- 5.8 Hydrology and Water Quality
- 5.9 Noise
- 5.10 Transportation

Organization of Environmental Analysis

To assist the reader with comparing information between environmental issues, each section is organized under the following major headings:

- Environmental Setting
  - Regulatory Setting
  - Existing Conditions
- Thresholds of Significance
- Environmental Impacts
  - Methodology
  - Impact Analysis

5. Environmental Analysis

- Mitigation Measures
- Level of Significance After Mitigation
- Cumulative Impacts
- References

In addition, at the end of Chapter 1, *Executive Summary,* is a table that summarizes all impacts by environmental issue.

Terminology Used in This Draft EIR

The level of significance is identified for each impact in this DEIR. Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with CEQA and the CEQA Guidelines:

- **No impact.** The resource is not present, or the Proposed Project would not result in any change in the environment.

- **Less than significant.** The Proposed Project would not cause any substantial, adverse change in the environment.

- **Less than significant with mitigation incorporated.** The Proposed Project would result in direct or indirect adverse change in the environment that exceeds established thresholds, which requires:
  - **Mitigation measures.** Feasible measures applied to the Proposed Project and intended to minimize identified significant adverse environmental impacts.

- **Significant and unavoidable.** The Proposed Project would cause a substantial adverse effect on the environment after implementation of all feasible mitigation measures to reduce the impact to a less than significant level.

5.1 AESTHETICS

This section of the Draft Environmental Impact Report (DEIR) evaluates the Grant Elementary School Campus Master Plan Project's (Proposed Project) potential impacts on aesthetic and visual resources related to visual character, visual quality, and new sources of light and glare.

The analysis in this section is based in part on the existing conditions of the current Grant Elementary School campus (Grant ES or campus) and architectural renderings prepared for the Proposed Project.

During the Initial Study/Notice of Preparation (IS/NOP) public review period, no written comments were received regarding potential visual impacts associated with the Proposed Project. A California Environmental Quality Act (CEQA) scoping meeting was conducted on February 7, 2023, where issues regarding visual impacts were raised during the meeting. The IS/NOP and all scoping comment letters are included as Appendices B and C of this document.

5.1.1 Environmental Setting

5.1.1.1 REGULATORY BACKGROUND

State and local laws, regulations, plans, or guidelines related to aesthetics that are applicable to the Proposed Project are summarized in this section.

State

California Building Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977 and most recently revised in 2018 (Title 24, Part 6, of the California Code of Regulations). The newly revised standards took effect on January 1, 2020. Title 24 requires the design of building shells and building components to conserve energy. It also requires outdoor lighting controls to reduce energy usage; in effect, this reduces outdoor lighting.

Local

City of Santa Monica Municipal Code

The City of Santa Monica Municipal Code (SMMC) establishes land use regulations and standards for development in the City, including specific design guidelines, height limits, building density, building design and landscaping standards, architectural features, and open space and setback requirements.

Section 4.12.110. Restrictions on demolition, excavation, grading, spray painting, construction, maintenance or repair of buildings.

a. No person shall engage in any construction activity during the following times anywhere in the City:

1. Before eight a.m. or after six p.m. on Monday through Friday, except that construction activities conducted by employees of the City of Santa Monica or public utilities while conducting duties associated with their employment shall not occur before seven a.m. or after six p.m. on Monday through Friday;

2. Before nine a.m. or after five p.m. on Saturday;

3. All day on Sunday;

4. All day on New Year's Day, Martin Luther King's Birthday, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, as those days have been established by the United States of America.

b. Except as set forth in subsection (d) of this Section, the noise created by construction activity shall not cause:

1. The equivalent noise level to exceed the noise standards specified in Section 4.12.060 of this Chapter, for the noise zone where the measurement is taken, plus twenty dBA; or

2. A maximum instantaneous A-weighted, slow sound pressure level to exceed the decibel limits specified in Section 4.12.060 of this Chapter for the noise zone where the measurement is taken plus forty dBA, for any period of time.

c. Prior to the issuance of a building permit, all development projects located within five hundred feet of any residential development or other noise sensitive land uses must submit a list of equipment and activities required during construction. In particular, this list shall include the following:

1. Construction equipment to be used, such as pile drivers, jackhammers, pavement breakers or similar equipment;

2. Construction activities such as twenty-four hour pumping, excavation or demolition;

3. A list of measures that will be implemented to minimize noise impacts on nearby residential uses;

d. Any construction that exceeds the noise levels established in subsection (b) of this Section shall occur between the hours of ten a.m. and three p.m., Monday through Friday.

e. A permit may be issued authorizing construction activity during the times prohibited by this Section whenever it is found to be in the public interest. The person obtaining the permit shall provide notification to persons occupying property within a perimeter of five hundred feet of the site of the proposed construction activity prior to commencing work pursuant to the permit. The form of the notification shall be approved by the City and contain procedures for the submission of comments prior to the approval of the permit. Applications for such permit shall be in writing, shall be accompanied by an application fee and shall set forth in detail facts showing that the public interest will be served by the issuance of such permit. Applications shall be made to the Building Officer. No permit shall be issued

unless the application is first approved by the Director of Environmental and Public Works Management, the Building Officer, the Chief of Police and the Director of Planning and Community Development. The City Council shall establish by resolution fees for the filing and processing of the application required by this subsection (e) and any required compliance monitoring. This fee may be revised from time to time by resolution of the City Council.

Chapter 9.15 Public and Semi-Public Districts

PL Institutional/Public Lands. This Zoning District is for public or semi-public facilities, including municipal offices, schools, libraries, museums, or performance spaces, cemeteries, corporation yards, utility stations, and similar uses. This District is consistent with the LUCE's Institutional/Public Lands land use designation. Table 9.15.030, *Development Standards – Public and Park Districts*, stipulates the development standards for the Public and Semi-Public Districts.

Table 9.15.030 Development Standards – Public and Park Districts

Standard	PL (Institution/Public Lands)
Parcel Intensity Standards	
Minimum Parcel Size	20,000 square feet
Building Form and Location	
Maximum Building Stories	2
Maximum Building Height	32 feet
Minimum Setbacks (feet, measures from property line)	
Street Frontage	10 feet
Interior Side and Rear	10 feet; 15 feet when abutting a residential district
Maximum Parcel Coverage (% of a parcel)	N/A

Section 9.21.080, Lighting

Section 9.21.080(A): Applicability

a. **New Lighting.** All new exterior lighting, including lighting fixtures attached to buildings, structures, poles, or self-supporting structures. Exterior lighting may be found on parking lots, walkways, building entrances, outdoor sales areas, landscaping, recreational fields, and building faces.

Section 9.21.080(C): General Standards

b. **Nonresidential Buildings.** All exterior doors, during the hours of darkness, shall be illuminated with a minimum of one foot-light candle of light.

c. **Shielding.** All lighting fixtures shall be shielded so as not to produce obtrusive glare onto the public right-of-way or adjacent properties. All luminaries shall meet the most recently adopted criteria of

the Illuminating Engineering Society of North America (IESNA) for "Cut Off" or "Full Cut Off" luminaries.

d. **Light Trespass.** Lighting may not illuminate other properties in excess of a measurement of 0.5 foot candles of light.

e. **Maximum Height.** The maximum height for exterior lighting shall be as follows:

    a. Residential, Ocean Park Oceanfront Districts: 16 feet.

    b. Nonresidential Districts: 26 feet.

Section 9.21.080(F): Parking Lot and Structure Lighting

1. Public parking areas designed to accommodate 10 or more vehicles shall be provided with a minimum of 0.5 foot-candle and a maximum of 3.0 foot candles of light over of the parking surface from 0.5-hour before dusk until 0.5-hour after dawn.

2. Lighting design shall be coordinated with the landscape plan to ensure that vegetation growth will not substantially impair the intended illumination.

3. All lighting used to illuminate a parking area for any number of automobiles in any District shall be arranged so that all direct rays from such lighting fall entirely within such parking lot and be consistent with this Section.

Section 9.21.120, Reflective Materials

No more than 25 percent of the surface area of any façade on any new building contain black or mirrored glass or other mirror-like material that is highly reflective, and that materials for roofing be of a non-reflective nature.

City of Santa Monica General Plan

Land Use and Circulation Element

The City of Santa Monica Land Use and Circulation Element (LUCE) was adopted July 6, 2010, and revised July 24, 2015. The LUCE establishes the City's land use, urban design, and transportation vision. The following goals and policies related to scenic quality and aesthetics are applicable to the entire city and relevant to the Proposed Project (City of Santa Monica 2015).

General: Citywide Scenic Quality/Design Goals and Policies

- **Policy LU1.4. Retention of Existing Structures.** Encourage and incentivize preservation of historic structures and older buildings that add to the character of residential districts through the development of programs such as Transfer of Development Rights (TDR) and conservation easements.

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

- **Policy LU12.2. Preservation Programs.** Preserve and protect historic resources through the development of preservation programs and economic incentives such as Transfer of Development Rights and conservation easements as well as neighborhood conservation approaches.

- **Policy LU12.3. Rehabilitation of Historic Resources.** Promote adaptive reuse of historic structures and sensitive alterations where changes are proposed. New construction or additions to historic structures shall be respectful of the existing historic resource.

Goal LU13: Preserve Community Identity Preserve and enhance the City's unique character and identity, and support the diversity of neighborhoods, boulevards, and districts within the City.

- **Policy LU13.1. Maintain Character.** Reinforce the City's distinctive natural, social, and environmental characteristics including its beachfront and connections to the water, civic and cultural institutions, terrain and climate, and the geographic fabric of neighborhoods and boulevards.

- **Policy LU13.3. Districts and Boulevards.** Support the City's diverse districts and boulevards and develop urban design principles, guidelines and standards tailored to each area that respect, reinforce and enhance the defining form and character of that area.

Goal LU15: Enhance Santa Monica's Urban Form. Encourage well-developed design that is compatible with the neighborhoods, responds to the surrounding context, and creates a comfortable pedestrian environment.

- **Policy LU15.8. Building Articulation.** Building façades should be well designed with appropriate articulation in the form of setbacks, offsets, projections and a mix of architectural materials and elements to establish an aesthetically pleasing pattern. Large areas of glass above the ground floor require special design consideration. Highly reflective materials are to be avoided, and dark or reflective glass is prohibited.

- **Policy LU15.10. Roofline Variation.** Buildings should be designed with a variety of heights and shapes to create visual interest while maintaining a generally consistent overall street front. To achieve this goal, development standards should provide flexibility to encourage buildings with interesting silhouettes and skylines, and the primary building façade shall not be lower than the designated minimum street façade height.

Neighborhoods: Citywide Goals and Policies

Goal N1: Protect, preserve and enhance the residential neighborhoods.

- **Policy N1.7.** Make new development projects of compatible scale and character with the existing neighborhoods, providing respectful transitions to existing homes, including ground level open spaces and appropriate building setbacks and upper-floor step backs along neighborhood streets.

Goal N4: Ensure compatible design to preserve and enhance neighborhoods.

- **Policy N4.1.** Design new development to be compatible with the existing scale, mass and character of the residential neighborhood. New buildings should transition in size, height and scale toward adjacent residential structures.

- **Policy N4.4.** Design new development or redeveloped structures in such a manner as to minimize impacts on or disruptions to neighbors.

- **Policy N4.5.** Ensure that new development or redevelopment of existing properties respects the neighborhood history and culture.

- **Policy N4.6.** Incorporate sustainable building practices, and encourage redevelopment to consider adaptive reuse as an alternative to demolition.

Sunset Park Neighborhood

Grant ES is in the Sunset Park neighborhood of Santa Monica. The following goals and policies related to scenic quality and aesthetics are specific to the Sunset Park neighborhood and applicable to the Proposed Project (City of Santa Monica 2015).

Goal N13: Protect, preserve and enhance the Sunset Park residential neighborhood and ensure compatible design.

Historic Preservation

The following goals and policies related to scenic quality and aesthetics, are specific to historical resources within the City of Santa Monica and applicable to the Proposed Project (City of Santa Monica 2015).

Goal HP1: Preserve and protect historic resources in Santa Monica through the land use decision-making process.

- **Policy HP1.3.** Ensure that new development, alterations or remodeling on, or adjacent to, historic properties are sensitive to historic resources and are compatible with the surrounding historic context.

- **Policy HP1.7.** Develop tools to address the conservation of unique and valued character-defining features in residential neighborhoods to preserve and enhance the existing architecture, scale, landscape and context.

5.1.1.2 EXISTING CONDITIONS

Sunset Park Neighborhood

The Grant ES campus is in Sunset Park neighborhood, which is geographically in the southeastern portion of Santa Monica, generally bounded by Pico Boulevard to the north, the eastern City limits, the southern City limits, and Lincoln Boulevard to the west. The area to the east and south of the Sunset Park neighborhood connects southeastern Santa Monica to the West Los Angeles area, and the areas to the west and north are

dense urban areas in the Ocean Park and Pico neighborhoods, characterized by their wide variety of architectural styles.

Visual Character

City of Santa Monica

The City of Santa Monica offers unique natural and man-made visual resources that are visible to those walking, cycling, or driving through the city. These resources include places such as the beachfront, historic areas, tree-lined neighborhoods, and commercial districts such as the Third Street Promenade. The major natural resources unique to the city are the Santa Monica Bay, including the beachfront and coastal area, and the natural Palisades bluffs that overlook the coastline. The city contains various historic buildings and designs representing a range of time periods, architectural styles, and urban character (Santa Monica 2010).

Neighborhood Character

The Sunset Park neighborhood is composed of two subareas separated by Ocean Park Boulevard—Sunset Park South and Sunset Park North. The Grant ES campus is in Sunset Park North, which consists of low-density multifamily and single-family housing. Sunset Park South contains the majority of the neighborhood's single-family homes but also provides some multifamily housing. The Sunset Park neighborhood is serviced by three commercial corridors—Pico Boulevard, which it shares with residents of the Pico neighborhood, Ocean Park Boulevard, and Lincoln Boulevard.

The Sunset Park neighborhood also contains the Douglas Aircraft Company, which sparked a building boom in southeast Santa Monica in the 1930s. During World War II, the Sunset Park neighborhood experienced a dramatic change as thousands of war-related production jobs emerged in Santa Monica and surrounding areas. In response, builders constructed hundreds of housing units to meet the growing demand from blue-collar and middle-class workers. These developments made Sunset Park a suburban community for working individuals and families.

Sunset Park has become a distinct neighborhood featuring schools, parks, small businesses, and employers. Its development pattern is orderly single-family homes with deep front setbacks oriented to quiet tree-lined streets. Some areas contain a limited number of multifamily buildings, as well as one- and two-story courtyard apartments (Santa Monica 2015).

Grant Elementary School Campus

In 1936, Grant ES was developed in its present location. The permanent buildings on the Grant ES campus were constructed between 1936 and 1965. The campus development commenced under the auspices of the federal Works Progress Administration and continued through the early postwar era (1945–1968), a period of growth in Santa Monica. The Grant ES campus fronts Pearl Street and is a visually prominent feature of the area, conveying a unique and dominant visual appearance. The campus consists of nine permanent buildings (Buildings A through K), which include four classroom buildings, an administration/classroom building, an auditorium building, a library, a computer lab/classrooms building, and a cafeteria/classrooms building; 11 modular and relocatable buildings (P70 through P79 and one playground restroom); an 32,600-square-

foot, irregularly shaped field; playgrounds; and shade structures, basketball courts, and parking lots (see Figure 3-4, *Existing Site Plan*, and Figure 3-5, *Photographs of the Existing Campus*). The campus has a total of 34 classrooms for preschool to 5th grade; special education; science, art, and music; and after-school programs. These buildings are concentrated in the northern portion of the campus nearest Pearl Street and along the western and eastern perimeters. As shown in Table 5.1-1, *Characteristics of Existing Buildings*, Buildings B though E and G through K were constructed in the 1930s and 1940s; Buildings A and F and portions of Building B were constructed in the 1950s and 1960s; and additional portable classrooms were constructed on the campus in the 1990s. The nine permanent buildings on the campus were generally designed in the Public Works Administration (PWA) Moderne and Mid-century Modern styles of architecture, consistent with the eras in which they were built.

Table 5.1-1 Characteristics of Existing Buildings

Building Name	Year Built	Current Use	Number of Classrooms	Building Square Feet	Building Type	Building Height	Number of Stories
A	1954	Classrooms	4	4,415	Permanent	12 ft 1 in	1
B	1940 1954	Classrooms	5	6,830	Permanent	16 ft 2 in (Original) 12 ft 1 in (addition)	1
C	1936	Classrooms	4	5,815	Permanent	16 ft 2 in	1
D	1936	Administration/Classrooms	2	5,110	Permanent	30 ft 7 in	1
E	1945	Auditorium	—	5,105	Permanent	22 ft 8 in	2
F	1968	Library	—	3,125	Permanent	15 ft	1
G	1940	Computer Lab/Classrooms	1	2,830	Permanent	16 ft 2 in	1
H	1945	Cafeteria/Classrooms	6	13,965	Permanent	20 ft	1
K	1945	Administration/Classrooms	2	3,370	Permanent	18 ft 6 in	1
P70–P75	1992	Classrooms	6	5,760	Portables	—	1
P76–P79	1999	Classrooms	4	3,860	Portables	—	1

Source: ARG 2022.

The following sections include an architectural description of each building and its visual prominence. The permanent buildings are stylistically similar—though not identical—and exhibit characteristics of the PWA Moderne and Mid-century Modern styles. The following sections include an architectural description of each building.

Building A (Classrooms)

Building A is a one-story building constructed in 1954. This building is approximately 4,415 square feet and 12 feet, 1 inch high and is designed in the Mid-century Modern style with a long, narrow, rectangular plan and a distinctive white-and-blue color scheme. This building is along the northern perimeter of the campus fronting Pearl Street and is predominantly visible from Pearl Street.

Building B (Classrooms)

Building B is a one-story classroom building on the western perimeter of the campus and is connected to Buildings A, C, D, and K by a network of semi-enclosed corridors. Building B was constructed in 1940 and expanded in 1954. It is a 6,830-square-foot building designed in the PWA Moderne style. The original building is 16 feet, 2 inches in height, and the addition to the north façade of the building is 12 feet, 1 inch in height. Building B is visible primarily from Pearl Street and Pearl Place.

Building C (Classrooms)

Building C is a one-story classroom building that anchors the south end of the campus's complex of permanent buildings (along with Building H) and is connected to Buildings B, G, and H by a network of semi-enclosed corridors. Building C was constructed in 1936 and is used for classrooms. It is designed in the PWA Moderne style and is approximately 5,815 square feet with a height of 16 feet, 2 inches. Most of the building consists of a rectangular footprint; however, there are two small volumes that project from the north end of the building and give the building a U-shaped footprint. Building C is interior to the campus and is not directly visible from the front or sides of the school; however, the building is visible from 24th Street through the chain-link fences of the existing staff parking lot.

Building D (Administration/Classrooms)

Building D is a one-story building that contains the school's administrative offices and classrooms. The building is near the center of the campus's complex of permanent buildings and is connected to Buildings B, C, E, G, and K by a network of semi-enclosed corridors. It is prominently visible from the north along Pearl Street. Building D is approximately 5,110 square feet with a height of 30 feet, 7 inches and was constructed in 1936. It is designed in the PWA Moderne style, has both one- and two-story volumes and is L-shaped in plan.

Building E (Auditorium)

Building E is a one-story auditorium building at the northeast corner of the campus and is connected to Buildings D, F, and G by a network of semi-enclosed corridors. Building E is approximately 5,105 square feet with a height of 22 feet, 8 inches and was constructed in 1945. It is designed in the PWA Moderne style, is irregularly shaped, and is a dominant visible building from Pearl Street and 24th Court with its distinctive white-and-blue color scheme.

Building F (Library)

Building F is a one-story library building to the south of Building E. It is connected to Building E by a semi-exterior corridor and is directly appended to the east façade of Building G. The building was constructed in 1965 as an addition to Building G. It is a 3,125-square-foot building with a height of 15 feet, rectangular in plan, and designed in the Mid-century Modern style. Building F is interior to the campus and is only visible to off-campus viewers from 24th Court.

Building G (Computer Lab/ Classrooms)

Building G is a one-story building also south of Building E. It is connected to Building E by a semi-exterior corridor and is directly appended to the west façade of Building F. This building was constructed in 1940 and is used as a computer lab and classrooms. It is a 2,830-square-foot building with a height of 16 feet, 2 inches, roughly L-shaped, and designed in the PWA Moderne style. Building G is interior to the campus and not directly visible from off campus.

Building H (Cafeteria/Classrooms)

Building H is a one-story building that anchors the south end of the campus's complex of permanent buildings (along with Building C) and flanks its east perimeter. It is connected to Buildings F, G, and C by a network of semi-enclosed corridors. This building was constructed in 1945 and houses a cafeteria and classrooms. Designed in the PWA Moderne style, it is a 13,965-square-foot building with a height of 20 feet and an irregular footprint. Building H is interior to the campus and is visible to off-campus viewers along 24th Court and 24th Street through the chain-link fences of the existing staff parking lot.

Building K (Classrooms)

Building K is a one-story building near the front (north) of the campus between Buildings A and D. It is connected to Building D by a semi-enclosed corridor. This building was constructed in 1945 and is used as classrooms. It is designed in the PWA Moderne style, is a 3,370-square-foot building with a height of 18 feet, 6 inches, and has a long, narrow rectangular plan. Building K is interior to the campus and is not directly visible to off-campus viewers.

Modular, Relocatable, and Ancillary Buildings

The campus also contains several modular and relocatable buildings that have been installed at various points to accommodate growth and campus needs. These buildings are to the south of the permanent buildings described above, along the eastern and western perimeters of the campus. Specifically, six relocatable buildings flank the western edge of campus (P70 to P75), and four modular buildings flank its eastern edge (P76 to P79), all of which are used as classrooms. The modular and relocatable building are visible from Pearl Place (P70 to P75) and 24th Court (P76 to P79), and one playground restroom building is visible from 24th Street through the chain-link fence of the existing staff parking lot.

Central Garden

The Central Garden is surrounded by Building D to the north, Building C to the south, Building B to the west, and building G to the east. The Central Garden is landscaped with grassy lawns, mature trees, and concrete patios with lunch tables. The Central Garden is interior to the campus and is not visible from off campus.

Athletic Field/ Playground

The campus includes approximately 2.8 acres of athletic fields, courts, and playgrounds. Much of this space consists of an approximately 74,000-square-foot paved asphalt surface that is used for basketball and athletic courts and contains several shade structures. There is also playground equipment installed on artificial turf and a raised bed garden enclosed by a low wood picket fence. The southwest corner of the campus contains a broad lawn. Bleachers are installed adjacent to the south edge of the lawn. The athletic field and playground are visible from 24th Street through the chain-link fences of the existing staff parking lot.

The existing athletic facilities, such as the athletic fields and basketball courts, are available for community use through the Civic Center Act and a joint-use agreement between the District and the City. When the school facilities are not in use and are not scheduled for school-sponsored or other District-related events, certain community organizations and members are permitted to use school facilities for their events by obtaining a Civic Center Act permit from the SMMUSD. Permitted events may include community and/or city use of the playfields, common areas, and classrooms, as permitted in the 2022 "Master Facility Use Agreements with the Santa Monica-Malibu Unified School" (City of Santa Monica 2022a). Recreational activities that occur on Grant ES through the Civic Center Act Permit during non-school hours include the American Youth Soccer Organization, Childcare Recreation Enrichment Sports Together enrichment and camps, and playground access.

Views of the Proposed Project's Site from Public Locations

Public viewing points, identified on Figure 5.1-1, *Key Public Viewpoint Locations,* were chosen as a representative sample of views of the Grant ES campus from surrounding public roads. Views from private residences are not protected views under CEQA and are not described here. The views from each of these public viewing points are described here and captured on Figures 5.1-2a, *Existing Public Viewing Point 1*, through Figure 5.1-2d, *Existing Public Viewing Point 4*. These views were selected based on the Proposed Project's location on the campus, public comments received during the scoping process, and consideration of the goals and policies in the City's General Plan.

Public Viewing Point 1: Pearl Street and 24th Court

Figure 5.1-2a*, Existing Public Viewing Point 1*, depicts the existing viewshed from the intersection of Pearl Street and 24th Court looking southwest to the Grant ES campus. As shown on Figure 5.1-2a, the eastern boundary of the campus is bordered by a chain-link fence and the public rights-of-way, which include above-ground power lines, street signs, grass areas, and several species of trees along Pearl Street—jacaranda (*Jacaranda Mimosifolia*), evergreen pear (*Pyrus kawakamii*), and hibiscus (*Hibiscus rosa-sinensis*) (Carlberg Associates 2010). Street parking is provided along Pearl Street, and none on 24th Court. From this intersection, immediate views of the campus include the surface parking lot on the northeastern corner of the campus, Building E (Auditorium), and the roofline of Building D (Administration/Classrooms). Additionally, the single-family residences are visible along Pearl Street.

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Public Viewing Point 2: Pearl Street (near 23rd Street)

Figure 5.1-2b*, Existing Public Viewing Point 2*, depicts the existing viewshed from Pearl Street near 23rd Street, looking southeast to the Grant ES campus. As shown on Figure 5.1-2b, the northwestern boundary of the campus is bordered by a vegetation-covered wall that encloses the preschool and kindergarten play area and by the public rights-of-way, which include above-ground power lines, street signs, and ornamental street trees and grass along Pearl Street. Street parking is provided along Pearl Street. From this intersection, immediate views of the campus include the roofline of Building A (Classrooms). Additionally, the single-family residences are visible along Pearl Street.

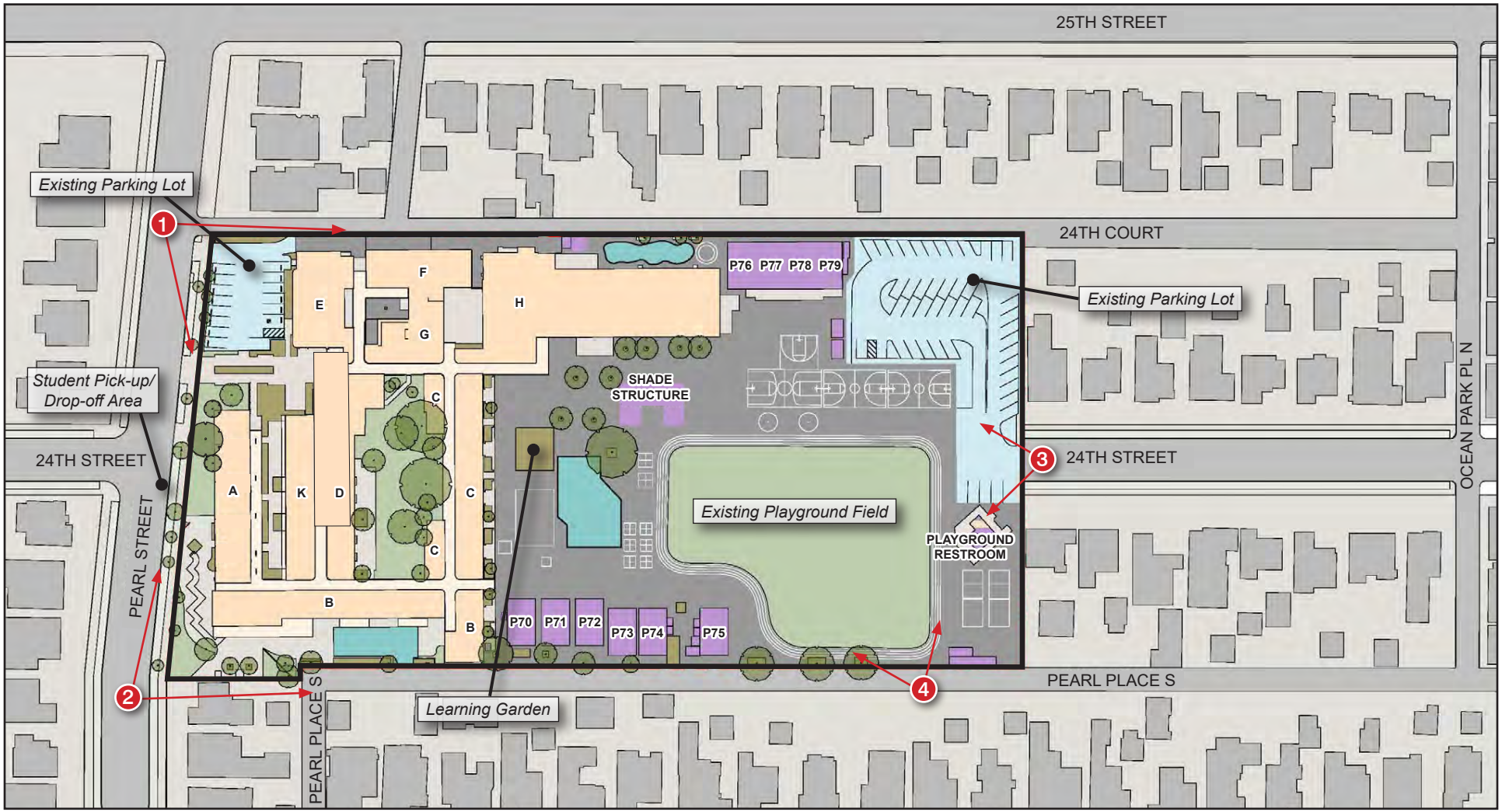
Public Viewing Point 3: 24th Street (southern boundary of campus)

Figure 5.1-2c*, Existing Public Viewing Point 3*, depicts the existing viewshed from 24th Street along the southern boundary of the campus looking north to the Grant ES campus. As shown on Figure 5.1-2c, the southern boundary of the campus is bordered by chain-link fencing and vegetation-covered walls that enclose the staff parking lot. Public rights-of-way along 24th Street include street signs and ornamental street trees and grass. Street parking is provided along 24th Street. From this viewpoint, the staff parking lot on the southern portion of the campus, paved and grass playground, the roofline of Buildings C and H, and the modular and relocatable buildings are visible. Additionally, the single-family residences are visible along 24th Street.

Public Viewing Point 4: Pearl Place (western boundary of campus)

Figure 5.1-2d*, Existing Public Viewing Point 4*, depicts the existing viewshed from Pearl Place along the western boundary of the campus looking northeast to the Grant ES campus. As shown on Figure 5.1-2d, the western boundary of the campus is bordered by chain-link fencing and Indian laurel fig (*Figus microcarpa*) trees (Carlberg Associates 2010). Public rights-of-way along Pearl Place include above-ground lines. Street parking is not provided along Pearl Place. From this viewpoint, immediate views of the campus include the paved and grass playground, the roofline of Buildings H, and the modular and relocatable buildings. Additionally, the walls and fencing of the adjacent single-family residences are visible along Pearl Place.

Figure 5.1-1 - Key Public Viewpoint Locations



Source: Johnson Favaro, 2022.

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Figure 5.1-2a - Existing Public View Point 1

Source: Johnson Favaro, 2023.

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Figure 5.1-2b - Existing Public View Point 2

Source: Johnson Favaro, 2023.

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Figure 5.1-2c - Existing Public View Point 3

Source: Johnson Favaro, 2023.

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Figure 5.1-2d - Existing Public View Point 4

Source: Johnson Favaro, 2023.

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Surrounding Areas

Grant ES is surrounded by residential neighborhoods—single-family and multifamily—on all four sides. The surrounding neighborhood streets include Pearl Street, Pearl Place (alley), 24th Street, and 24th Court (alley). Pico Boulevard, a regional transportation corridor, is approximately 0.2 mile north of the campus, and Ocean Boulevard is approximately 0.1 mile south of the campus.

North

Immediately adjacent to the northern boundary of the campus is Pearl Street, surrounded by single-family residential properties with a land use designation of Low Density Housing. Further north, approximately 0.2 miles from the campus, is Pico Boulevard, a mixed-use boulevard with commercial, residential, and open space land uses.

East

A paved alley (24th Court) parallels the campus on the east and separates the campus from single-family residential development that has a land use designation of Low-Density Housing.

South

Immediately adjacent to the southern boundary of the campus is 24th Street, surrounded by single-family residential properties with a land use designation of Low Density Housing. Further south, approximately 0.10 miles from the campus, is Ocean Boulevard, a mixed-use boulevard with commercial, residential, and open space land uses.

West

A paved alley (Pearl Place) parallels the campus on the west and separates the campus from one- and two-story residential development that has a land use designation of Low-Density Housing.

Light and Glare

The Grant ES campus is in an urbanized area and features a mix of residential and commercial uses and surface parking lots. Interior lighting emanating from existing structures, security lighting, and ornamental lighting fixtures are common sources of nighttime lighting in the surrounding area. Other existing sources of nighttime lighting include pole-mounted overhead streetlights along Pearl Street and 24th Street; pedestrian safety and security lighting installed at or near building entrances; vehicle headlights; and parking-lot pole lights off of Pearl Street.

In addition to these lighting sources, building materials are a potential source of glare in the area surrounding the campus during daytime hours. Specifically, glass windows and exposed metal features in local area healthcare and commercial buildings are sources of potential daytime glare.

Some land uses are considered "light-sensitive receptors," including residences, hotels, and convalescent homes, since these uses are typically occupied by persons who have expectations for privacy during evening

hours and are subject to disturbance by bright sources of light. Light-sensitive uses near the Proposed Project's Site include the residential uses immediately north, west, and east of the campus.

5.1.2 Thresholds of Significance

Appendix G of the CEQA Guidelines states that, "except as provided in Public Resources Code Section 21099," a project would normally have a significant effect on the environment if the project would:

AE-1 Have a substantial adverse effect on a scenic vista.

AE-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

AE-3 In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.

AE-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The IS/NOP, included as Appendix B, substantiates that impacts associated with the following thresholds would be less than significant; therefore, these impacts will not be further addressed in this DEIR:

- Threshold AE-1
- Threshold AE-2

These impacts are addressed in Chapter 6, *Other CEQA Considerations*, and in Appendix B of this DEIR.

5.1.2.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the IS/NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.1-1: The Proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. [Threshold AE-3]

Construction

Construction activities would occur entirely within the Grant ES campus. During the construction period, different types of equipment (e.g., backhoes, forklifts, skip loaders, and compaction rollers) would be on campus to varying degrees and in various locations, depending on phase and activity. The District would obtain the After-Hours Construction Permit to begin work at 7:00 a.m., and it is anticipated that all Proposed Project construction would occur during daytime hours and would end before 6:00 p.m. in compliance with SMMC 4.12.110(a); construction activities would comply with SMMC 4.12.110. Before construction activities

begin for any phase of the Proposed Project, temporary fencing would be installed around the construction areas. Construction activities at ground level would be largely obscured from off-campus viewpoints by intervening fencing, buildings, and vegetation on the campus. Furthermore, visual effects from construction activities would be temporary and short term. As such, construction of the Proposed Project would not conflict with applicable zoning and other regulations governing scenic quality of the campus. Therefore, impacts would be **less than significant**.

Operation

The existing Grant ES campus is in the City of Santa Monica's Sunset Park neighborhood, which is highly urbanized. Therefore, evaluation as to whether the Proposed Project would substantially degrade the existing visual character or quality of public views of the site and its surroundings is not required. However, visual simulations were prepared for the public's information only and are not intended to support an analysis of any potential environmental impacts in this regard relative to CEQA requirements. The campus encompasses 6.01 acres and contains nine permanent buildings (Buildings A through K), which include four classroom buildings, an administration/classroom building, an auditorium building, a library, a computer lab/classrooms building, a cafeteria/classrooms building; 11 modular and relocatable buildings (P70 through P79 and one playground restroom); a 32,600-square-foot irregularly shaped field; playgrounds; and shade structures, basketball courts, and parking lots (see Figure 3-4). As stated above, the nine permanent buildings on the campus were generally designed in the PWA Moderne and Mid-century Modern styles of architecture, consistent with the eras in which they were built—between 1936 and 1968. Additionally, the campus includes the Central Garden between Building B, C, D, and G, which is landscaped with grassy lawns, mature trees, and concrete patios with lunch tables. The images depicted on Figures 5.1-3a, *Architectural Rendering of Public Viewing Point 1*, through 5.1-3d, *Architectural Rendering of Public Viewing Point 4*, are architectural renderings of public viewing points 1 through 4 and are intended to represent the anticipated visual character of the overall Proposed Project. Figure 3-8, *Full Buildout of the Proposed Project*, shows proposed massing of new buildings on the campus.

Public Viewing Point 1: Pearl Street and 24th Court

Figure 5.1-3a, *Architectural Rendering of Public Viewing Point 1*, shows the proposed view from the area around Pearl Street and 24th Court, looking southwest to the Grant ES campus after Proposed Project implementation. The proposed on-campus improvements would be visible to motorists and pedestrians along Pearl Street and to residential properties north of Pearl Street and east of 24th Court.

As shown on Figure 5.1-3a, implementation of the Proposed Project would be similar to the existing views of the Grant ES campus (see Figure 5.1-2a). From this viewpoint, the surface parking lot on the northeastern portion of the campus, Building E (Auditorium), and the roofline of Building D (Administration/Classrooms) are visible. Phase 1 of the Proposed Project would include renovation and expansion of the existing library (Building F) on the eastern boundary of the campus along 24th Court and renovation of the transitional kindergarten and kindergarten classrooms in Building A on the northern boundary along Pearl Street. However, all proposed improvements during Phase 1 of the Proposed Project, including alteration to Buildings A and F, would be to the interiors of the existing buildings and would not

require the removal of any buildings or construction of new buildings on the campus. Renovations to Building A during Phase 1 of the Proposed Project have been designed to reflect the visual character and appearance of existing on-site buildings in materials and color and to respect and maintain the architectural design of the campus.

All other components of the campus that are visible from this viewpoint, including Buildings D and E and the surface parking lot, would remain as is. The existing street trees would remain and would provide screening of views from vantage points along Pearl Street. As such, the Proposed Project is not anticipated to substantially change the overall character of the campus or the surrounding areas.

Public Viewing Point 2: Pearl Street (near 23rd Street)

Figure 5.1-3b, *Architectural Rendering of Public Viewing Point 2*, depicts the proposed viewshed from Pearl Street near 23rd Street looking southeast to the Grant ES campus. From this viewpoint, the roofline of Building A (Classrooms) is visible. As described above, Phase 1 of the Proposed Project would include renovation of the transitional kindergarten and kindergarten classrooms in Building A but these improvements would be inside the building and would not require the removal or construction of buildings. Renovations to the Building A have been designed to reflect the visual character and appearance of existing on-site buildings in materials and color and to respect and maintain the architectural design of the campus.

All other components of the campus that are visible from this viewpoint, including the surface parking lot, would remain as is. The existing street trees would remain and would provide screening of views from vantage points along Pearl Street. As such, the Proposed Project is not anticipated to substantially change the overall character of the campus or the surrounding areas.

Public Viewing Point 3: 24th Street (southern boundary of campus)

Figure 5.1-3c, *Architectural Rendering of Public Viewing Point 3*, depicts the proposed viewshed from 24th Street along the southern boundary of the campus, looking north towards the Grant ES campus. The proposed improvements would be visible to residents, motorists, and pedestrians on 24th Street. As described in Chapter 3, *Project Description*, Phase 2 of the Proposed Project would require the removal of six portable classrooms (P70 to P75), playground restrooms, and shade structures and reconfiguration of the existing playground and parking lot, all of which are visible from 24th Street. Phase 2 would include the construction of a new one-story classroom building with six classrooms and with a maximum height of 32 feet (see Figure 5.1-4, *Proposed Building Heights*); development of two new parking lots at the southeast and southwest corners of the campus along 24th Court and Pearl Place; and reconfiguration of the playfield to a standard rectangular play field centrally located in the southern portion of the campus (see Figure 5.1-3c).

Figure 5.1-3a - Architectural Rendering of Public View Point 1

Source: Johnson Favaro, 2023.

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Figure 5.1-3b - Architectural Rendering of Public View Point 2

Source: Johnson Favaro, 2023.

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Figure 5.1-3c - Architectural Rendering of Public View Point 3

Source: Johnson Favaro, 2023.

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Figure 5.1-3d - Architectural Rendering of Public View Point 4

Source: Johnson Favaro, 2023.

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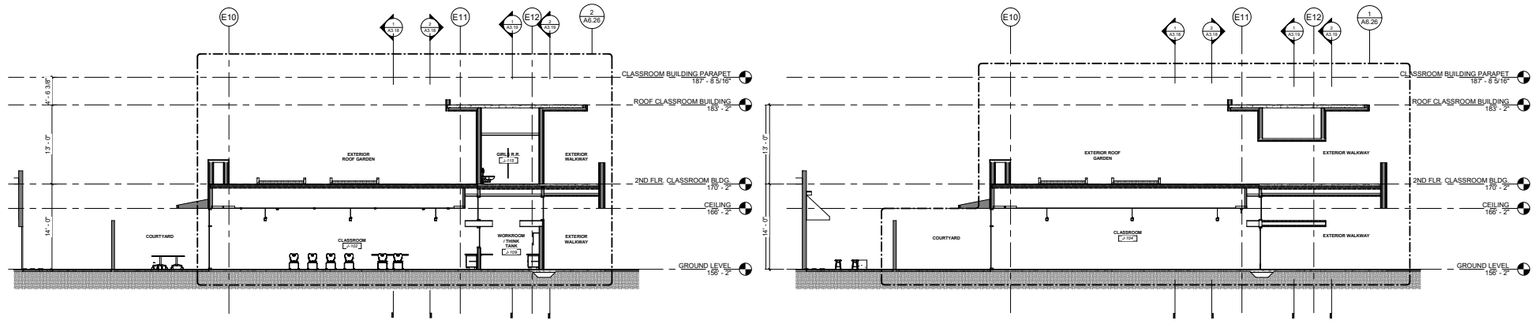
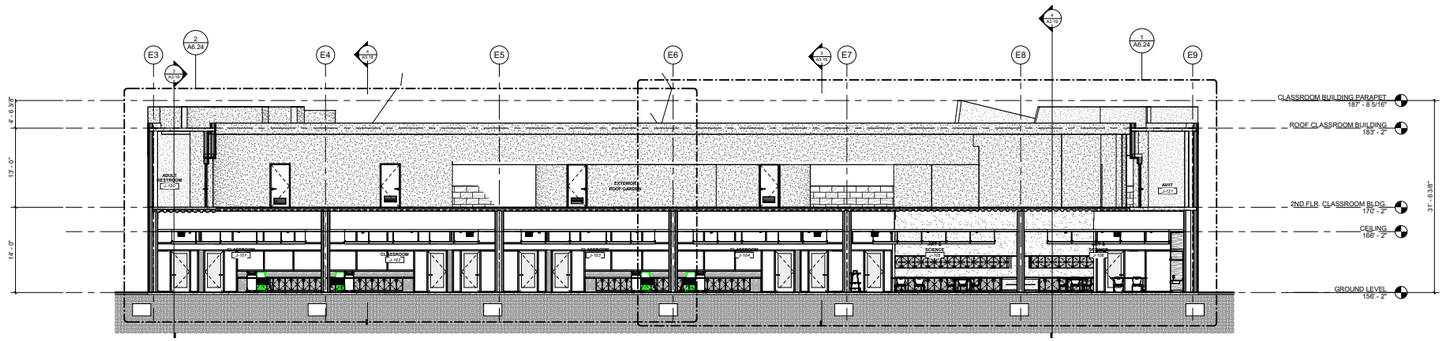
Figure 5.1-4 - Proposed Building Heights

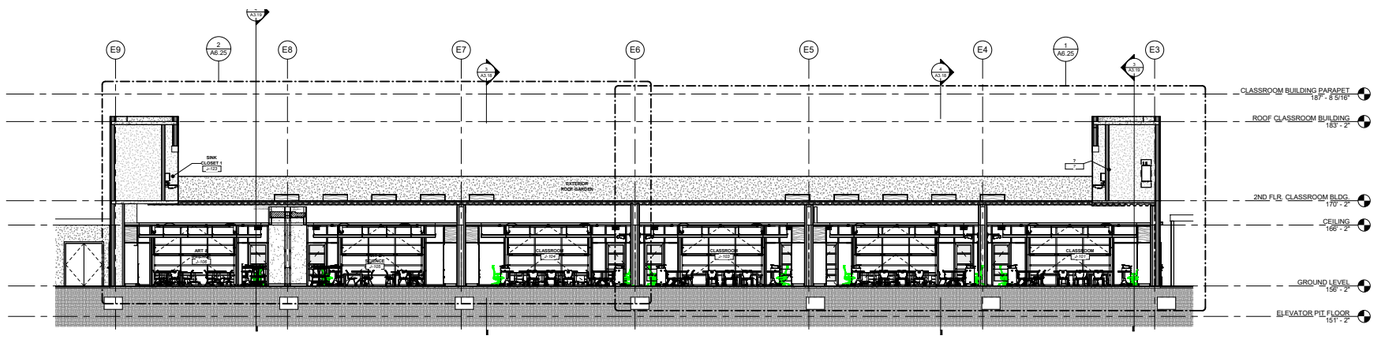


Classroom Building Section 2

Classroom Building Section 1



Classroom Building Section 2



Classroom Building Section 1

0 23
Scale (Feet)

Source: Johnson Favaro, 2022.

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Additionally, Phase 3 of the Proposed Project would require the removal of four portable classrooms (P76 to P79), which are visible from 24th Street. Phase 3 would include the construction of a new two-story classroom building (see Figure 5.1-3c). The relocated field with the new two-story classroom building set behind it would be a visual element of increased bulk and scale compared to existing conditions and with a maximum height of 34 feet; this would be adjacent to the existing Buildings B and C and the new one-story classroom building. Final design of the proposed two-story building would be completed in the future, depending on funding availability, as described in Chapter 3, *Project Description*; however, the maximum height of the proposed building would not exceed 34 feet and would be compatible with all surrounding buildings on the campus.

The proposed new classroom buildings would generally reflect the height and scale of existing on-campus structures from this vantage point and would provide a stepped transition in heights. The new classroom buildings have been designed to reflect the visual character and appearance of existing buildings in materials and color and to respect and maintain the architectural design of the campus. As such, the Proposed Project is not anticipated to substantially change the overall character of the campus or the surrounding areas.

Public Viewing Point 4: Pearl Place (western boundary of campus)

Figure 5.1-3d, *Architectural Rendering of Public Viewing Point 3*, depicts the proposed improvements from Pearl Place along the western boundary of the campus, looking northeast to the Grant ES campus. The proposed improvements would be visible to residents on 24th Court. As described in Chapter 3, *Project Description*, Phase 2 of the Proposed Project would require the removal of six portable classrooms (P70 to P75) and reconfiguration of the existing playground with new trees and parking lot, all of which are visible from Pearl Place. Phase 2 would include the construction of a new one-story classroom building with six classrooms and a maximum heigh of 32 feet (see Figure 5.1-6a), development of two new parking lots at the southeast and southwest corners of the campus along 24th Court and Pearl Place, and reconfiguration of the playfield (see Figure 5.1-3d).

Additionally, Phase 3 would include the construction of a new two-story classroom building with a maximum height of 34 feet (see Figure 5.1-3c). The new two-story classroom building would be adjacent to the existing Buildings B and C, and the new one-story classroom building would generally reflect the height and scale of existing on-campus structures.

The proposed new two-story classroom building along Pearl Place would generally reflect the height and scale of existing structures from this vantage point and would provide a stepped transition in heights from the one-story classroom building at 32 feet high to a maximum height of 34 feet for the new two-story classroom building. The new classroom buildings have been designed to reflect the visual character and appearance of existing on-campus buildings in materials and color and to respect and maintain the architectural design of the campus. As such, the Proposed Project is not anticipated to substantially change the overall character of the campus or the surrounding areas.

New development in the City of Santa Monica is governed by the City's zoning ordinance and the LUCE, which include development standards and design policies. The new one- and two-story classroom buildings would have a maximum height of 32 feet and 34 feet above natural grade, respectively, and would not contain

any rooftop mechanical equipment (see Figure 5.1-4). Though the building height would exceed the maximum permitted height of 32 feet above grade—as stipulated in Table 9.15.030, Development Standards – Public and Park Districts, of SMMC Chapter 9.15—the new structure would be compatible with the existing buildings on the campus, including Building D, which has a total height of 30 feet, 7 inches. A portion of the existing Building B would be replaced by the new two-story classroom building, and Building C would remain in place, integrating the proposed buildings with the existing campus. Development of the Proposed Project would comply with Policies LU15.10, N1.7, and N4.1 of the LUCE—to design buildings with a variety of heights and shapes to create visual interest while maintaining a generally consistent overall street front; make new development projects of compatible scale and character with the existing neighborhoods, providing respectful transitions to existing homes; and design new development to transition in size, height and scale toward adjacent residential structures.

The proposed new buildings would be of quality design and would incorporate design features, colors, and exterior materials that are compatible with the existing school buildings and surrounding landscape (see Figures 5.1-3a through 5.1-3d) in compliance with Goal LU15 and Policies LU15.8 and LU15.10, which encourage well-developed design that is compatible with the neighborhoods and well-designed building façades with appropriate articulation in the form of setbacks, offsets, projections, and a mix of architectural materials and elements to establish an aesthetically pleasing pattern.

In compliance with Goal LU12 and Policies LU12.2 and LU12.3 of the LUCE, the Proposed Project would preserve all areas and structures in the campus's historic district that characterize and represent the city's rich heritage and are considered eligible for listing in the California Register of Historical Resources and for designation as a City of Santa Monica historic district (ARG 2023),[1] including Buildings B, C, D, E, G, H, and K the Central Garden, which is the landscaped courtyard bounded by Buildings B, C, D, and G; covered breezeways and corridors connecting the buildings; and the paved forecourt and flagpole at the north end of the campus, with a period of significance from 1936 to 1945.

Additional elements of the Proposed Project, including renovations to Buildings A, F, and G, would be interior alterations that would not erect new structures and would not be visible from the surrounding neighborhood or from Pearl Street, Pearl Place, 24th Street, and 24th Court; thus, these elements of the Proposed Project would not have the potential to degrade the visual character or quality of the campus or the surrounding area.

As demonstrated, development of the Proposed Project would generally be consistent and would comply with the policies in the SMMC and LUCE. Compliance with these goals and policies would ensure that implementation of the Proposed Project would not result in the significant degradation of the visual quality of the campus and surrounding area. Therefore, impacts to visual character and quality of the campus and surround area would be **less than significant**.

[1] As governed by SMMC Section 9.56.100, Landmarks and Historic Districts Ordinance.

Impact 5.1-2: The Proposed Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. [Threshold AE-4]

Construction

As described in Chapter 3, *Project Description*, Phase 1 of the Proposed Project is anticipated to begin in the summer 2024, Phase 2 in the summer of 2025, and Phase 3 in the summer of 2028 and end in the summer of 2030. The construction for Phase 1 would occur over approximately 12 months, and the construction for Phases 2 and 3 is anticipated to occur over approximately 24 months each.

The SMMC Section 4.12.110(a) limits the hours of construction to between 8:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. to 5:00 p.m. on Saturday, and prohibits construction on Sundays and holidays. However, the District would request an After-Hours Construction Permit to allow Proposed Project construction activities to begin at 7:00 a.m. The earlier arrival of contractors would allow them to be in the work area prior to student arrival/drop-off, thereby improving pedestrian safety and reducing traffic congestion during construction activities. As required under the After-Hours Construction Permit, the District is required to post one sign along the street frontage of each construction area and notify neighbors within a 500-foot radius of construction activities. The notifications must include a description of the activities covered under the After-Hours Construction Permit and the dates and times that these activities would take place. The notifications must also include the contact information of the permit holder (i.e., the District) and the City contact. The District would be required to follow SMMC Section 4.12.110 and any allowances made by the City under the After-Hours Construction Permit.

Although the District would obtain the After-Hours Construction Permit to begin work at 7:00 a.m., it is anticipated that all Proposed Project construction would occur during daytime hours and end before 6:00 p.m. in compliance with SMMC 4.12.110(a). Thus, portable temporary construction lighting would not be required during construction activities. Therefore, light and glare impacts during construction of the Proposed Project would be **less than significant**.

Operation

Light

As described above in Section 5.1.1, *Environmental Setting*, the built-out school campus is in a fully developed urbanized area surrounded by single-family residences on all four sides. Existing light sources within the campus include interior and exterior building lighting and wayfinding lighting along campus pathways. Light sources surrounding the campus include interior and exterior lighting from residential buildings, streetlights, and vehicle lighting on local roadways. Light-sensitive receptors are generally considered to be residential properties and may also include hospital or nursing home uses, where excessive nighttime lighting may affect the use of the property. The nearest residences to the campus are across 24th Court and Pearl Place, along the eastern and western boundaries of the campus, respectively.

Development of the Proposed Project would include interior and exterior lighting sources, including outdoor wayfinding lighting along entryways and driveways, and exterior security lighting along the perimeter of the

proposed new buildings and within the reconfigured parking lots. Proposed Project lighting would be similar in intensity to existing conditions and surrounding uses. Consistent with existing conditions and the District's lighting standards, the Proposed Project would include only the minimum amount of outdoor lighting necessary to maintain safety and comfort. Nighttime lighting would be limited to wayfinding and security lighting, which would be shielded and directed on campus to minimize spillover effects and night sky pollution. To minimize spill lighting and glare impacts, all lighting from the Proposed Project would be LED, have full-cutoff shielding, and be aimed directly to specific areas. Thus, the Proposed Project would not create a new source of substantial light that would adversely affect nighttime views in the area. Therefore, impacts would be **less than significant**.

Glare

The Proposed Project would not use reflective building materials that would create new sources of glare during operation (see Figures 5.1-3a through 5.1-3d). The Proposed Project would comply with SMMC Section 9.21.120, which prohibits the use of highly reflective materials. SMMC Section 9.21.120 states that no more than 25 percent of the surface area of any façade on any new building may contain black or mirrored glass or other mirror-like material that is highly reflective, and that materials for roofing must be nonreflective. Vertically retracting glass doors would primarily be situated toward the interior of the Grant ES campus and would be limited to the first floor of the renovated and new buildings. As such, any glare reflecting from the glass doors would be screened so that surrounding roadways and residences would not be adversely affected. The Proposed Project is not anticipated to introduce a new substantial source of glare to the Proposed Project's area that would adversely affect daytime views; and the Proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. Thus, the Proposed Project would not create a new source of substantial glare that would adversely affect daytime views in the area Therefore, impacts would be **less than significant.**

5.1.3 Mitigation Measures

No mitigation measures are required.

5.1.4 Level of Significance After Mitigation

All impacts are **less than significant**.

5.1.5 Cumulative Impacts

Aesthetic impacts are typically localized to a proposed project's site and the immediate surrounding area. The closest cumulative project to the campus is the development of the Pico Neighborhood Library at 2200 Virginia Avenue, approximately 0.32 mile northwest of the campus. Development in the city of Santa Monica is subject to design review and adherence to applicable regulations and policies relating to scenic resources, visual quality, and lighting. Compliance with these policies would ensure that future development would not result in a substantial adverse effect on a scenic vista or the degradation of the existing visual character or quality of the site and its surroundings. Cumulative projects could introduce new nighttime lighting and would be required to comply with regulations related to aesthetics and lighting and glare in the SMMC.

As described above, the Proposed Project would exceed allowable building heights; however, the Proposed Project would be compatible with the existing buildings on campus and in the immediately surrounding area. The Proposed Project would not create new sources of substantial light and glare that would affect day or nighttime views. Therefore, the Proposed Project's contribution to cumulative impacts would not be cumulatively considerable, and the cumulative impact of the Proposed Project would be **less than significant**.

5.1.6 References

Architectural Resources Group (ARG). 2023, March. Grant Elementary School, Santa Monica, CA, Historic Resources Impact Assessment.

California Department of Transportation (Caltrans). 2019. California State Scenic Highway System Map. Accessed December 1. 2022. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

Carlberg Associates. 2010, February. *Grant Elementary School Tree Report*.

Santa Monica, City of. 2015, July 24. Santa Monica Land Use and Circulation Element. https://learn.sharedusemobilitycenter.org/wp-content/uploads/policy-documents-4/Santa%20Monica_Revised%20LUCE%207.24.15_web.pdf.

———. Santa Monica Municipal Code. https://library.qcode.us/lib/santa_monica_ca/pub/municipal_code.

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5.2 AIR QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for the Grant Elementary School Campus Master Plan (Proposed Project) to impact air quality in a local and regional context. This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (South Coast AQMD). The analysis focuses on air pollution from regional emissions and localized pollutant concentrations. In this section, "emissions" refers to the actual quantity of pollutant, measured in pounds per day (lbs./day), and "concentrations" refers to the amount of pollutant material per volumetric unit of air. Concentrations are measured in parts per million, parts per billion, or micrograms per cubic meter.

Criteria air pollutant emissions modeling is in Appendix D, A*ir Quality and Greenhouse Gas Emissions Data*, of this DEIR. Transportation-sector impacts are based on trip generation and vehicle miles traveled (VMT) as provided by Arcadis (see Appendix K). Cumulative impacts related to air quality are based on the regional boundaries of the South Coast Air Basin (SoCAB). An evaluation of localized construction health risks is in Appendix E, *Construction Health Risk Assessment*, of this DEIR.

During the Initial Study/Notice of Preparation (IS/NOP) public review period, comments were received regarding health risk and air quality during construction of the Proposed Project. A California Environmental Quality Act (CEQA) scoping meeting was conducted on February 7, 2023, where additional concerns regarding these issues were raised. The IS/NOP and all scoping comment letters are included as Appendices B and C of this document.

5.2.1 Environmental Setting

5.2.1.1 AIR POLLUTANTS OF CONCERN

Criteria Air Pollutants

The pollutants emitted into the ambient air by stationary and mobile sources are categorized as primary and/or secondary pollutants. Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_X), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb) are primary air pollutants. Of these, CO, SO_2, nitrogen dioxide (NO_2), PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that ambient air quality standards (AAQS) have been established for them. VOC and NO_X are criteria pollutant precursors that form secondary criteria air pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and NO_2 are the principal secondary pollutants.

Each of the primary and secondary criteria air pollutants and its known health effects are described below.

- **Carbon Monoxide (CO)** is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion,

engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (South Coast AQMD 2005; USEPA 2023a). The SoCAB is designated as being in attainment under the California AAQS and attainment (serious maintenance) under the National AAQS (CARB 2023a).

- **Volatile Organic Compounds (VOC)** are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such as aerosols (South Coast AQMD 2005). There are no AAQS for VOCs. However, because they contribute to the formation of O_3, South Coast AQMD has established a significance threshold (South Coast AQMD 2019). The health effects for ozone are described later in this section.

- **Nitrogen Oxides (NO_X)** are a by-product of fuel combustion and contribute to the formation of ground-level O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_X produced by combustion is NO, but NO reacts quickly with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO_2 is only potentially irritating. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (South Coast AQMD 2005; USEPA 2023a). On February 21, 2019, the California Air Resources Board (CARB) approved the separation of the area that runs along the State Route 60 corridor through portions of Riverside, San Bernardino, and Los Angeles counties from the remainder of the SoCAB for state nonattainment designation purposes. CARB designated this corridor as nonattainment.[1] The remainder of the SoCAB is designated in attainment (maintenance) under the National AAQS and attainment under the California AAQS (CARB 2023a).

- **Sulfur Dioxide (SO_2)** is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2. When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_X). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory

[1] CARB is proposing to redesignate SR-60 Near-Road Portion of San Bernardino, Riverside, and Los Angeles Counties in the SoCAB as attainment for NO_2 at the February 24, 2022 Board Hearing (CARB 2023d).

tract. Current scientific evidence links short-term exposures to SO_2, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing) at lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (South Coast AQMD 2005; USEPA 2023a). The SoCAB is designated as attainment under the California and National AAQS (CARB 2023a).

- **Suspended Particulate Matter (PM_{10} and $PM_{2.5}$)** consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤0.01 millimeter). Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤0.002.5 millimeter). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The US Environmental Protection Agency's (EPA) scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (South Coast AQMD 2005). There has been emerging evidence that ultrafine particulates, which are even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.0001 millimeter) have human health implications because their toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (South Coast AQMD 2013). However, the EPA and CARB have not adopted AAQS to regulate these particulates. Diesel particulate matter is classified by CARB as a carcinogen (CARB 2023e). Particulate matter can also cause environmental effects such as visibility impairment,[2] environmental damage,[3] and aesthetic damage[4] (South Coast AQMD 2005; USEPA 2023a). The SoCAB is a nonattainment area for $PM_{2.5}$ under California and National AAQS and a nonattainment area for PM_{10} under the California AAQS (CARB 2023a).[5]

- **Ozone (**O_3) is a key ingredient of "smog" and is a gas that is formed when VOCs and NO_X, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O_3 is a

[2] $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the United States.

[3] Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

[4] Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

[5] CARB approved the South Coast AQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM_{10} standards from 2004 to 2007. The EPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.

secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation during the growing season (South Coast AQMD 2005; USEPA 2023a). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2023a).

- **Lead (Pb)** is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (South Coast AQMD 2005; USEPA 2018). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.[6] As a result of these violations, the Los Angeles County portion of the SoCAB is designated as nonattainment under the National AAQS for lead (South Coast AQMD 2012; CARB 2023a). However, lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011 (South Coast AQMD 2012). CARB's State Implementation Plan revision was submitted to the EPA for approval. Because emissions of lead are found only in projects that are permitted by South Coast AQMD, lead is not a pollutant of concern for the Proposed Project.

Table 5.2-1, *Criteria Air Pollutant Health Effects Summary*, summarizes the potential health effects associated with the criteria air pollutants.

[6] Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (South Coast AQMD 2012).

Table 5.2-1 Criteria Air Pollutant Health Effects Summary

Pollutant	Health Effects	Examples of Sources
Carbon Monoxide (CO)	• Chest pain in heart patients • Headaches, nausea • Reduced mental alertness • Death at very high levels	Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Ozone (O_3)	• Cough, chest tightness • Difficulty taking a deep breath • Worsened asthma symptoms • Lung inflammation	Atmospheric reaction of organic gases with nitrogen oxides in sunlight
Nitrogen Dioxide (NO_2)	• Increased response to allergens • Aggravation of respiratory illness	Same as carbon monoxide sources
Particulate Matter (PM_{10} and $PM_{2.5}$)	• Hospitalizations for worsened heart diseases • Emergency room visits for asthma • Premature death	Cars and trucks (particularly diesels) Fireplaces and woodstoves Windblown dust from overlays, agriculture, and construction
Sulfur Dioxide (SO_2)	• Aggravation of respiratory disease (e.g., asthma and emphysema) • Reduced lung function	Combustion of sulfur-containing fossil fuels, smelting of sulfur-bearing metal ores, and industrial processes
Lead (Pb)	• Behavioral and learning disabilities in children • Nervous system impairment	Contaminated soil

Source: CARB 2023b.

Toxic Air Contaminants

CARB has identified other air pollutants as toxic air contaminants (TAC), which are pollutants that may cause serious, long-term effects. Main sources of outdoor TACs include emissions from stationary sources (e.g., factories, refineries, power plants) and mobile sources (e.g., cars, trucks, buses) (USEPA 2018). For indoor TACs, the main sources include building materials (e.g., asbestos) and chemicals like solvents (USEPA 2018). People exposed to TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems (USEPA 2021b). By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. There are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most relevant to the Proposed Project being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified diesel particulate matter (DPM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs. Long-term (chronic) inhalation of DPM is likely a lung cancer risk. Short-term (i.e., acute) exposure can cause irritation and inflammation and may exacerbate existing allergies and asthma systems (USEPA 2002).

5.2.1.1 REGULATORY BACKGROUND

Ambient air quality standards have been adopted at the state and federal levels for criteria air pollutants. In addition, both the state and federal government regulate the release of TACs. The Proposed Project is in the SoCAB and is subject to the rules and regulations imposed by the South Coast AQMD as well as the California AAQS adopted by CARB and National AAQS adopted by the EPA. Federal, State, and regional laws, regulations, plans, or guidelines that are potentially applicable to the Proposed Project are summarized in this section.

Federal and State

Ambient Air Quality Standards

The Clean Air Act was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The Clean Air Act allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS.

These National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 5.2-2, *Ambient Air Quality Standards for Criteria Pollutants*, these pollutants are O_3, NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and Pb. In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 5.2-2 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Ozone (O_3)[3]	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)[5]	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Respirable Fine Particulate Matter ($PM_{2.5}$)[4]	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	
Lead (Pb)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m^3	
	Rolling 3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)	24 hours	25 µg/m^3	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	*	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	*	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.

Table 5.2-2 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Vinyl Chloride	24 hours	0.01 ppm	*	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.
Notes: ppm: parts per million; µg/m^3: micrograms per cubic meter
* Standard has not been established for this pollutant/duration by this entity.
1 California standards for O3, CO (except 8-hour Lake Tahoe), SO2 (1 and 24 hour), NO2, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2 National standards (other than O3, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
4 On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m3 to 12.0 µg/m3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
5 On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions.

- **Assembly Bill (AB) 1493: Pavley Fuel Efficiency Standards.** Pavley I is a clean-car standard that reduces greenhouse gas (GHG) emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016. In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025.

- **Heavy-Duty (Tractor-Trailer) GHG Regulation.** The tractors and trailers subject to this regulation must either use EPA SmartWay-certified tractors and trailers or retrofit their existing fleet with SmartWay-verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low-rolling-resistance tires. Sleeper cab tractors model year 2011 and later must be SmartWay certified. All other tractors must use SmartWay-verified low-rolling-resistance tires. There are also requirements for trailers to have low-rolling-resistance tires and aerodynamic devices.

- **Senate Bills (SB) 1078 and SB 107, Renewables Portfolio Standards.** A major component of California's Renewable Energy Program is the renewables portfolio standard established under SB 1078 (Sher) and SB 107 (Simitian). Under the standard, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010.

- **California Code of Regulations (CCR), Title 20: Appliance Energy Efficiency Standards.** The 2006 Appliance Efficiency Regulations (20 CCR sections 1601–1608) were adopted by the California Energy Commission on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances.

- **24 CCR, Part 6: Building and Energy Efficiency Standards.** Energy conservation standards for new residential and nonresidential buildings adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977.

- **24 CCR, Part 11: Green Building Standards Code.** Establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[7]

Tanner Air Toxics Act and Air Toxics Hot Spot Information and Assessment Act

Public exposure to TACs is a significant environmental health issue in California. In 1983, the California legislature enacted a program to identify the health effects of TACs and reduce exposure to them. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health" (17 CCR sec. 93000). A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act (42 US Code sec. 7412[b]) is a TAC. Under state law, the California Environmental Protection Agency, acting through CARB, is authorized to identify a substance as a TAC if it is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act set up a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit that TAC. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate "toxics best available control technology" to minimize emissions. To date, CARB has established formal control measures for 11 TACs that are identified as having no safe threshold.

Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High-priority facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public through notices and public meetings.

CARB has promulgated the following specific rules to limit TAC emissions:

[7] The green building standards became mandatory in the 2010 edition of the code.

- **13 CCR Chapter 10 Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.** Generally restricts on-road diesel-powered commercial motor vehicles with a gross vehicle weight rating of greater than 10,000 pounds from idling more than five minutes.

- **13 CCR Chapter 10 Section 2480: Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools.** Generally restricts a school bus or transit bus from idling for more than five minutes when within 100 feet of a school.

- **13 CCR Section 2477 and Article 8: Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate.** Regulations established to control emissions associated with diesel-powered TRUs.

Regional

Air Quality Management Planning

The South Coast AQMD is the agency responsible for improving air quality in the SoCAB and ensuring that the National and California AAQS are attained and maintained. South Coast AQMD is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). The AQMP is a regional strategy plan to achieve air quality standards by examining emissions, looking at regional growth projections, and the impact of existing and proposed control measures to provide healthful air in the long-term. Since 1979, a number of AQMPs have been prepared.

The Clean Air Act requires CARB to develop a State Implementation Plans (SIP) that describes how an area will attain national AAQS. The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the SIP. Areas are classified as attainment or nonattainment areas for a particular pollutant depending on whether they meet the AAQSs. Severity classifications for ozone nonattainment range from marginal, moderate, and serious to severe and extreme.

- ***Unclassified.*** A pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.

- ***Attainment.*** A pollutant is in attainment if the AAQS for that pollutant was not violated at any site in the area during a three-year period.

- ***Nonattainment.*** A pollutant is in nonattainment if there was at least one violation of an AAQS for that pollutant in the area.

- ***Nonattainment/Transitional.*** A subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

2022 AQMP

South Coast AQMD adopted the 2022 AQMP on December 2, 2022, as an update to the 2017 AQMP. On October 1, 2015, the EPA strengthened the National AAQS for ground-level ozone, lowering the primary and secondary ozone standard levels to 70 parts per billion (ppb) (2015 Ozone National AAQS.). The SoCAB is currently classified as "extreme" nonattainment for the 2015 Ozone National AAQS. Meeting the 2015 federal ozone standard requires reducing NO_X emissions, the key pollutant that creates ozone, by 67 percent more than is required by adopted rules and regulations in 2037. The only way to achieve the required NO_X reductions is through extensive use of zero emission (ZE) technologies across all stationary and mobile sources. South Coast AQMD's primary authority is over stationary sources, which account for approximately 20 percent of NO_X emissions. The overwhelming majority of NO_X emissions are from heavy-duty trucks, ships, and other State and federally regulated mobile sources that are mostly beyond the South Coast AQMD's control. The region will not meet the standard absent significant federal action. In addition to federal action, the 2022 AQMP requires substantial reliance on future deployment of advanced technologies to meet the standard. The control strategy for the 2022 AQMP includes aggressive new regulations and the development of incentive programs to support early deployment of advanced technologies. The two key areas for incentive programs are (1) promoting widespread deployment of available ZE and low-NO_X technologies and (2) developing new ZE and ultra-low NO_X technologies for use in cases where the technology is not currently available. South Coast AQMD is prioritizing distribution of incentive funding in environmental-justice areas and seeking opportunities to focus benefits on the most disadvantaged communities (South Coast AQMD 2022).

South Coast AQMD $PM_{2.5}$ Redesignation Request and Maintenance Plan

In 1997, the EPA adopted the 24-hour fine $PM_{2.5}$ standard of 65 micrograms per cubic meter ($\mu g/m^3$). In 2006, this standard was lowered to a more health-protective level of 35 $\mu g/m^3$. The SoCAB is designated nonattainment for both the 65 and 35 $\mu g/m^3$ 24-hour $PM_{2.5}$ standards (24-hour $PM_{2.5}$ standards). In 2020, monitored data demonstrated that the SoCAB attained both 24-hour $PM_{2.5}$ standards. The South Coast AQMD has developed the "2021 Redesignation Request and Maintenance Plan" for the 1997 and 2006 24-hour $PM_{2.5}$ Standards for the SoCAB $PM_{2.5}$ Redesignation Request and Maintenance Plan, demonstrating that the SoCAB has met the requirements to be redesignated to attainment for the 24-hour $PM_{2.5}$ standards (South Coast AQMD 2021b).

AB 617, Community Air Protection Program

AB 617 (C. Garcia, Chapter 136, Statutes of 2017) requires local air districts to monitor and implement air pollution control strategies that reduce localized air pollution in communities that bear the greatest burdens. In response to AB 617, CARB has established the Community Air Protection Program.

Air districts are required to host workshops to help identify disadvantaged communities that are disproportionately affected by poor air quality. Once the criteria for identifying the highest priority locations have been identified and the communities have been selected, new community monitoring systems would be installed to track and monitor community-specific air pollution goals. In 2018 CARB prepared an air monitoring plan, the Community Air Protection Blueprint, that evaluates the availability and effectiveness of

air monitoring technologies and existing community air monitoring networks. Under AB 617, the Blueprint is required to be updated every five years.

Under AB 617, CARB is also required to prepare a statewide strategy to reduce TACs and criteria pollutants in impacted communities; provide a statewide clearinghouse for best available retrofit control technology; adopt new rules requiring the latest best available retrofit control technology for all criteria pollutants for which an area has not achieved attainment of California AAQS; and provide uniform, statewide reporting of emissions inventories. Air districts are required to adopt a community emissions reduction program to achieve reductions for the communities impacted by air pollution that CARB identifies.

Lead Implementation Plan

In 2008, the EPA designated the Los Angeles County portion of the SoCAB as a nonattainment area under the federal lead (Pb) classification because of the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in the City of Vernon and the City of Industry that exceeded the new standard in the 2007 to 2009 period. The remainder of the SoCAB, outside the Los Angeles County nonattainment area, remains in attainment of the new 2008 lead standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to the EPA for approval.

South Coast AQMD Rules and Regulations

All projects within the SoCAB are subject to South Coast AQMD rules and regulations in effect at the time of activity.

- **Rule 401, Visible Emissions.** This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in visible emissions. Specifically, the rule prohibits the discharge of any air contaminant into the atmosphere by a person from any single source of emission for a period or periods aggregating more than three minutes in any one hour that is as dark as or darker than designated No. 1 on the Ringelmann Chart, as published by the US Bureau of Mines.

- **Rule 402, Nuisance.** This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in a public nuisance. Specifically, this rule prohibits any person from discharging quantities of air contaminants or other material from any source such that it would result in an injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. Additionally, the discharge of air contaminants would also be prohibited where it would endanger the comfort, repose, health, or safety of any number of persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Rule 403, Fugitive Dust.** This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made

condition capable of generating fugitive dust and requires best available control measures to be applied to earth-moving and grading activities.

- **Rule 445, Wood Burning Devices.** In general, the rule prohibits new developments from the installation of wood-burning devices. This rule is intended to reduce the emission of particulate matter from wood-burning devices and applies to manufacturers and sellers of wood-burning devices, commercial sellers of firewood, and property owners and tenants that operate a wood-burning device.

- **Rule 1113, Architectural Coatings.** This rule serves to limit the VOC content of architectural coatings used on projects in the South Coast AQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects in the South Coast AQMD must comply with the current VOC standards in this rule.

- **Rule 1403, Asbestos Emissions from Demolition/Renovation Activities.** The purpose of this rule is to specify work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and cleanup procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

5.2.1.2 EXISTING CONDITIONS

The Grant ES campus is in the SoCAB, which includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The SoCAB is in a coastal plain connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The region lies in the semipermanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (South Coast AQMD 2005).

Meteorology

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the campus with temperature data is the Santa Monica Pier Monitoring Station (ID 047953). The average low is reported at 49.2 °F in January, and the average high is 72.1°F in August (WRCC 2023).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from October through April. Summer rainfall is normally restricted to widely scattered

thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall averages 12.62 inches per year in the vicinity of the area (WRCC 2023).

Humidity

Although the SoCAB has a semiarid climate, the air near the Earth's surface is typically moist because of a shallow marine layer. This "ocean effect" is dominant except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds. Periods of heavy fog are frequent, given the Air Basin's location along the coast. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (South Coast AQMD 1993).

Wind

Wind patterns across the southern coastal region are characterized by westerly or southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB combined with other meteorological conditions can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east inhibit the eastward transport and diffusion of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (South Coast AQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the Air Basin (South Coast AQMD 2005).

SoCAB Nonattainment Areas

The attainment status for the SoCAB is shown in Table 5.2-3, *Attainment Status of Criteria Air Pollutants in the South Coast Air Basin*.

Table 5.2-3 Attainment Status of Criteria Air Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM_{10}	Serious Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment[2]
CO	Attainment	Attainment
NO_2	Nonattainment (SR-60 Near Road only)[1]	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only)[3]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2023a.

[1] On February 21, 2019, CARB's Board approved the separation of the area that runs along State Route 60 corridor through portions of Riverside, San Bernardino, and Los Angeles counties from the remainder of the SoCAB for State nonattainment designation purposes. The Board designated this corridor as nonattainment. The remainder of the SoCAB remains in attainment for NO_2 (CARB 2019). CARB is proposing to redesignate SR-60 Near-Road Portion of San Bernardino, Riverside, and Los Angeles Counties in the SoCAB as attainment for NO_2 at the February 24, 2022 Board Hearing (CARB 2022c). This redesignation will not be official until the Office of Administrative Law (OAL) approves the rulemaking filed with the Secretary of State, expected in the fall of 2022 (South Coast AQMD 2022).

[2] The SoCAB is pending a resignation request from nonattainment to attainment for the 24-hour federal $PM_{2.5}$ standards. The *2021* $PM_{2.5}$ *Redesignation Request and Maintenance Plan* demonstrates that the South Coast meets the requirements of the CAA to allow USEPA to redesignate the SoCAB to attainment for the 65 µg/m^3 and 35 µg/m^3 24-hour $PM_{2.5}$ standards. CARB has reviewed and adopted submit the 2021 $PM_{2.5}$ Redesignation Request and Maintenance Plan to the USEPA as a revision to the California State Implementation Plan (SIP) (CARB 2021).

[3] In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new 2008 federal AAQS as a result of large industrial emitters. Remaining areas for lead in the SoCAB are unclassified. However, lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011 (South Coast AQMD 2012). CARB's SIP revision was submitted to the EPA for approval.

Multiple Air Toxics Exposure Study V

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on existing ambient concentrations of TACs and the potential health risks from air toxics in the SoCAB. In April 2021, South Coast AQMD released the latest update to the MATES study, MATES V. The first MATES analysis, MATES I, began in 1986 but was limited because of the technology available at the time. Conducted in 1998, MATES II was the first MATES iteration to include a comprehensive monitoring program, an air toxics emissions inventory, and a modeling component. MATES III was conducted in 2004 to 2006, with MATES IV following in 2012 to 2013.

MATES V uses measurements taken during 2018 and 2019, with a comprehensive modeling analysis and emissions inventory based on 2018 data. The previous MATES studies quantified the cancer risks based on the inhalation pathway only. MATES V includes information on the chronic noncancer risks from inhalation and noninhalation pathways for the first time. Cancer risks and chronic noncancer risks from MATES II through IV measurements have been reexamined using current Office of Environmental Health Hazards Assessment and California Environmental Protection Agency risk assessment methodologies and modern statistical methods to examine the trends over time.

The MATES V study showed that cancer risk in the SoCAB decreased to 454 in a million from 997 in a million in the MATES IV study. Overall, air toxics cancer risk in the SoCAB decreased by 54 percent since

2012 when MATES IV was conducted. MATES V showed the highest risk locations near the Los Angeles International Airport and the Ports of Long Beach and Los Angeles. DPM continues to be the major contributor to air toxics cancer risk (approximately 72 percent of the total cancer risk). Goods movement and transportation corridors have the highest cancer risk. Transportation sources account for 88 percent of carcinogenic air toxics emissions, and the remainder is from stationary sources, which include large industrial operations such as refineries and power plants as well as smaller businesses such as gas stations and chrome-plating facilities. (South Coast AQMD 2021b).

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the campus are best documented by measurements taken by the South Coast AQMD. The campus is in Source Receptor Area (SRA) 2: Northwest Coastal LA County. The air quality monitoring station closest to the Proposed Project is the Los Angeles-Westchester Parkway Monitoring Station, which is one of 31 monitoring stations South Coast AQMD operates and maintains in the SoCAB.[8] Data from this station includes O_3, NO_2, and PM_{10} and is summarized in Table 5.2-4, *Ambient Air Quality Monitoring Summary*. Data for $PM_{2.5}$ is supplemented by the Los Angeles-North Main Street Monitoring Station. The data show that the area regularly exceeds the state and federal one-hour and eight-hour O_3 standards within the last five recorded years. Additionally, the area has regularly exceeded the State PM_{10} standards and federal $PM_{2.5}$ standard.

Table 5.2-4 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations[1,2]				
	2017	2018	2019	2020	2021
Ozone (O_3)					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	0	0	0	1	0
State & Federal 8-hour ≥ 0.070 ppm (days exceed threshold)	0	0	0	2	0
Max. 1-Hour Conc. (ppm)	0.086	0.074	0.082	0.117	0.059
Max. 8-Hour Conc. (ppm)	0.070	0.065	0.067	0.074	0.049
Nitrogen Dioxide (NO_2)					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Federal 1-Hour ≥ 0.100 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppb)	0.0722	0.0596	0.0566	0.0597	0.0628
Coarse Particulates (PM_{10})					
State 24-Hour > 50 µg/m³ (days exceed threshold)	0	0	2	1	0
Federal 24-Hour > 150 µg/m³ (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m³)	46.5	45.2	62.8	55.5	33.3
Fine Particulates ($PM_{2.5}$)					
Federal 24-Hour > 35 µg/m³ (days exceed threshold)	6	6	1	12	13
Max. 24-Hour Conc. (µg/m³)	54.9	61.4	43.5	175.0	61.0

Source: CARB 2023c.
Notes: ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter; * = Data not available
[1] Data for O_3, NO_2, and PM_{10} obtained from the Los Angeles-Westchester Parkway Monitoring Station. Data for $PM_{2.5}$ obtained from the Los Angeles-North Main Street Monitoring Station.
[2] Most recent data available as of January 2023.

[8] Locations of the SRAs and monitoring stations are shown at: http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf.

Existing Emissions

The existing Grant ES campus includes 60,185 square feet of operational school facilities, including buildings, outdoor structures, student areas, playgrounds and playfields, and parking areas. The elementary school operations currently generate criteria air pollutant emissions from area sources (e.g., consumer cleaning products, landscaping equipment, and VOC emissions from paints), energy consumption (e.g., natural gas used for cooking, heating, etc.), and mobile sources (employee, student, and vendor vehicle trips).

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent because the majority of workers tend to stay indoors most of the time. In addition, the workforce is generally the healthiest segment of the population. The nearest receptors are the Grant ES students and the single-family residents along 24th Street, 24th Court, Pearl Street, and Pearl Place South to the south, east, north, and west.

5.2.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would have a significant effect on the environment with respect to air quality if the project would:

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

AQ-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

AQ-3 Expose sensitive receptors to substantial pollutant concentrations.

AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The IS/NOP, included as Appendix B to this DEIR, substantiates that the impacts associated with the following thresholds would be less than significant; therefore, this impact will not be further addressed in this DEIR:

- Threshold AQ-4

This impact is addressed in Chapter 6, Other CEQA Considerations, and in Appendix B of this DEIR

5.2.2.1 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT THRESHOLDS

South Coast AQMD has established thresholds of significance for air quality for construction activities and project operation in the SoCAB, as shown in Table 5.2-5, *South Coast AQMD Significance Thresholds*. The table lists thresholds that are applicable for all projects uniformly, regardless of size or scope. As discussed in Section 5.2.1.1 under "Suspended Particulate Matter," there is growing evidence that although ultrafine particulate matter contributes a very small portion of the overall atmospheric mass concentration, it represents a greater proportion of the health risk from PM. However, the EPA and CARB have not adopted AAQS to regulate ultrafine particulate matter, so South Coast AQMD has not developed thresholds for it.

Table 5.2-5 South Coast AQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Volatile Organic Compounds (VOC)	75 lbs./day	55 lbs./day
Carbon Monoxide (CO)	550 lbs./day	550 lbs./day
Nitrogen Oxides (NO_X)	100 lbs./day	55 lbs./day
Sulfur Oxides (SO_X)	150 lbs./day	150 lbs./day
Particulates (PM_{10})	150 lbs./day	150 lbs./day
Particulates ($PM_{2.5}$)	55 lbs./day	55 lbs./day

Source: South Coast AQMD 2019.

Health Outcomes Associated with the AQMD Regional Significance Thresholds

Projects that exceed the AQMD's regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health effects. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Increases cancer risk ($PM_{2.5}$, TACs)
- Aggravates respiratory disease (O_3, $PM_{2.5}$)
- Increases bronchitis (O_3, $PM_{2.5}$)
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O_3)
- Reduces resistance to infections and increases fatigue (O_3)
- Reduces lung growth in children ($PM_{2.5}$)
- Contributes to heart disease and heart attacks ($PM_{2.5}$)
- Contributes to premature death (O_3, $PM_{2.5}$)
- Contributes to lower birth weight in newborns ($PM_{2.5}$) (South Coast AQMD 2015a)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of $PM_{2.5}$ is responsible

for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists, in a landmark children's health study, found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (South Coast AQMD 2015b).

South Coast AQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals exposed to elevated concentrations of air pollutants in the SoCAB and has established thresholds that would be protective of these individuals. To achieve the health-based standards established by the EPA, South Coast AQMD prepares an AQMP that details regional programs to attain the AAQS. Mass emissions thresholds shown in Table 5.2-5 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. These thresholds are based on the trigger levels for the federal New Source Review Program, which was created to ensure projects are consistent with attainment of health-based federal AAQS. Regional emissions from a single project do not trigger a regional health impact, and it is speculative to identify how many more individuals in the air basin would be affected by the health effects listed previously. Projects that do not exceed the South Coast AQMD regional significance thresholds in Table 5.2-5 would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

If projects exceed the emissions levels presented in Table 5.2-5, then those emissions would cumulatively contribute to the nonattainment status of the air basin and would contribute to elevating health effects associated with the criteria air pollutants. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with particulate matter include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would contribute to reducing possible health effects related to criteria air pollutants. However, for projects that exceed the emissions in Table 5.2-5, it is speculative to determine how exceeding the regional thresholds would affect the number of days the region is in nonattainment, because mass emissions are not correlated with concentrations of emissions or how many additional individuals in the air basin would be affected by the health effects cited previously.

South Coast AQMD has not provided methodology to assess the specific correlation between mass emissions generated and the effect on health to address the issue raised in *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, Case No. S21978 (Friant Ranch, L.P.). South Coast AQMD currently does not have methodologies that would provide the District with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a project's mass emissions.[9] Ozone concentrations are dependent on a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby

[9] In April 2019, the Sacramento Metropolitan Air Quality Management District (SMAQMD) published an Interim Recommendation on implementing *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 ("Friant Ranch") in the review and analysis of proposed projects under CEQA in Sacramento County. Consistent with the expert opinions submitted to the court in Friant Ranch by the San Joaquin Valley Air Pollution Control District and South Coast AQMD, the SMAQMD guidance confirms the absence of an acceptable or reliable quantitative methodology that would correlate the expected criteria air pollutant emissions of projects to likely health consequences for people from project-generated criteria air pollutant emissions. The SMAQMD guidance explains that while it is in the process of developing a methodology to assess these impacts, lead agencies should follow the Friant Court's advice to explain in meaningful detail why this analysis is not yet feasible. Since this interim memorandum SMAQMD has provided methodology to address health impacts. However, a similar analysis is not available for projects in the South Coast AQMD region.

structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level ozone concentrations in relation to the National and California AAQS and the absence of modeling tools that could provide statistically valid data and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects, it is not possible to link specific health risks to the magnitude of emissions exceeding the significance thresholds. However, if a project in the SoCAB exceeds the regional significance thresholds, the project could contribute to an increase in health effects in the basin until the attainment standards are met in the SoCAB.

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to the AAQS is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles and introduction of cleaner fuels, as well as implementation of control technology on industrial facilities, CO concentrations in the SoCAB and the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for attainment by South Coast AQMD did not predict a violation of CO standards at the busiest intersections in Los Angeles during the peak morning and afternoon periods.[10] As identified in South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in years before the 2007 redesignation were a result of unusual meteorological and topographical conditions and not of congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—to generate a significant CO impact (BAAQMD 2017).[11]

Localized Significance Thresholds

South Coast AQMD identifies localized significance thresholds (LST), shown in Table 5.2-6, *South Coast AQMD Localized Significance Thresholds*. Emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at a campus could expose sensitive receptors to substantial concentrations of criteria air pollutants. Off-site mobile-source

[10] The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

[11] The CO hotspot analysis refers to the modeling conducted by the Bay Area Air Quality Management District for its CEQA Guidelines because it is based on newer data and considers the improvement in mobile-source CO emissions. Although meteorological conditions in the Bay Area differ from those in the Southern California region, the modeling conducted by BAAQMD demonstrates that the net increase in peak hour traffic volumes at an intersection in a single hour would need to be substantial. This finding is consistent with the CO hotspot analysis South Coast AQMD prepared as part of its 2003 AQMP to provide support in seeking CO attainment for the SoCAB. Based on the analysis prepared by South Coast AQMD, no CO hotspots were predicted for the SoCAB. As noted in the preceding footnote, the analysis included some of Los Angeles' busiest intersections, with daily traffic volumes of 100,000 or more peak hour vehicle trips operating at LOS E and F.

emissions are not included in the LST analysis. A project would generate a significant impact if it generates emissions that, when added to the local background concentrations, violate the AAQS.

Table 5.2-6 South Coast AQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO_2 Standard (CAAQS)	0.18 ppm
Annual NO_2 Standard (CAAQS)	0.03 ppm
24-Hour PM_{10} Standard – Construction (South Coast AQMD)[1]	10.4 µg/m^3
24-Hour $PM_{2.5}$ Standard – Construction (South Coast AQMD)[1]	10.4 µg/m^3
24-Hour PM_{10} Standard – Operation (South Coast AQMD)[1]	2.5 µg/m^3
24-Hour $PM_{2.5}$ Standard – Operation (South Coast AQMD)[1]	2.5 µg/m^3
Annual Average PM_{10} Standard (South Coast AQMD)[1]	1.0 µg/m^3

Source: South Coast AQMD 2019.
ppm – parts per million; µg/m^3 – micrograms per cubic meter
[1] Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is in nonattainment for PM_{10} and $PM_{2.5}$, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, South Coast AQMD developed screening-level LSTs to back-calculate the mass amount (pounds per day) of emissions generated on-site that would trigger the levels shown in Table 5.2-6 for projects under five acres. These "screening-level" LST tables are the LSTs for all projects of five acres and less and are based on emissions over an 8-hour period; however, they can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required.

The construction screening-level LSTs in SRA 2 are shown in Table 5.2-7, *South Coast AQMD Screening-Level Localized Significance Thresholds for Construction*. For construction activities, LSTs are based on the acreage disturbed per day associated with the equipment used, up to a project site's maximum disturbed acreage (South Coast AQMD 2011). The different types of construction activities would require different equipment mixes, resulting in multiple LSTs. The screening-level LSTs reflect the thresholds for sensitive receptors within 82 feet (25 meters) of a campus.

Table 5.2-7 South Coast AQMD Screening-Level Localized Significance Thresholds for Construction

	Threshold (lbs./day)			
Acreage Disturbed	Nitrogen Oxides (NO_X)	Carbon Monoxide (CO)	Coarse Particulates (PM_{10})	Fine Particulates ($PM_{2.5}$)
≤1.00 Acre Disturbed per Day	103	562	4.00	3.00
1.38 Acres Disturbed per Day	120	661	4.75	3.37
1.50 Acres Disturbed per Day	125	694	5.00	3.50
2.00 Acres Disturbed per Day	147	827	6.00	4.00
2.38 Acres Disturbed per Day	156	915	6.87	4.25
2.44 Acres Disturbed per Day	158	930	7.02	4.29

Source: South Coast AQMD 2008, 2011.
Note: The screening-level LSTs are based on receptors within 82 feet (28 meters) in SRA 2.

Health Risk

Whenever a project would require use of chemical compounds that have been identified in South Coast AQMD Rule 1401, placed on CARB's air toxics list pursuant to AB 1807, or placed on the EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the South Coast AQMD. Table 5.2-8, *South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. The type of land uses that typically generate substantial quantities of criteria air pollutants and TACs from operations include industrial (stationary sources) and warehousing (truck idling) land uses (CARB 2005). Additionally, the purpose of this environmental evaluation is to identify the significant effects of the Proposed Project on the environment, not the significant effects of the environment on the proposed project (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478)). As school uses do not generate substantial quantities of TACs, these thresholds are typically applied to new industrial projects only.

Table 5.2-8 South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Cancer Burden (in areas ≥ 1 in 1 million)	> 0.5 excess cancer cases
Hazard Index (project increment)	≥ 1.0

Source: South Coast AQMD 2019.

5.2.3 Environmental Impacts

5.2.3.1 METHODOLOGY

This air quality evaluation was prepared in accordance with the requirements of CEQA to determine if significant air quality impacts are likely to occur in conjunction with the Proposed Project. South Coast AQMD's *CEQA Air Quality Handbook* (Handbook) and the updates on its website are intended to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts. The Handbook provides standards, methodologies, and procedures for conducting air quality analyses in EIRs, and they were used in this analysis.

Proposed Project's Design Features

The Proposed Project would include features that would reduce criteria air pollutant emissions:

- **PDF AQ-1.** New buildings are required to achieve the current California Building Energy and Efficiency Standards (24 CCR Part 6) and CALGreen standards (24 CCR Part 11).

- **PDF AQ-2.** Construction activities will be conducted in compliance with 13 CCR Section 2499, which requires that nonessential idling of construction equipment be restricted to five minutes or less.
- **PDF AQ-3.** Construction activities will also be conducted in compliance with any applicable South Coast AQMD rules and regulations, including Rule 403 for fugitive dust control, Rule 402 for nuisance, and Rule 1113 for limiting volatile organic compound content of architectural coating.
- **PDF AQ-4.** The District has committed to the use of off-road construction equipment that meets the EPA Tier 4 Final emissions standards for off-road diesel-powered construction equipment with more than 25 horsepower.

Criteria Air Pollutant Emissions

Air pollutant emissions were calculated using the California Emissions Estimator Model (CalEEMod), version 2020.4 (CAPCOA 2021). CalEEMod compiles an emissions inventory of construction (fugitive dust, off-gas emissions, on-road emissions, and off-road emissions), area sources, indirect emissions from energy use, mobile sources, indirect emissions from waste disposal (annual only), and indirect emissions from water/wastewater (annual only). Criteria air pollutant emissions modeling is included in Appendix B of this DEIR. The calculated emissions of the Proposed Project are compared to thresholds of significance for individual projects, as shown in Table 5.2-5 using the South Coast AQMD Handbook. The following is a summary of the assumptions used for the Proposed Project's analysis.

Construction Phase

Construction would entail building and asphalt demolition and debris haul, site preparation, rough grading, fine grading, utilities trenching, building construction, paving, architectural coating, and finishing and landscaping over approximately 3.80 acres of the 6.01-acre campus. The Proposed Project was modeled over three construction phases, with Phase 1 occurring over a period of 12 months between summer 2024 and summer 2025, Phase 2 occurring over 24 months between summer 2025 and summer 2027, and Phase 3 occurring over 24 months from summer 2028 and summer 2030.[12]

Construction Health Risk Assessment

A construction health risk assessment (HRA) for TACs associated with construction equipment exhaust was prepared for the Proposed Project. Sources evaluated in the HRA include off-road construction equipment and heavy-duty diesel trucks along the truck haul route. Modeling is based on the EPA's AERMOD, v. 10.2.1, air dispersion modeling program and the latest HRA guidance from the Office of Environmental Health Hazard Assessment to estimate excess lifetime cancer risks and chronic noncancer hazard indices at the nearest maximum exposed off-site sensitive receptors (OEHHA 2015).

DPM emissions were based on the CalEEMod construction runs, using annual exhaust PM_{10} construction emissions presented in pounds (lbs.) per day. Construction of the Proposed Project was assumed to occur

[12] Although the exact timing for implementation of Phases 2 and 3 is currently unknown, to provide a realistic scenario, the analysis assumes that construction activities for Phases 1 through 3 would not overlap.

continuously over a total cumulative duration of approximately 4.09 years (1,067 workdays). Phase 1 construction would occur over 12 months between summer 2024 and summer 2025, Phase 2 over 24 months between summer 2025 and summer 2027, and Phase 3 over 24 months from summer 2028 and summer 2030. The average daily emission rates from construction equipment used for the Proposed Project were determined by dividing the annual average emissions for each construction year by the number of construction days per year for each calendar year of construction. The off-site hauling emission rates were adjusted to evaluate localized emissions from the haul route distance within 1,000 feet of the campus.

Air dispersion modeling using the EPA's AERMOD program was conducted to assess the impact of emitted compounds on sensitive receptors. The model is a steady-state Gaussian plume model and is an approved model by South Coast AQMD for estimating ground level impacts from point and fugitive sources in simple and complex terrain. Meteorological data obtained from the South Coast AQMD for the nearest representative meteorological station (Santa Monica Airport) with the five latest available years (2012 to 2016) of record were used to represent local weather conditions and prevailing winds.

For all modeling runs, a unit emission rate of 1 gram per second was used. The unit emission rates were proportioned over the poly-area sources for on-site construction emissions and divided between the volume sources for off-site hauling emissions. The maximum modeled concentrations at each sensitive receptor were then multiplied by the construction emission rates to obtain the maximum concentrations at the off-site and on-site maximum exposed receptors (MER). The calculated total cancer risk conservatively assumes that the risk for the MER consists of a pregnant woman in the third trimester that subsequently gives birth to an infant during the construction period spanning from 2024 through 2030; therefore, all calculated risk values were multiplied by a factor of 10 for the first 2.25 years of construction and by a factor of 3 for the remaining years. In addition, it was conservatively assumed that the residents were outdoors 8 hours a day, 260 construction days per year, and exposed to all of the daily construction emissions.

Operational Phase

Following completion of construction over the three construction phases, the campus would operate in a manner similar to existing conditions. In addition, because enrollment, staffing, and types of activities used by both the school and the community would be the same as existing conditions, the Proposed Project would not result in an increase in mobile emissions, which generally contribute the majority of criteria air pollutant emissions associated with a project. As such, operation of the Proposed Project was described qualitatively.

5.2.3.2 IMPACT ANALYSIS

The following impact analysis addresses the thresholds of significance for which the Initial Study/Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.2-1: The Proposed Project would not conflict with or obstruct the South Coast AQMD's air quality management plan. [Threshold AQ-1]

A consistency determination with the AQMP plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision makers of the environmental effects of the Proposed Project under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in the AQMP.

The regional emissions inventory for the SoCAB is compiled by South Coast AQMD and SCAG. Regional population, housing, and employment projections developed by SCAG are based, in part, on cities' general plan land use designations. These projections form the foundation for the emissions inventory of the AQMP. These demographic trends are incorporated into SCAG's Regional Transportation Plan/Sustainable Communities Strategy to determine priority transportation projects and vehicle miles traveled in the SCAG region. Because the AQMP strategy is based on projections from local general plans, projects that are consistent with the local general plan are considered consistent with the air-quality-related regional plan.

Changes in population, housing, or employment growth projections have the potential to affect SCAG's demographic projections and therefore the assumptions in South Coast AQMD's AQMP. Based on the scope and nature of the Proposed Project in that student capacity and staffing would not increase, the Proposed Project would not substantially affect housing, employment, or population projections within the region. Due to the nature of the Proposed Project, it would not result in new long-term employment. Construction activities associated with the Proposed Project would result in short-term employment only and would end upon project completion.

The long-term emissions generated by the Proposed Project would not produce criteria air pollutants that exceed the South Coast AQMD significance thresholds for Proposed Project operations (see Impact 5.2-3). South Coast AQMD's significance thresholds identify whether a project has the potential to cumulatively contribute to the SoCAB's nonattainment designations. Because the Proposed Project would not exceed the South Coast AQMD's regional significance thresholds (see Impact 5.2-2 and Impact 5.2-3) and growth is consistent with regional growth projections, the Proposed Project would not interfere with South Coast AQMD's ability to achieve the long-term air quality goals identified in the AQMP. Therefore, the Proposed Project would not conflict nor obstruct implementation of the AQMP, and impacts would be **less than significant**.

Impact 5.2-2: Construction and operation associated with the Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant in exceedance of South Coast AQMD's threshold criteria. [Threshold AQ-2]

This impact analyzes the impacts associated with construction activities over the three project phases (up to six years) as well as long-term operational emissions.

Construction

Construction activities produce combustion emissions from various sources, such as on-site heavy-duty construction vehicles, vehicles hauling materials to and from the site, and motor vehicles transporting the construction crew. As stated above in PDF AQ-4, the District requires use of Tier 4 equipment for equipment 25 horsepower and higher, and this is assumed in the construction emissions analysis. Construction of the Proposed Project would generate criteria air pollutants associated with construction equipment exhaust and fugitive dust from building and asphalt demolition and debris haul, site preparation, rough grading, fine grading, utilities trenching, building construction, paving, architectural coating, and finishing and landscaping of the campus during the three construction phases. Air pollutant emissions from construction activities on campus would vary daily as construction activity levels change. An estimate of maximum daily construction emissions for the Proposed Project is provided in Table 5.2-9, *Maximum Daily Regional Construction Emissions*. The table shows the highest daily emissions that would be generated over the anticipated development period. Although the exact timing for implementation of Phases 2 and 3 is currently unknown, to provide a realistic scenario, the analysis assumes that construction activities for Phases 1 through 3 would not overlap.

Table 5.2-9 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lbs./day)[1, 2]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 2024						
Phase 1 Building and Asphalt Demolition and Debris Haul	<1	3	5	<1	<1	<1
Phase 1 Building and Asphalt Demolition and Debris Haul and Utilities Trenching	1	6	9	<1	<1	<1
Phase 1 Utilities Trenching	<1	2	4	<1	<1	<1
Phase 1 Utilities Trenching and Building Construction (2024)	1	8	11	<1	<1	<1
Phase 1 Building Construction (2024)	1	6	7	<1	<1	<1
Year 2025						
Phase 1 Building Construction (2025)	1	6	7	<1	<1	<1
Phase 1 Building Construction (2025) and Architectural Coating	4	7	8	<1	<1	<1
Phase 1 Building Construction (2025), Architectural Coating, and Finishing/Landscaping	5	9	13	<1	<1	<1
Year 2025 (Phase 2)						
Phase 2 Building and Asphalt Demolition and Debris Haul	<1	5	8	<1	1	<1
Phase 2 Building and Asphalt Demolition and Debris Haul, Site Preparation	1	11	18	<1	2	1
Phase 2 Site Preparation	1	6	10	<1	<1	<1
Phase 2 Site Preparation and Building Construction (2025)	2	16	22	<1	1	1
Phase 2 Building Construction (2026)	1	11	12	<1	<1	<1
Year 2026						
Phase 2 Building Construction (2026)	1	10	12	<1	<1	<1
Year 2027						

Table 5.2-9 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lbs./day)[1, 2]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Phase 2 Building Construction (2027)	1	10	12	<1	<1	<1
Phase 2 Building Construction (2027), Paving, and Architectural Coating	6	14	18	<1	<1	<1
Year 2028 (Phase 3)						
Phase 3 Building and Asphalt Demolition and Debris Haul	1	6	10	<1	1	<1
Phase 3 Building and Asphalt Demolition and Debris Haul, Site Preparation	1	11	20	<1	1	1
Phase 3 Site Preparation	1	5	10	<1	<1	<1
Phase 3 Site Preparation and Utilities Trenching	1	6	11	<1	<1	<1
Phase 3 Utilities Trenching	<1	1	1	<1	<1	<1
Phase 3 Utilities Trenching and Building Construction (2028)	1	9	12	<1	<1	<1
Phase 3 Building Construction (2028)	1	8	11	<1	<1	<1
Year 2029						
Phase 3 Building Construction (2029)	1	8	11	<1	<1	<1
Phase 3 Building Construction (2029), Paving, and Architectural Coating	10	12	17	<1	1	<1
Phase 3 Building Construction (2029), Paving, Architectural Coating, and Finishing/Landscaping	10	12	18	<1	1	<1
Maximum Daily Construction Emissions						
Maximum Daily Emissions	10	16	22	<1	2	1
South Coast AQMD Regional Construction Threshold	75	100	550	150	150	55
Significant?	No	No	No	No	No	No

Source: CalEEMod Version 2022.1.0. Highest winter or summer emissions are reported. For the most conservative estimates, emissions estimates considers the average tier engines for construction equipment based on CalEEMod defaults instead of Tier 4 Final engines.

[1] Based on the preliminary information provided by the District. Where specific information regarding Proposed Project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast AQMD of construction equipment.

[2] Includes implementation of PDF AQ-1 through AQ—3, which includes fugitive dust control measures required by South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186–compliant sweepers. In addition, PDF AQ-4 requires use of Tier 4 construction equipment for equipment for equipment 25 horsepower and higher.

The SoCAB is designated nonattainment for O_3 and $PM_{2.5}$ under the California and National AAQS, nonattainment for PM_{10} under the California AAQS,[13] and nonattainment for lead (Los Angeles County only) under the National AAQS. According to South Coast AQMD methodology, any project that does not exceed or can be mitigated to less than the daily threshold values would not add significantly to a cumulative impact (South Coast AQMD 1993). As shown in Table 5.2-9, the maximum daily emissions for VOC, NOx, CO, SO_2, PM_{10}, and $PM_{2.5}$ from construction-related activities would be less than their respective South Coast AQMD regional significance threshold values. Projects that do not exceed the South Coast AQMD regional significance thresholds would not result in an incremental increase in health impacts in the SoCAB from

[13] Portions of the SoCAB along SR-60 in Los Angeles, Riverside, and San Bernardino Counties are proposed as nonattainment for NO_2 under the California AAQS.

project-related increases in criteria air pollutants. Therefore, short-term air quality impacts from Proposed Project-related construction activities would be **less than significant**.

Operation

Implementation of the Proposed Project would result in the redevelopment and modernization of the Grant Elementary School campus. The new and permanent 10,626-square-foot, one-story classroom and 23,645-square-foot, two-story classroom building would replace the 10 portable classrooms, Building B classrooms, and other structures to be demolished. However, the Proposed Project would not result in an increase in student capacity or staffing and would not change attendance boundaries. Because student capacity and staffing would not increase or change after full buildout, the Proposed Project would not result in an increase in emissions from mobile sources, and criteria air pollutant emissions from the Proposed Project would be minimal. In addition, emissions from building natural gas use would be minimized because the older buildings on the campus, which were constructed prior to modern building energy codes, would be replaced with newer, more energy-efficient buildings that meet the current California Building and Energy Efficiency Standards. In addition, the proposed buildings would be equipped to accommodate the installation of solar voltaic systems, which would offset building energy use. As seen in Table 5.2-10, *Maximum Daily Regional Operation Emissions*, long-term operation of the Proposed Project would not generate emissions that exceed the South Coast AQMD regional significance thresholds. Projects that do not exceed the South Coast AQMD regional significance thresholds would not result in an incremental increase in health impacts in the SoCAB from project-related increases in criteria air pollutants. Therefore, impacts to the regional air quality associated with operation of the Proposed Project would be **less than significant**.

Table 5.2-10 Maximum Daily Regional Operation Emissions

Source	Maximum Daily Emissions (lbs./Day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile[1]	0	0	0	0	0	0
Area	3	<1	4	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Total	3	<1	4	<1	<1	<1
South Coast AQMD Regional Threshold	**55**	**55**	**550**	**150**	**150**	**550**
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2022.1. Highest winter or summer emissions are reported.
Notes: lbs. = Pounds.
[1] Because student capacity is not anticipated to increase, the Proposed Project would not result in additional trips, and therefore there would be no change in mobile emissions.

Impact 5.2-3: The Proposed Project would not expose sensitive receptors to substantial pollutant concentrations during construction or operation. [Threshold AQ-3]

This impact analysis describes changes in localized impacts from short-term construction activities. The Proposed Project could expose sensitive receptors to elevated pollutant concentrations during construction activities if it would cause or contribute significantly to elevated levels. Unlike the mass of emissions shown

in the regional emissions analysis shown in Table 5.2-9, which are described in pounds per day, localized concentrations refer to an amount of pollutant in a volume of air (ppm or μg/m^3) and can be correlated to potential health effects.

This impact analysis also describes changes in localized impacts from long-term operational activities. The Proposed Project could expose sensitive receptors to elevated pollutant concentrations during operation of the Proposed Project if it would cause or contribute significantly to elevated levels. However, the Proposed Project would not result in significant changes to the campus's current operations for elementary school use.

Construction

Construction-Phase Localized Significance Thresholds

Screening-level LSTs (pounds per day) are the amount of project-related mass emissions at which localized concentrations (ppm or μg/m^3) could exceed the AAQS for criteria air pollutants for which the SoCAB is designated nonattainment. They are based on the acreage disturbed and distance to the nearest sensitive receptor. Screening-level LSTs are based on the campus size and distance to the nearest sensitive receptor. Thresholds are based on the California AAQS, which are the most stringent, established to provide a margin of safety in the protection of the public health and welfare. They are designed to protect sensitive receptors most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. On-campus sensitive receptors would include the Grant Elementary School students. The nearest off-campus sensitive receptors are the single- and multifamily residences surrounding the Proposed Project on all sides, along Pearl Street to the north, 24th Court to the east, and Pearl Place to the west.

Table 5.2-11, *Maximum Daily On-Site Localized Construction Emissions,* shows the maximum daily construction emissions (pounds per day) generated during on-site construction activities compared with the South Coast AQMD's screening-level LSTs, for non-sensitive receptors within 82 feet (25 meters). The on-campus PM_{10} and $PM_{2.5}$ emissions shown represent the total on-campus particulate matter emissions from vehicle exhaust and fugitive dust. On-campus NO_X emissions are from off-road equipment exhaust. As shown in the Table 5.2-11, construction of the Proposed Project would not generate construction-related on-campus emissions that would exceed the screening-level LSTs, and impacts would be **less than significant**.

Table 5.2-11 Maximum Daily On-Campus Localized Construction Emissions

	Pollutants (lbs./day)[1,2]			
	NO_X	CO	PM_{10}[3]	$PM_{2.5}$[3]
South Coast AQMD ≤1.00-Acre LST	**103**	**562**	**4.00**	**3.00**
Phase 1 Building and Asphalt Demolition and Debris Haul	3	4	0.19	0.16
Phase 1 Building and Asphalt Demolition and Debris Haul and Utilities Trenching	5	8	0.30	0.26
Phase 1 Utilities Trenching	2	4	0.11	0.10
Phase 1 Utilities Trenching and Building Construction (2024)	8	11	0.39	0.36

Table 5.2-11 Maximum Daily On-Campus Localized Construction Emissions

	Pollutants (lbs./day)[1,2]			
	NO_X	CO	PM_{10}[3]	$PM_{2.5}$[3]
Phase 1 Building Construction (2024)	6	7	0.28	0.26
Phase 1 Building Construction (202)	6	7	0.26	0.23
Phase 1 Building Construction (2024) and Architectural Coating	7	8	0.29	0.26
Phase 1 Building Construction (2025), Architectural Coating, and Finishing/Landscaping	9	12	0.40	0.36
Phase 2 Building Construction (2025)	11	12	0.40	0.37
Phase 2 Building Construction (2026)	10	12	0.36	0.33
Phase 2 Building Construction (2027)	10	12	0.32	0.30
Phase 3 Building and Asphalt Demolition and Debris Haul	5	9	0.56	0.21
Phase 3 Building and Asphalt Demolition and Debris Haul, Site Preparation	10	17	0.71	0.35
Phase 3 Site Preparation	5	9	0.15	0.14
Phase 3 Site Preparation and Utilities Trenching	6	10	0.17	0.16
Phase 3 Utilities Trenching	1	1	0.02	0.02
Phase 3 Utilities Trenching and Building Construction (2028)	9	11	0.28	0.26
Phase 3 Building Construction (2028)	8	10	0.23	0.21
Phase 3 Building Construction (2028)	8	10	0.23	0.21
Phase 3 Building Construction (2029), Paving, and Architectural Coating	11	16	0.33	0.30
Phase 3 Building Construction (2029), Paving, Architectural Coating, and Finishing/Landscaping	12	17	0.35	0.32
Exceeds LST?	No	No	No	No
South Coast AQMD 1.38-Acre LST	**120**	**661**	**4.75**	**3.37**
Phase 2 Building Construction (2027), Paving, and Architectural Coating	14	18	0.47	0.45
Exceeds LST?	No	No	No	No
South Coast AQMD 1.50-Acre LSTs	**125**	**694**	**5.00**	**3.50**
Phase 2 Building and Asphalt Demolition and Debris Haul	4	7	1.02	0.29
Exceeds LST?	No	No	No	No
South Coast AQMD 2.00-Acre LSTs	**147**	**827**	**6.00**	**4.00**
Phase 2 Site Preparation	5	9	0.21	0.19
Exceeds LST?	No	No	No	No
South Coast AQMD 2.38-Acre LSTs	**156**	**915**	**6.87**	**4.25**
Phase 2 Site Preparation and Building Construction (2025)	16	21	0.61	0.56
Exceeds LST?	No	No	No	No
South Coast AQMD 2.44-Acre LSTs	**158**	**930**	**7.02**	**4.29**
Phase 2 Building and Asphalt Demolition and Debris	10	16	1.23	0.48

Table 5.2-11 Maximum Daily On-Campus Localized Construction Emissions

	Pollutants (lbs./day)[1,2]			
	NO_X	CO	PM_{10}[3]	$PM_{2.5}$[3]
Haul, Site Preparation				
Exceeds LST?	No	No	No	No

Sources: CalEEMod Version 2022.1.0, and South Coast AQMD 2008 and 2011. Highest winter or summer emissions are reported. For the most conservative estimates, LST emissions estimates considers the average tier engines for construction equipment based on CalEEMod defaults instead of Tier 4 Final engines.
1 In accordance with South Coast AQMD methodology, only on-site stationary sources and mobile equipment occurring on the Proposed Project's Site are included in the analysis. LSTs are based on non-sensitive receptors within 82 feet (25 meters) of the Proposed Project's Site in Source Receptor Area (SRA) 2.
2 Based on information provided or verified by the applicant. Where specific information regarding project-related construction activities or processes was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by the South Coast AQMD.
3 Includes implementation PDF AQ-1 through AQ-43 which include fugitive dust control measures required by South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186–compliant sweepers. In addition, PDF AQ-4 requires use of Tier 4 construction equipment for equipment for equipment 25 horsepower and higher.

Construction Health Risk

The Proposed Project would elevate concentrations of TACs (i.e., DPM) in the vicinity of sensitive land uses during temporary construction activities, and at different levels depending on the type of activity (for example, little to none during installation of utilities and more during grading activities). Construction modeling considered years 2024 to 2025 for Phase 1 construction activities, 2025 to 2027 for Phase 2 construction activities, and 2028 to 2030 for Phase 3 construction activities. On-campus sensitive receptors would include the Grant ES students.

The nearest sensitive receptors to the campus are the students who will be on campus during periods of construction activity. The nearest off-campus receptors include single- and multifamily residences along Pearl Street to the north, 24th Court to the east, and Pearl Place South to the west of the campus. A site-specific construction HRA of TACs was prepared to quantify potential health risk emissions during construction (see Appendix E). The results of the analysis are shown in Table 5.2-12, *Construction Risk Summary*, and demonstrate that there would be no exceedance of identified thresholds.

Table 5.2-12 Construction Risk Summary[1,2]

Receptor	Cancer Risk (per million)	Chronic Hazards
Maximum Exposed Receptor – Off-site Resident	5.8	0.039
Maximum Exposed Receptor – On-site Students	2.4	0.075
South Coast AQMD Threshold	10	1.0
Exceeds Threshold?	No	No

Source: Appendix E
1 Modeling includes implementation PDF AQ-1 through AQ-4. PDF AQ-4 requires use of Tier 4 construction equipment for equipment for equipment 25 horsepower and higher.
2 In accordance with the 2015 Office of Environmental Health Hazard Assessment guidance, the calculated total cancer risk conservatively assumes that the risk for the MEIR consists of a pregnant woman in the third trimester that subsequently gives birth to an infant during the approximately 6-year construction period; therefore, calculated risk values for the first 2.25 years were multiplied by a factor of 10 and the remaining risk values by a factor of 3.
2 The calculated risk values for the students were multiplied by a factor of 3.

The results of the HRA are based on the maximum receptor concentration over an approximately nine-year construction exposure for receptors.

- Cancer risk for the maximum exposed receptor from construction activities related to the Proposed Project were calculated to be 5.8 in a million and would not exceed the 10 in a million significance threshold.
- Cancer risk for the maximum exposed on-campus student receptor from construction activities would be 2.4 in a million and would not exceed the 10 in a million significance threshold.
- For noncarcinogenic effects, the chronic hazard index identified for each toxicological endpoint totaled less than one for all the on- and off-campus sensitive receptors. Therefore, chronic noncarcinogenic hazards are less than significant.

Because cancer risks for the on-campus student receptor and off-campus residential MER would not exceed the South Coast AQMD significance thresholds, construction activities associated with the Proposed Project are **less than significant.**

Operation

Operational Phase LSTs

The screening-level LSTs are the amount of project-related stationary and area sources of emissions at which localized concentrations (ppm or $\mu g/m^3$) would exceed the ambient air quality standards for criteria air pollutants for which the SoCAB is designated a nonattainment area. The Proposed Project would involve the redevelopment and modernization of Grant ES. The Proposed Project would not generate a substantial number of trucks trips or stationary sources of emissions. Typical sources of criteria air pollutant emissions associated with the Proposed Project from both stationary and area sources include energy use and landscaping fuel and aerosols. Types of land uses that typically generate substantial quantities of criteria air pollutants and TACs include industrial (stationary sources) and warehousing (truck idling) land uses. These types of major air pollutant emissions sources would not be included and/or expanded under the Proposed Project. Thus, the Proposed Project would not result in creation of land uses that would generate substantial concentrations of criteria air pollutant emissions. Therefore, localized operation-related air quality impacts are considered **less than significant**.

Carbon Monoxide Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to AAQS is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. The SoCAB has been designated in attainment of both the National and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per

hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—to generate a significant CO impact (BAAQMD 2017). As the Proposed Project would not result in an increase of student capacity or employees, the Proposed Project would not generate additional peak-hour trips. Circulation (pick-up and drop-off areas) would be relocated and improved so that idling time would not increase. Therefore, implementation of the Proposed Project would not have the potential to substantially increase CO hotspots at intersections in the vicinity of the campus. Operational impacts would be **less than significant**.

5.2.4 Mitigation Measures

No mitigation measures are required.

5.2.5 Level of Significance After Mitigation

All impacts are **less than significant**.

5.2.6 Cumulative Impacts

In accordance with South Coast AQMD's methodology, any project that produces a significant project-level regional air quality impact in an area that is in nonattainment contributes to the cumulative impact. The greatest source of emissions in the SoCAB is mobile sources. Due to the extent of the area potentially impacted from cumulative project emissions (i.e., the SoCAB), South Coast AQMD considers a project cumulatively significant when project-related emissions exceed the South Coast AQMD regional emissions thresholds shown in Table 5.2-5. No significant cumulative impacts were identified with regard to CO hotspots.

Construction

The SoCAB is designated nonattainment for O_3 and $PM_{2.5}$ under the California and National AAQS and nonattainment for PM_{10} under the California AAQS,[14] and nonattainment for lead (Los Angeles County only) under the National AAQS. Construction of cumulative projects will further degrade the regional and local air quality. Air quality will be temporarily impacted during construction activities. As shown in Table 5.2-9, the Proposed Project's short-term emissions would not exceed the South Coast AQMD regional emissions thresholds. In addition, construction activities from all three construction phases would not exceed their screening-level LSTs. Construction of the Proposed Project would also not exceed the South Coast AQMD cancer risk or chronic hazards thresholds.

Therefore, Project-related construction emissions would be reduced to below the cancer risk threshold and construction-related cumulative impacts would be reduced to **less than significant**.

[14] Portions of the SoCAB along SR-60 in Los Angeles, Riverside, and San Bernardino counties are proposed nonattainment for NO_2 under the California AAQS.

Operation

For operational air quality emissions, any project that does not exceed or can be mitigated to less than the daily regional threshold values are not considered by South Coast AQMD to be a substantial source of air pollution and does not make a cumulatively considerable contribution to a cumulative air quality impact. Operation of the Proposed Project would not result in emissions in excess of the South Coast AQMD regional emissions thresholds, and thus the Proposed Project would not cumulatively contribute to significant health impacts in the SoCAB. Therefore, the air pollutant emissions associated with the Proposed Project would not be cumulatively considerable and impacts would be **less than significant**.

5.2.7 References

Arcadis. 2023, October. Traffic Analysis Memorandum for Grant ES Access and Pedestrian Safety.

Bay Area Air Quality Management District (BAAQMD). 2017, May. California Environmental Quality Act Air Quality Guidelines. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). 2022. California Emissions Estimator Model (CalEEMod). Version 2022.1.0. Prepared by: ICF in collaboration with Sacramento Metropolitan Air Quality Management District.

California Air Resources Board (CARB). 1992. Federal Attainment Plan for Carbon Monoxide.

———. 1999. Final Staff Report: Update to the Toxic Air Contaminant List.

———. 2016, May 4. Ambient Air Quality Standards. https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf.

———. 2021, December 9. Staff Report, CARB Review of the South Coast 2021 Redesignation Request and Maintenance Plan. https://ww2.arb.ca.gov/sites/default/files/2021-10/Staff_Report_for_the_South_Coast_PM2.5_Redesignation_Request_and_Maintenance_Plan.pdf.

———. 2023a, January 20 (accessed). Area Designations Maps/State and National. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.

———. 2023b, January 20 (accessed). Common Air Pollutants. https://ww2.arb.ca.gov/resources/common-air-pollutants.

———. 2023c, January 9 (accessed). Air Pollution Data Monitoring Cards (2017, 2018, 2019, 2020, and 2021). https://www.arb.ca.gov/adam/topfour/topfour1.php.

———. 2023d, May 19 (accessed). February 24-2, 2022, Board Meeting Agenda. https://ww2.arb.ca.gov/ma022422.

———. 2023e, January 20 (accessed). Overview: Diesel Exhaust & Health. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

Office of Environmental Health Hazard Assessment (OEHHA). 2015, February. Air Toxics Hot Spots Program Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments. http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf.

South Coast Air Quality Management District (South Coast AQMD). 1992. Federal Attainment Plan for Carbon Monoxide.

———. 1993. *California Environmental Quality Act Air Quality Handbook*.

———. 2003, August. 2003 Air Quality Management Plan. Appendix V. https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2003-aqmp.

———. 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

———. 2008, July. Final Localized Significance Threshold Methodology.

———. 2011. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2.

———. 2012, May 4. Final 2012 Lead State Implementation Plan: Los Angeles County. http://www3.aqmd.gov/hb/attachments/2011-2015/2012May/2012-May4-030.pdf.

———. 2013, February. 2012 Final Air Quality Management Plan. https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan.

———. 2015a. *Health Effects of Air Pollution*. http://www.aqmd.gov/docs/default-source/publications/brochures/the-health-effects-of-air-pollution-brochure.pdf.

———. 2015b, October. "Blueprint for Clean Air: 2016 AQMP White Paper." 2016 AQMP White Papers web page. https://www.aqmd.gov/docs/default-source/Agendas/aqmp/white-paper-working-groups/wp-blueprint-final.pdf?sfvrsn=2.

———. 2019, April (revised). South Coast AQMD Air Quality Significance Thresholds. http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.

———. 2021a, August. MATES V: Multiple Air Toxics Exposure Study in the South Coast AQMD. http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v.

———. 2021b, October. Draft Final 2021 Redesignation Request and Maintenance Plan for the 2006 and 1997 24-Hour PM2.5 Standards for South Coast Air Basin. https://ww2.arb.ca.gov/sites/default/files/2021-10/draft-final-pm2-5-redesignation-request-and-maintenance-plan.pdf.

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AIR QUALITY

———. 2022, December. 2022 Air Quality Management Plan. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=10.

US Environmental Protection Agency (USEPA). 2002, May. Health Assessment Document for Diesel Engine Exhaust. EPA/600/8-90/057F. Prepared by the National Center for Environmental Assessment, Washington, DC, for the Office of Transportation and Air Quality.

———. 2023a, January 20 (accessed). Criteria Air Pollutants. https://www.epa.gov/criteria-air-pollutants.

Western Regional Climate Center (WRCC). 2023. Western U.S. Climate Summaries: Santa Monica Pier, California (ID 047953). Accessed January 9, 2023. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7953.

5.3 CULTURAL RESOURCES

Cultural resources comprise archaeological and historical resources. A cultural resource is defined as any object or specific location of past human activity, occupation, or use identifiable through historical documentation, inventory, or oral evidence. Cultural resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. Cultural resources can be separated into three categories: archaeological, built environment, and traditional cultural resources.

Archaeology studies human artifacts, such as places, objects, and settlements that reflect group or individual religious, cultural, or everyday activities. Archaeological resources include both historic and prehistoric remains of human activity. Historic-period resources include historic structures, structural ruins (such as foundation remnants), sites (such as artifact reuse deposits and artifact-filled features), objects, or places that are significant for their engineering, architecture, cultural use, or association. Prehistoric resources can include lithic artifact or ceramic scatters, quarries, habitation sites, temporary camps/rock rings, ceremonial sites, and monuments, canals, historic roads and trails, bridges, and ditches and objects.

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Grant Elementary School Campus Master Plan Project (Proposed Project) to impact cultural resources. Impacts to paleontological resources are addressed in Section 5.5, *Geology and Soils*. Tribal cultural resources are addressed in Chapter 6, Section 6.2, *Impacts Found Not to Be Significant*.

The analysis in this section is based in part on the following technical reports:

- *Archaeological and Paleontological Resources Assessment for the Grant Elementary Campus Master Plan Project*, Cogstone, October 2023
- *Grant Elementary School Campus Plan Project Historical Resources Inventory Report,* Architectural Resources Group, January 2022
- *Grant Elementary School Campus Plan Project Historical Resources Impact Assessment,* Architectural Resources Group, March 2023

Complete copies of these technical reports are provided in Appendix F of this Draft EIR.

During the Initial Study/Notice of Preparation (IS/NOP) public review period, comments were received regarding historical impacts associated with the Proposed Project. A California Environmental Quality Act (CEQA) scoping meeting was conducted on February 7, 2023; however, no concerns regarding cultural resources were raised during the meeting. The IS/NOP and all scoping comment letters are included as Appendices B and C of this document

5.3.1 Environmental Setting

5.3.1.1 REGULATORY BACKGROUND

Federal, state, and local laws, regulations, plans, or guidelines related to cultural resources that are applicable to the Proposed Project are summarized below.

Federal Regulations

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) coordinates public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. The act authorized the National Register of Historic Places (NRHP), which lists districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Section 106 (Protection of Historic Properties) of the NHPA requires federal agencies to consider the effects of their undertakings on historic properties. Section 106 review ensures that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation, an independent federal agency, administers the review process with assistance from state historic preservation offices.

National Register of Historic Places

The NRHP is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archaeology, engineering, and culture. The NRHP recognizes resources of local, state, and national significance that have been documented and evaluated according to uniform standards and criteria.

Authorized under the NHPA, the NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archaeological resources. The NHRP is administered by the National Park Service (NPS), which is part of the U.S. Department of the Interior.

To be eligible for listing in the NRHP, a resource must meet at least one of the following criteria:

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

B. Is associated with the lives of persons significant in our past.

C. Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.

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

Historic Integrity

Historic integrity is the ability of a property to convey its significance. It is defined as the "authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic period" (NPS 1997a) The NPS defines seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association.

- ***Location*** is the place where the historic property was constructed or the place where the historic event occurred.
- ***Design*** is the combination of elements that create the form, plan, space, structure, and style of a property.
- ***Setting*** is the physical environment of a historic property.
- ***Materials*** are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- ***Workmanship*** is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- ***Feeling*** is a property's expression of the aesthetic or historic sense of a particular period of time.
- ***Association*** is the direct link between an important historic event or person and a historic property.

Period of Significance

The NPS defines period of significance as "the length of time when a property was associated with important events, activities or persons, or attained the characteristics which qualify it for ... listing" in National, State, or local registers. A period of significance can be "as brief as a single year …[or] span many years." It is based on "specific events directly related to the significance of the property," for example the date of construction, years of ownership, or length of operation as a particular entity (NPS 1997a).

Historic Districts

Standard preservation practice evaluates collections of buildings from similar time periods, places, and historic contexts as historic districts. The NPS defines a historic district as "a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development" (NPS 1997b). A historic district is significant as a single unified entity.

According to the NPS,

> [A] district can comprise both features that lack individual distinction and individually distinctive features that serve as focal points. It may even be considered eligible if all of the components lack individual distinction, provided that the grouping achieves significance as a whole within its historic context. In either case, the

> majority of the components that add to the historic district's character, even if they are individually undistinguished, must possess integrity, as must the district as a whole." (NPS 1997b)

Resources that have been found to contribute to the historic identity of a district are referred to as district contributors. Properties in the historic district boundaries that do not contribute to its significance are identified as non-contributors.

As identified by the NPS, school campuses, which are often geographically concentrated and purpose-built, are often evaluated as historic districts. Schools in the United States, especially those built in the 20th century, often exhibit definable campuses and unified site plans that reflect the individual buildings' interconnectedness and functionality as a larger grouping. Although historic districts can contain resources built during distinct periods of development, many school campus historic districts reflect a specific era of development in a common period of significance.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 (United States Code, Title 16, Section 470aa et seq.) regulates the protection of archaeological resources and sites on federal and Native American lands (USDA 2023).

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that mandates museums and federal agencies to return certain Native American cultural items—such as human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants or culturally affiliated Native American tribes (BLM 2023).

State Regulations

The California Office of Historic Preservation, a division of the California Department of Parks and Recreation, is responsible for carrying out the duties described in the California Public Resources Code (PRC) and maintaining the California Historic Resources Information System (CHRIS) and the California Register of Historical Resources (CRHR). The state-level regulatory framework also includes CEQA, which requires the identification and mitigation of substantial adverse impacts that may affect the significance of eligible historical and archaeological resources.

California Environmental Quality Act

CEQA requires a lead agency to analyze whether historic and/or archaeological resources may be adversely impacted by a proposed project. Under CEQA, a "project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment" (PRC Section 21084.1.) Answering this question is a two-part process. First, the determination must be made as to whether the proposed project involves cultural resources. Second, if cultural resources are present, the proposed project must be analyzed for a potential "substantial adverse change in the significance" of the resource.

Historical Resources

According to CEQA Guidelines Section 15064.5, for the purposes of CEQA, historical resources are:

- A resource listed in, or formally determined eligible…for listing in the California Register of Historical Resources (PRC Section 5024.1; California Code of Regulations [CCR], Title 14, Section 4850 et seq.)

- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significance in a historic resources survey meeting the requirements of Section 5024.1(g) of the PRC.

- Any object, building, structure, site, area, place, record, or manuscript that the lead agency determines to be eligible for national, state, or local landmark listing; generally, a resource shall be considered by the lead agency to be historically significant (and therefore a historic resource under CEQA) if the resource meets the criteria for listing on the California Register (as defined in PRC Section 5024.1; 14 CCR Section 4852).

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity (as defined above) does not meet NRHP criteria may still be eligible for listing in the CRHR.

According to CEQA, the fact that a resource is not listed in or determined eligible for listing in the CRHR or is not included in a local register or survey shall not preclude the lead agency from determining that the resource may be a historical resource (PRC Section 5024.1). Pursuant to CEQA, 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 (CEQA Guidelines, Section 15064.5[b]).

Substantial Adverse Change and Indirect Impacts to Historical Resources

CEQA Guidelines specify that a "substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (State CEQA Guidelines, Section 15064.5). Material impairment occurs when a project alters in an adverse manner or demolishes "those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion" or eligibility for inclusion in the NRHP, CRHR, or local register. In addition, pursuant to CEQA Guidelines, Section 15126.2, the "direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects."

The following guides and requirements are of relevance to this study's analysis of indirect impacts to historic resources. Pursuant to CEQA Guidelines Section 15378, study of a project under CEQA requires consideration of "the whole of an action, which has the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." State CEQA Guidelines Section 15064(d) further defines direct and indirect impacts:

1. A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project.

2. An indirect physical change in the environment is a physical change in the environment, which is not immediately related to the project, by which is caused indirectly by the project. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment.

3. An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project.

Archaeological Resources

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

2. Has a special and particular quality such as being the oldest of its type of the best available example of its type.

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If it can be demonstrated that a proposed project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required. (PRC Sections 21083.2[a], [b], and [c].) CEQA notes that, if an archaeological resource is neither a unique archaeological resource nor a historical resource, the effects of the project on those resources shall not be considered to be a significant effect on the environment (CEQA Guidelines Section 15064.5[c][4].)

California Public Resources Code

Archaeological, paleontological, and historical sites are protected under a wide variety of state policies and regulations in the PRC. In addition, cultural and paleontological resources are recognized as nonrenewable resources and receive protection under the PRC and CEQA.

PRC Sections 5020 to 5029.5 continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The commission oversees the administration of the CRHR and is responsible for designating State Historical Landmarks and Historical Points of Interest.

PRC Sections 5079 to 5079.65 define the functions and duties of the Office of Historic Preservation, which administers federal- and state-mandated historic preservation programs in California as well as the California Heritage Fund.

PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites; identify the powers and duties of the Native American Heritage Commission; require that descendants be notified when Native American human remains are discovered; and provide for treatment and disposition of human remains and associated grave goods.

Requirements for paleontological resource management are included in California PRC Division 5, Chapter 1.7, Section 5097.5, which states:

> A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

These statutes prohibit the removal, without permission, of any paleontological site or feature from land under the jurisdiction of the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, local agencies are required to comply with PRC Section 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others. PRC Section 5097.5 also establishes the removal of paleontological resources as a misdemeanor and requires reasonable mitigation of adverse impacts to paleontological resources from developments on public (i.e., state, county, city, and district) land.

California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Sections 21083.2 and 21084.1). Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys, or designated by local landmarks programs, may be nominated for inclusion in the CRHR.

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historical integrity and are historically significant at the local, state, or national level under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. It is associated with the lives of persons important in our past;

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. It has yielded, or has the potential to yield, information important to the prehistory or history.

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity does not meet NRHP criteria may still be eligible for listing in the CRHR.

Secretary of the Interior's Standards

The Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards) provide guidance for reviewing proposed projects that may affect historical resources. The intent of the Standards is to assist the long-term preservation of a property's significance through the preservation, rehabilitation, and maintenance of historic materials and features.

The Standards are a useful analytic tool for understanding and describing the potential impacts of substantial changes to historical resources. However, compliance with the Standards does not necessarily determine whether a project would cause a substantial adverse change in the significance of an historical resource. Rather, projects that comply with the Standards benefit from a regulatory presumption that they would have a less than significant adverse impact on a historic resource (CEQA Guidelines Section 15064.5[4][b][3]).

The statutory language above references the Secretary of the Interior's standards and guidelines for four distinct historic "treatments," including: (1) preservation, (2) rehabilitation, (3) restoration, and (4) reconstruction. The specific standards and guidelines associated with each of these possible treatments are provided on the NPS's website regarding the treatment of historic resources. For analytical purposes, a threshold decision must be made regarding which treatment standards should be used to analyze a project's potential effect on historic resources. According to the NPS, the rehabilitation standards are most frequently applied for the majority of historic buildings. The rehabilitation standards acknowledge the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.

In the case of schools in the Santa Monica-Malibu School District (SMMUSD) that contain historic districts, the rehabilitation standards provide a framework for conservative impact analysis for future projects. A discussion of the rehabilitation standards as they may apply to future projects in the historic district follows.

Secretary of the Interior's Standards and Guidelines for Rehabilitation

The Standards are intended as general guidance for work on any historic building. The NPS encourages maintaining the integrity of a district through the appropriate design of infill buildings at vacant sites or sites where new buildings replace non-contributing buildings. The Guidelines for Rehabilitation expand the discussion to sites and neighborhoods.

As written in the Guidelines for Rehabilitation, there is a distinction, but not a fundamental difference, between the concerns for additions to historic buildings and new construction or "infill" adjacent to historic buildings on a property or within a district. As with most matters of design and planning, the differences are defined by the scale, site, setting, and project.

Following are quotations from the NPS guidance.

> [A] modern addition should be readily distinguishable from the older work; however, the new work should be harmonious with the old in scale, proportion, materials, and color.
>
> Plan the new addition in a manner that provides some differentiation in material, color, and detailing so that the new work does not appear to be part of the historic building. The character of the historic resource should be identifiable after the addition is constructed. (Grimmer and Weeks 2010)

Rehabilitation Standards for Historic Districts

Future projects that involve new infill construction and/or demolition of contributing features to a historic district have the potential to impact the historic district. However, for potential impacts to be considered a "substantial adverse change" to a historic district under CEQA, it must be shown that the new construction and/or removal of the contributing buildings associated with a project would result in the physical alteration of the historic district such that its ability to convey its historical significance and eligibility for historic listing would be threatened.

Typically, if new buildings are designed to be compatible and differentiated from the historic district using the rehabilitation standards, future projects will not result in a "substantial adverse change." Similarly, if a historic district retains a majority of its contributing features and integrity and continues to convey its significance, future projects will not result in a "substantial adverse change." Analysis should be conducted on a case-by-case basis to consider all potential impacts that a project may have on a historic district, including the percentage of resources retained and lost, historic spatial and circulation patterns, scale and massing, and visibility from the public right-of-way. As such, the rehabilitation standards provide a certain level of flexibility for future projects planned within or adjacent to historic districts.

Local

Santa Monica/Malibu United School District Board Policy and Administrative Regulation 7113

The District adopted "Board Policy 7113: Facilities: Historical Resources" on February 9, 2021, for the purpose of outlining objectives and establishing procedures for the treatment of historical resources on District campuses. SMMUSD developed this policy to identify and clarify treatment of historical resources on properties under SMMUSD jurisdiction. SMMUSD owns and operates multiple school campuses/properties, which together contain over 100 individual buildings, some of which date from the mid-20th century or earlier. Some of these buildings might be or contain elements that potentially have historical significance. SMMUSD understands that historical resources should be identified in advance of approval of campus rehabilitation and construction to retain and/or commemorate their significance for future generations when feasible and consistent with educational priorities. Objectives of Board Policy 7113 include engaging architects and engineers with demonstrated preservation expertise to consult and guide the planning and design process, where appropriate and consulting with interested third parties, including the Santa Monica Conservancy when potential impacts to identified historic resources are involved. In addition to Board Policy 7113, the District has also prepared Administrative Regulation 7113, which establishes procedures for the retention of qualified historical resources consultants to survey each campus prior to approval of a master plan or design of a school facilities project to identify any historical resources on the campuses.

City of Santa Monica Landmarks and Historic Districts Ordinance

Historic preservation in Santa Monica is governed by Chapter 9.56 (Landmarks and Historic Districts Ordinance) of the Santa Monica Municipal Code. The ordinance was adopted by the Santa Monica City Council on March 24, 1976, and was amended in 1987 and again in 1991. Its current version was adopted in 2015. Among the primary objectives achieved by the ordinance was the creation of a local designation program for buildings, structures, sites, objects, districts, and landscapes in the city that are of historical significance (ARG 2022).

With respect to individually significant properties, the ordinance distinguishes between two tiers of designation: Landmarks and Structures of Merit.

- Landmarks, outlined in Section 9.56.100, are considered to exhibit "the highest level of individual historical or architectural significance"; Santa Monica's designated landmarks include the Rapp Saloon, Santa Monica City Hall, and the John Byers Adobe.
    - Landmarks are sited on Landmark Parcels. Section 9.56.030 defines a Landmark Parcel as "any portion of real property, the location and boundaries as defined and describes by the Landmarks Commission, upon which a Landmark is situated, which is determined by the Landmarks Commission as requiring control and regulation to preserve, maintain, protect or safeguard the Landmark."
- Structures of Merit, outlined in Section 9.56.080, possess a degree of individual significance that is more limited in scope. Protections against demolition and alterations are commensurate with the tier of individual designation assigned to a particular resource.

In addition to individual Landmarks and Structures of Merit, the ordinance establishes statutory criteria and procedures for the designation of Historic Districts, defined in Section 9.56.030 as a "geographic area or noncontiguous grouping of thematically related properties" that collectively contribute to the historic character of an area in the city. Unlike individual properties, whose designation does not require owner consent and is approved by the City's Landmarks Commission, Historic Districts must win the support of a majority of property owners within the historic district and be approved by the City Council.

Per Section 9.56.100(A) of the ordinance, a property merits consideration as a Landmark if it satisfies one or more of the following six statutory criteria:

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 a 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.

5.3.1.2 PREHISTORIC SETTING

Approaches to prehistoric frameworks have changed over the past half century from being based on material attributes to radiocarbon chronologies to association with cultural traditions. Archaeologists defined a material complex consisting of an abundance of milling stones (for grinding food items) with few projectile points or vertebrate faunal remains dating from about 7 to 3 thousand years before the present as the "Millingstone Horizon." Later, the "Millingstone Horizon" was redefined as a cultural tradition named the Encinitas Tradition with various regional expressions, including Topanga and La Jolla. Use by archaeologists varied as some adopted a generalized Encinitas Tradition without regional variations; some continued to use "Millingstone Horizon"; and some used Middle Holocene (the time period) to indicate this observed pattern (Cogstone 2023).

Recently, it was recognized that generalized terminology is suppressing the identification of cultural, spatial, and temporal variation and the movement of peoples throughout space and time. These factors are critical to understanding adaptation and change (Cogstone 2023).

The Encinitas Tradition characteristics are abundant metates and manos, crudely made core and flake tools, bone tools, shell ornaments, very few projectile points with subsistence focusing on collecting (plants, shellfish, etc.). Faunal remains vary by location but include shellfish, land animals, marine mammals, and fish (Cogstone 2023).

The Topanga cultural pattern of the Encinitas Tradition is applicable to coastal Los Angeles and Orange counties. This pattern is replaced by the Angeles pattern of the Del Rey Tradition later in time (Cogstone 2023).

The Topanga cultural pattern can be described by three phases: Topanga I (8,500 to 5,000 years before the present [BP]), Topanga II (5,000 to 3,500 BP), and Topanga III (3,500 to 1,000 BP). Topanga I is characterized by the use of manos and metates, abundant core tools, and leaf-shaped projectile points; Topanga II is characterized by use of mortar and pestle, smaller points, nearshore and terrestrial food sources; and Topanga III is characterized by increased abundance of metates and manos, mortar and pestles, more varied types of projectile points, and the stone-lined earthen ovens. The Angeles Pattern can be described by three periods: Angeles IV (1,000 to 800 BP), Angeles V (800 to 450 BP), and Angeles VI (450 to 150 BP). Angeles IV is characterized by new cottonwood points, *Olivella* cupped beads, and *Mytilus* shell disk, and Angeles V is characterized by use of larger steatite artifacts, larger vessels, and more elaborate effigies. The Angeles VI period is characterized by Gabrielino post-contact with Euro-Americans—specifically population loss due to disease, social/political disruption, and the inclusion of Euro-American tools and materials.

5.3.1.3 ETHNOGRAPHIC SETTING

The Gabrielino language was derived from the Takic family of the Uto-Aztecan linguistic stock, which can be traced to the Great Basin area. The Gabrielino territory encompassed a vast area stretching from Topanga Canyon in the northwest, to the base of Mount Wilson in the north, to San Bernardino in the east, Aliso Creek in the southeast and the Southern Channel Islands, in all an area of more than 2,500 square miles. At European contact, the tribe consisted of more than 5,000 people living in various settlements throughout the area. Some of the villages could be quite large, housing up to 150 people. The closest known village to the campus is Wanaawna located 3.75 miles south.

The Gabrielino structures were domed and circular thatched with tule or similar materials. The main food zones were marine, woodland, and grassland. Acorns were an important food source. Villages were located near water sources necessary for the leaching of acorns, which was a daily occurrence. Grass seeds were the next most abundant plant food used along with chia. Seeds were parched, ground, and cooked as mush in various combinations according to taste and availability. Greens and fruits were eaten raw or cooked or sometimes dried for storage. Bulbs, roots, and tubers were dug in the spring and summer and usually eaten fresh. Mushrooms and tree fungus were considered delicacies. Various teas were prepared from flowers, fruits, stems, and roots as beverages and for medicinal purposes (Cogstone 2023).

Common game animals were deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, dove, ducks, and other birds. Most predators were avoided as food, as were tree squirrels and most reptiles. Trout and other fish were caught in the streams. Salmon was available in the larger creeks. Sea mammals, fish, and crustaceans were hunted and gathered from both the shoreline and the open ocean using reed and dugout canoes. Shellfish were the most common resource, including abalone, turbans, mussels, clams, scallops, bubble shells, and others (Cogstone 2023).

5.3.1.4 HISTORIC OVERVIEW

Spanish Colonial and Mexican Periods

Juan Rodriguez Cabrillo led the first Spanish expedition into California in 1542. Cabrillo named various features along the coast of Southern California, including San Pedro Bay and the Channel Islands. On October 8th of that year, Cabrillo is believed to have dropped anchor in what is now Santa Monica Bay. He anchored in the bay of Malibu Lagoon later that month, naming it the "Pueblo de las Canoas" (Town of the Canoes), after the many Chumash canoes (tomols) in the area.

Despite this early exploration, the area was not further colonized until the arrival of the first land expedition in 1769, led by Gaspar de Portolá. Portolá traveled across Alta California from San Diego to Monterey, establishing a system of missions one day's journey apart throughout the territory. He is said to have arrived in present-day Santa Monica on August 3rd. A few years later, on February 22, 1776, explorer Juan Bautista de Anza made camp "on a fine stream under the oak trees in the vicinity of today's Malibu Creek State Park."

At the time of California's annexation as Mexican territory in 1822, the Santa Monica area was still unoccupied, an "unclaimed mesa covered with wild grass." In 1827, Xavier Alvarado and Antonio Machado

were given a provisional grant to "a place called Santa Monica," referring to the land stretching from Santa Monica Canyon north to Topanga Canyon. (The Alvarado-Machado lands later passed into the hands of Ysidro Reyes and Francisco Marquez.) In 1828, Don Francisco Sepulveda received possession of "a place called San Vicente," which stretched from Santa Monica Canyon south to present-day Pico Boulevard, and from the coast inland to what is now Westwood, including all of the land that would become the original townsite of Santa Monica. The area was slowly populated and developed with an adobe by Ysidro Reyes in 1839. The rancho had herds of cattle, horses, and sheep.

The 1840s brought several land disputes in Santa Monica between Sepulveda and the Reyes and Marquez families. The argument was not settled until 1851, the year after California achieved statehood. At that time, the Board of Land Commissioners deeded Sepulveda the 30,000 acres known as "Rancho San Vicente y Santa Monica." The Reyes and Marquez families received approximately 6,600 acres known as the "Boca de Santa Monica." (ARG 2022).

American Period

The original rancho lands remained intact and were used primarily for grazing purposes into the 1870s. Santa Monica's local history really began in September of 1872, when some 38,409 acres of Sepulveda's rancho was sold for $54,000 to Colonel Robert S. Baker. Baker, a cattleman from Rhode Island, acquired the flat expanse of the mesa to operate a sheep ranch. However, just two years later, Nevada Senator John P. Jones purchased a three-fourths interest in Baker's property for $162,500. Together, the two men subdivided a portion of their joint holdings and platted the town of Santa Monica recorded in the office of the County Recorder at Los Angeles on July 10th, 1875. The townsite fronted the ocean and was bounded by Montana Avenue on the northwest, Railroad Avenue (now Colorado Avenue) on the southeast, and 26th Street on the northeast. The streets were numbered, and the avenues were named for the western states.

Baker and Jones envisioned Santa Monica as a prosperous industrial port with a dedicated rail line linking the mines of Colorado and Nevada to a long wharf in Santa Monica Bay. Construction of the wharf and the rail line commenced in early 1875. Jones and Baker organized the Los Angeles & Independence Railroad (LA&I), a steam-powered rail line that extended 16 miles along a private right-of-way between the Santa Monica waterfront to 5th and San Pedro Streets in downtown Los Angeles. The railroad was completed in a little over ten months, opening on October 17th.

The official founding of Santa Monica dates to July 15th, 1875, when the first town lots were sold via auction. The town's immediate growth was rapid; in less than nine months it had 160 homes and over one thousand inhabitants. However, hopes to establish Santa Monica as the region's primary commercial shipping center were short-lived. In the early 1880s, Southern Pacific undermined the LA&I railroad by cutting their passenger and freight rates so drastically that both the local railroad and wharf were forced to operate at a loss from the moment they began operations. Eventually, both enterprises were acquired by Southern Pacific, who later abandoned the port project in favor of a site in San Pedro. Thus, the wharf was demolished, and Santa Monica was forced to reinvent itself as a seaside resort town. As it turned out, this was an easy transition, as new residents and tourists alike were already flocking to the coastal community, lured by its scenic views and temperate climate.

5. Environmental Analysis
CULTURAL RESOURCES

On November 30th, 1886, residents of Santa Monica voted to incorporate as an independent city. By 1887, a rate war between the Southern Pacific and Santa Fe Railroads brought floods of people to Southern California, setting off a real estate boom in the still largely agricultural community. At that time, Santa Monica was home to a host of agricultural enterprises—carnations, lima beans, and produce were grown with great success.

The arrival of the first electric streetcar on April 1, 1896, and the later establishment of the "Balloon Route" from downtown Los Angeles spurred further investment in Santa Monica real estate. A number of new subdivisions were opened during the first five years of the 20th century, and between 1900 and 1903 the resident population jumped from 3,057 to 7,208. By 1911, five electrical railway lines served Santa Monica, with travel times of 30 to 50 minutes from downtown Los Angeles. The completion of major roadways to the area only increased its popularity as the automobile became a factor in Southern California growth.

Santa Monica experienced continued growth and development following World War I. In the 1920s, Santa Monica's population jumped from 15,000 to 37,000, the largest increase in the city's history. Commercial activity increased quickly, and buildings were constructed to accommodate Santa Monica's new or expanding businesses and increased tourist activity. Commercial trends that began in the early 20th century continued in the 1920s with the establishment of numerous prominent commercial buildings downtown, including the city's first skyscrapers, and the continued development of resort- and tourist-related resources. The downtown commercial core continued to expand with the growing population. However, the Great Depression and World War II slowed commercial development in Santa Monica. Building activity declined, and new commercial construction was rare. Santa Monica's tourist attractions struggled throughout the Great Depression.

In the years leading up to the United States' entry into the war in December 1941, a series of dramatic shifts began. Thousands of people migrated to Southern California from other parts of the country. The rapid influx of Douglas Aircraft and other defense workers exacerbated Southern California's already intense need for housing. In 1940, the population of Santa Monica was 53,500. During the war, Douglas aircraft had 44,000 people (mostly women) on its payroll at the Santa Monica Cloverfield facility, nearly doubling Santa Monica's population. Unlike other cities, Santa Monica had little open land on which to construct defense worker housing, even if the money and materials had been available. Instead, density increased in an already built-out city. The federal government converted newly built public housing complexes to "defense housing" and constructed additional "war worker" housing complexes. These investments provided temporary relief, but housing was a problem that persisted for many years after the war's end.

Like so many Southern California communities, Santa Monica's population density increased during the postwar period as returning G.I.s sought to live in Southern California. Educational institutions, libraries, and civic buildings all expanded to meet the growing demand. However, housing continued to be a problem. So dire was the postwar housing situation in Santa Monica, in 1945 the Santa Monica Housing Authority repaired army barracks across from City Hall between Main Street and Ocean Avenue for use as residential quarters. Only discharged service men and women and their families were considered for housing in the restored barracks.

Southern California's postwar population boom and rise in consumer culture spurred retail and commercial development throughout the region. Santa Monica was no exception. During the postwar years, Santa Monica continued to expand as a residential community, as a resort and hub of "space age technological development," and in the provision of healthcare and financial services for Los Angeles' westside. Large-scale commercial development in the postwar era was largely concentrated along Wilshire and Santa Monica Boulevards.

Southern California's aerospace industry gained momentum following World War II. Many existing aviation firms, such as Santa Monica's Douglas Aircraft Company, repositioned themselves for a new wave of defense manufacturing: missiles and spacecraft. This theme explores the industrial development associated with Santa Monica's innovation and leadership in the defense industry in Cold War America and beyond. Santa Monica was a hub of technology and innovation during the postwar period. It was home to some of the most important and cutting-edge aerospace, electronics, and computer systems companies in the country. In many ways, these companies are the natural ancestors of the technological firms that dominated the industrial area of Santa Monica at the beginning of the 21st century. Industries from the previous decades such as agriculture, motion pictures and transportation and shipping took a backseat to the aerospace industry.

Transportation also changed in the postwar years. Named the Olympic Freeway while still in the planning stages, the portion of Interstate 10 in Santa Monica between Bundy and the McClure Tunnel opened to traffic January 29, 1965. As a part of the National System of Interstate and Defense Highways (now known as the Eisenhower Interstate System), route planning was done at a federal level with less concern for existing neighborhoods and buildings. By 1958, Interstate 10's present configuration had been determined, generally following the old Los Angeles & Independence Railroad right-of-way from the eastern city limit to about 20th Street, running between Olympic and Michigan Avenues to the McClure Tunnel, and cutting through established, less-affluent residential neighborhoods. Construction began in downtown Los Angeles and progressed westward.

Today, the City of Santa Monica has over 90,000 residents and its largest industries are professional, scientific, and technical services (ARG 2022).

5.3.1.5 CULTURAL RESOURCES IN THE PROPOSED PROJECT'S AREA

Methods Used to Identify Known Cultural Resources

To evaluate the Proposed Project's potential effects on significant cultural resources, Cogstone (2023) conducted a cultural resources assessment of the Grant ES campus, which included records searches, site inspections, intensive-level surveys, background research, and Native American coordination. In 2021, the SMMUSD adopted several procedures for the identification of historic resources at school facilities and their recordation in historical resources inventory reports. Architectural Resources Group (ARG 2023) completed an evaluation of the Grant ES campus to identify any potentially significant adverse effects to cultural resources as a result of the Proposed Project. The methodology and results of these studies are summarized below and are described in more detail in Appendix F of this DEIR.

5. Environmental Analysis
CULTURAL RESOURCES

Records Search Results

A search of the CHRIS from the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, was conducted on February 3, 2022, and included the entire campus as well as a half-mile radius. The purpose was to determine the extent and location of previous surveys, previously identified prehistoric or historic archaeological site locations, architectural resources, historic properties, cultural landscapes, or ethnic resources within a half-mile radius of the campus. As shown in Table 5.3-1, *Previous Studies Within a Half-Mile Radius of the Proposed Project*, no previous studies have been completed on the campus, and 10 studies have been completed within a half-mile radius of the campus.

Table 5.3-1 Previous Studies Within a Half-Mile Radius of the Proposed Project

Report No.	Author(s)	Title	Year	Distance (miles) from Project Area
LA-00352	Breece, Wilson H.	Missing: Title information not provided by SCCIC	1978	0–0.25
LA-01975	Neuenschwander, Neal J	Cultural Resource Survey and Clearance Report for the Proposed American Telephone and Telegraph Los Angeles Airport Central Office to the Santa Monica Central Office Fiberoptic Communication Route	1989	0–0.25
LA-04492	Maki, Mary K	Negative Phase I Archaeological Survey and Impact Assessment of 9.45 Acres for the Virginia Avenue Park Expansion Project, Santa Monica, Los Angeles County, California	1999	0.25–0.5
LA-05009	Lapin, Philippe	Cultural Resource Assessment for Modifications to Pacific Bell Wireless Facility La 607-03, County of Los Angeles, Ca	2000	0.25–0.5
LA-06480	Duke, Curt	Cultural Resource Assessment for AT&T Fixed Wireless Services Facility Number La_043_a, County of Los Angeles, California	2001	0.25–0.5
LA-006498	McKenna, Jeanette A.	Highway Project Involving Upgrading of Intersection Within the City of Santa Monica Located Between San Vicente Blvd. (north); Ocean Park (south); 9th Street (west); and 30th Street (east)	2002	0.25–0.5
LA-006505	Smith, Philomene C.	Highway Project of Replacing the Existing Overhead Reflective Sign Panels In-Kind with Retro-Reflective Panels	2000	0.25–0.5
LA-06524	Maki, Mary K.	2402-2410 Kansas Avenue Rehabilitation Project, Santa Monica	2002	0.25–0.5
LA-10662	Bonner, Wayne	Cultural Resources Records Search, Site Visit Results and Direct APE Historic Architectural Assessment for Clearwire Candidate CA-LOS6581A/LA03XC097 (Santa Monica Airport), 2644 30th Street, Santa Monica, Los Angeles County, California	2010	0.25–0.5
LA-11994	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SV11514A (SM Theatre Guild), 2627 Pico Boulevard, Santa Monica, Los Angeles County, California	2012	0.25–0.5

Source: Cogstone 2023.

The CHRIS records search also indicated 7 previously recorded pre-contract and historic-era cultural resources are within one mile of the campus, as shown in Table 5.3-2, *Previously Recorded Cultural Resources Within a One-Mile Radius of the Proposed Project or That Contribute to P-19-188708*. Two cultural resources were recorded on the campus as a result of the SCCIC records search (P-19-188708 and P-19-188715). Grant ES (P-19-188715) was previously identified as a potentially eligible historic resource. The first evaluation of the campus was conducted in 1993 as part of the City of Santa Monica's Historic Resources Inventory (HRI) process. The 1993 HRI identified a potential thematic district of public school campuses (called the Santa

Monica Schools Thematic District), which consisted of six public school campuses in Santa Monica. Grant ES was among the six campuses identified as contributors to the potential district, and Grant ES was assigned a California Historical Resource Status Code of 5D1, indicating its status as a contributor to a potential historic district identified through survey evaluation. It was subsequently recorded in the City's HRI, though it was not formally designated by this process. Outside the campus, two cultural resources (historic built environment resources) were previously documented within one-half mile of the campus. Three of the additional historic built environment resources outside the half-mile radius are contributing resources to the Santa Monica Public Schools Thematic District Resource.

Table 5.3-2 Previously Recorded Cultural Resources Within a One-Mile Radius of the Proposed Project or That Contribute to P-19-188708

Primary No. (P-19-)	Resource Type	Resource Description	Year Recorded	Distance (miles) from Proposed Project's Area	NRHP/CRHR Status
188708	Historic Built Environment	Santa Monica Public Schools Thematic District, PWA Moderne style, 1924	1993	Within	NR Eligible: Criterion A, and Criterion C
188711	Historic Built Environment	John Adams Junior High School, 2425 16th St. Modern style, 1935	1993, 2007	0.5–1 (Outside 0.5-mile radius but part of the Santa Monica Public Schools Thematic District)	NR Eligible: 5D1 and Criterion A.2
188715	Historic Built Environment	Grant School, 2368 Pearl St. Modern style, 1936	1993, 2007	Within	NR Eligible: 5D1 and Criterion A.4
188849	Historic Built Environment	Santa Monica Airport. 2644 30th Street. Modern style, 1956	2010	0.25–0.5	NR Not Eligible; CR: Not Evaluated
190059	Historic Built Environment	Morgan-Wixson Theatre, 2627 Pico Boulevard. Modern Style, 1965	2012	0.25–0.5	NR Not Eligible; CR: Not Evaluated
190932	Historic Built Environment	Mountain View Trailer Inn, Mobile Home Park, 1930 Stewart Street. Slump block Structure, 1948	2010	0.5–1 (Outside 0.5-mile radius but part of the Santa Monica Public Schools Thematic District)	NR/CR: Not Eligible
190985	Historic Built Environment	John Drescher Hall, Santa Monica College, 1702 Pico Boulevard. Modern style, 1969	2014	0.5–1 (Outside 0.5-mile radius but part of the Santa Monica Public Schools Thematic District)	NR Not Eligible; CR: Not Evaluated

Source: Cogstone 2023.

Sacred Lands File Search

A Sacred Lands File search request to the Native American Heritage Commission (NAHC) was submitted on February 3, 2022. The NAHC responded on March 24, 2022, and indicated that there are no sacred lands or resources known within the same US Geological Survey Quadrangle, Township, Range, and Section as the Grant ES campus. The NAHC also provided a consultation list of tribes that may have knowledge of cultural resources and/or sacred lands within or near the campus. See also Chapter 6, *Other CEQA Considerations*.

Tribal Consultation

In accordance with Assembly Bill (AB) 52 and PRC Section 21080.3.1, the SMMUSD sent formal notification letters of the Proposed Project, dated January 4, 2023, to two Native American tribes that have requested notification from the District: the Gabrieleño Band of Mission Indians – Kizh Nation and the Torres Martinez Desert Cahuilla Indians. No responses were received from the Native American tribes. Therefore, the District as lead agency under CEQA has completed its notification and consultation requirements per AB 52. No known resources within the campus area were identified as tribal cultural resources as defined in PRC section 21074.

5.3.1.1 CAMPUS HISTORY

The original Grant ES campus was constructed in 1905, approximately one-half mile northwest of its present-day location. The school originally consisted of a one-room schoolhouse at 22nd Street and Virginia Avenue. A new, four-room school building was constructed at the original location in 1906. In 1924, the Grant School campus was expanded amid an increase in student enrollment. In 1936, the District elected to move Grant School to its present-day location. The permanent buildings on the Grant ES campus were constructed between 1936 and 1965. The campus development commenced under the auspices of the federal Works Progress Administration and continued through the early postwar era (1945 to 1968), a period of growth in Santa Monica. As shown in Table 5.3-3, *Characteristics of Existing Buildings*, Buildings B through E and G through K were constructed in the 1930s and 1940s; Buildings A and F and portions of Building B were constructed in the 1950s and 1960s; and additional portable classrooms were constructed on the campus in the 1990s.

Table 5.3-3 Characteristics of Existing Buildings

Building Name	Year Built	Current Use	Number of Classrooms	Building Square Feet	Building Type	Building Height	Number of Stories
A	1954	Classrooms	4	4,415	Permanent	12 ft 1 in	1
B	1940 1954	Classrooms	5	6,830	Permanent	16 ft 2 in (Original) 12 ft 1 in (addition)	1
C	1936	Classrooms	4	5,815	Permanent	16 ft 2 in	1
D	1936	Administration/Class rooms	2	5,110	Permanent	30 ft 7 in	1
E	1945	Auditorium	-	5,105	Permanent	22 ft 8 in	2
F	1968	Library	-	3,125	Permanent	15 ft	1
G	1940	Computer Lab/Classrooms	1	2,830	Permanent	16 ft-2 in	1
H	1945	Cafeteria/Classrooms	6	13,965	Permanent	20 ft	1
K	1945	Administration/Class rooms	2	3,370	Permanent	18 ft 6 in	1
P70–P75	1992	Classrooms	6	5,760	Portables	-	1
P76–P79	1999	Classrooms	4	3,860	Portables	-	1

Source: ARG 2022.

The campus includes nine permanent buildings generally designed in the Public Works Administration (PWA) Moderne and Mid-century Modern styles of architecture, consistent with the eras in which they were built (see Table 5.3-3). Buildings at the campus include four classroom buildings, an administration/classroom building, an auditorium building, a library, a computer lab/classrooms building, a cafeteria/classrooms building, and eight modular and relocatable buildings.

Historic Resources Inventory

In February 2021, the District adopted Board Policy 7113 and the accompanying Administrative Regulation 7113, which were developed to identify and clarify treatment of historical resources present on properties within the District's jurisdiction. The Board Policy and Administrative Regulation require completion of an HRI of a school campus prior to approval of either a master plan or design of a school facilities project at that campus. In 2022, the District commissioned an HRI of the Grant ES campus to determine whether there are historical resources present, and if so, to identify character-defining features and spaces to aid in matters related to site planning and facilities management at the campus moving forward. The campus HRI was prepared in conformance with Board Policy and Administrative Regulation 7113 as they relate to Grant ES (see Appendix F).

Grant Elementary School Historic District

The HRI identified the Grant Elementary School Historic District (historic district) at the Grant ES campus as eligible for listing in the CRHR and for designation as a City of Santa Monica historic district under Chapter 9.56.100 (Landmarks and Historic Districts Ordinance) of the Santa Monica Municipal Code (SMMC) (ARG 2022). Significance of the historic district is derived from the synergy between contributing buildings and site features; no one building or site feature on the campus appears to be individually eligible when evaluated independently of the larger historic district. Buildings B, C, D, E, G, and H; the landscaped courtyard bounded by Buildings B, C, D, and G; and the paved forecourt and flagpole at the north end of the campus as approached from Pearl Street are contributing elements of the historic district; however, other buildings and site/landscape features do not contribute to the historic district (see Table 5.3-4, *Features in the Historic District*, and Figure 5.3-1, *Historic District Boundary*). All other buildings and features on campus were determined ineligible for listing at the federal, state, and local levels (ARG 2022).

Table 5.3-4 Features in the Historic District

Current Feature Name	Year Built	Relation to District	Building Style
Buildings			
Building A	1954	Non-Contributor	Mid-century Modern
Building B	1940	Contributor	PWA Moderne
Building B (north addition)	1954	Non-Contributor	Mid-century Modern
Building C	1936	Contributor	PWA Moderne
Building D	1936	Contributor	PWA Moderne
Building E	1945	Contributor	PWA Moderne
Building F	1968	Non-Contributor	Mid-century Modern
Building G	1940	Contributor	PWA Moderne
Building H	1945	Contributor	PWA Moderne
Building K	1945	Contributor	PWA Moderne
Site Features			
Central Garden (Landscaped courtyard bounded by Buildings B, C, D, and G)	1936	Contributor	N/A
Covered breezeways and corridors connecting the buildings	Unknown	Contributor	N/A
Paved forecourt and flagpole at the north end of the campus	Unknown	Contributor	N/A

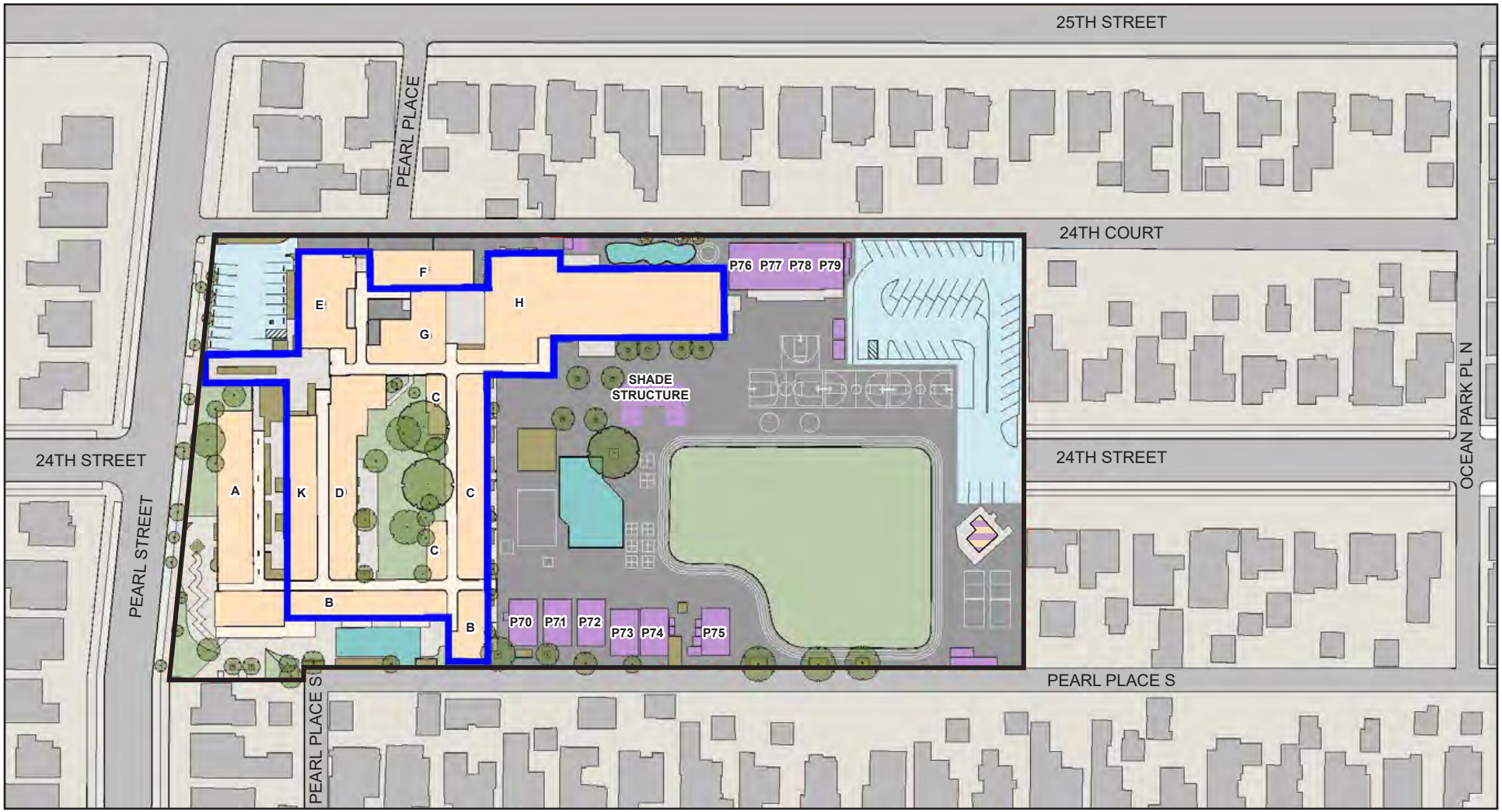
Source: Architectural Resources Group 2022.

Contributing Resources

Resources that have been found to contribute to the historic identity of a district are referred to as district contributors. Resources located within the historic district boundaries that do not contribute to its significance are identified as non-contributors (as shown in Table 5.3-4). Contributing resources were identified as such if they satisfied the following conditions:

- They date to the campus's period of significance (1936 to 1945)
- They retain sufficient integrity to convey their association with applicable historic contexts

Figure 5.3-1 - Historic District Boundary



Source: Johnson Favaro, 2022.

5. Environmental Analysis
CULTURAL RESOURCES

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Generally, if a building or other resource has one or more minor alterations but retains most of its original features, it was treated as a contributing element of the campus. Alterations including window replacement, door replacement, and installation of solar panels are common and, in most instances, do not result in dramatic aesthetic changes so long as doors and windows are installed in original openings. As shown in Table 5.3-4 and on Figure 5.3-1, the following have been identified as contributors to the historic district:

- Building B (built 1940; excludes the north addition)
- Building C (built 1936)
- Building D (built 1936)
- Building E (built 1945)
- Building G (built 1940)
- Building H (built 1945)
- Building K (built 1945)
- Covered breezeways and corridors connecting the above buildings
- Paved forecourt and flagpole at front (north) of campus
- Central Garden (Landscaped courtyard bounded by Buildings B, C, D, and G)

The above-listed buildings are all designed in the PWA Moderne style and all constructed within the school's primary period of development (1936 to 1945), and they all possess a common unit of characteristics that renders them compatible with one another and reflective of institutional development patterns and architectural values associated with the Great Depression and wartime periods.

Some contributing buildings—notably, Buildings B, C, G, H, and K—are more restrained in their architectural styling than others. Buildings D and E, by contrast, constitute the front of the campus and are its public face when viewed from Pearl Street, and these buildings have a greater degree of articulation and detail than Buildings B, C, G, H, and K. However, none of the buildings have a level of articulation that would render them individually eligible. It is the synergy between these buildings and their associated site and landscape features that define the campus's sense of place.

Noncontributing Resources

If a resource post-dates the period of significance, it was considered a non-contributing element of the campus. Buildings that were inserted into the campus after its primary period of development deviate from earlier improvements with respect to their siting, orientation, and style. They do not have the same visual and contextual qualities as contributing elements of the campus. The following have been identified as non-contributors to the historic district:

- Building A (built 1954; falls outside period of significance)
- Building B, north addition only (built 1954; falls outside period of significance)
- Building F (built 1965; falls outside period of significance)

All other campus improvements not identified above—including the portable/modular/ancillary buildings and other site/landscape features—also do not contribute to the significance of the historic district.

Later additions to the campus do not contribute to its significance. Building A and the north addition to Building B were both constructed in 1954, outside the period of significance, and while they are not incompatible with the rest of the campus, their Mid-century Modern architectural styling and placement at the front of the campus do not bear a particularly strong relationship with other buildings and site features. They also do not convey the same historic contexts and themes that are expressed elsewhere on campus. Building F, which is appended to the east façade of Building G, is a later addition that dates to 1965, far outside the established period of significance. It does not bear a particularly strong relationship with the contributing buildings and site/landscape features comprising the campus.

Character-Defining Features

Character-defining features are physical elements of a resource that define its historic character and help to convey its significance. In instances of future change to a historic resource, character-defining features should be retained to the greatest extent feasible in order to ensure that a resource can continue to physically represent its historical period. The following are character-defining features for the Grant ES campus:

Site and Setting

- Orientation to the north, toward Pearl Street
- Formal, monumental massing
- Decentralized plan comprising multiple semi-attached buildings
- Semi-enclosed circulation corridors connecting individual buildings
- Paved forecourt and flagpole at primary (north) entrance to campus
- Central landscaped garden framed by Buildings B, C, D, and G

Building Exteriors (contributing buildings)

- Low building profiles, from 1 to 2 stories tall
- Simple, rectilinear building forms
- Flat roofs and parapets
- Smooth stucco exterior walls
- Flush-mounted doors
- Tall, narrow window channels
- Shallow canopies with reeded details above some windows
- Rounded building corners
- Geometric window grilles (north façade of Building B)
- Canopy letters that spell "GRANT SCHOOL" (north façade of Building B)
- Reeded pilasters (Building E)

Building interiors have been extensively modified over the years. Therefore, no interior character-defining features were identified.

Evaluation of Historic Integrity

Historic integrity is the ability of a property to convey its significance. It is defined as the "authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic period" (NPS 1997a) The NPS defines seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association.

To be eligible for listing, a resource must retain enough of its historic character or appearance to be recognizable as a historic resource and convey the reason(s) for its significance. The following is an assessment of Grant ES against each aspect of integrity.

- **Location.** Location is the place where the historic property was constructed or the place where the historic event occurred. The Grant ES campus remains in the same location as it has since 1936; therefore, the campus retains integrity of location**.**

- **Design.** Design is the combination of elements that create the form, plan, space, structure, and style of a property. The campus generally retains its original plan, configuration, and design intent from its 1936-1945 period of significance, though some additions and other changes have since taken place. The insertion of Buildings A and the north addition to Building B, both completed in 1954, resulted in changes to the campus as it is experienced from its primary public vantage point along Pearl Street. However, the campus's essential planning framework and orientation around a series of courtyards and other interstitial spaces remain intact. Similarly, the original design intent has been somewhat modified by the replacement of original doors and windows, but original fenestration patterns remain intact. Therefore, the campus retains integrity of design, though this aspect of integrity has been compromised.

- **Setting.** Setting is the physical environment of a historic property constituting topographical features, vegetation, manmade features, and relationships between buildings or open space. Aerial photographs of the subject campus show that when it was originally built in 1936, the surrounding area was somewhat sporadically developed with single-family residences, though the city blocks adjacent to the campus had previously been subdivided into residential neighborhoods. These blocks were incrementally filled in with new houses over time, as they were intended to, resulting in the maturation of the surrounding neighborhood, but no substantial changes to the essential land use patterns in the immediate vicinity of the campus. Therefore, the campus retains integrity of setting.

- **Materials.** Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. Some of the campus's historic materials have been removed and replaced. This includes the replacement of original steel and wood windows with contemporary metal windows, and the replacement of original wood doors with contemporary steel doors. Some, but not all of the original doors and windows have been replaced, and the replacements are generally sensitive in their approach to materiality. However, on the whole original materials associated with the campus remain intact. The stucco walls, metal grilles, and other materials dating to the campus's 1936 to 1945 period of significance continue to be important features of

the campus and its buildings. Therefore, the campus retains integrity of materials, though this aspect of integrity has been compromised.

- **Workmanship.** Workmanship is the physical evidence of the crafts of a particular culture, people or artisan during any given period in history or pre-history. Some elements of the campus's historic building fabric—in particular, original doors and windows—have been removed. However, most of the distinguishing characteristics that provided the campus with its distinctive character, as well as architectural details that express the skill of the design, remain largely intact. The campus, then, continues to convey the physical evidence of technological practices and aesthetic principles from its 1936 to 1945 period of significance. Therefore, the campus retains integrity of workmanship, though this aspect of integrity has been compromised.

- **Feeling.** Feeling is a property's expression of the aesthetic or historical sense of a particular period of time. In spite of additions that were made to the campus in the period after its 1936 to 1945 period of significance—including the addition of Buildings A and F, an addition to the north façade of Building B, and the insertion of multiple modular and relocatable buildings—the campus retains most of its essential character-defining features and appearance. It retains the distinctive look and feel of a Depression era/early postwar era school campus through its architectural forms and details. Therefore, the campus retains integrity of feeling.

- **Association.** Association is the direct link between an important historic event or person and a historic property. Through its combination of site planning and architectural characteristics, the campus retains the distinctive look, feel, and appearance of a public school campus dating to the Depression and very early postwar periods. Therefore, the campus retains integrity of association.

The Grant ES campus retains integrity of location, setting, feeling, and association. It also retains integrity of design, materials, and workmanship, though these three aspects of integrity have been compromised. When these aspects are weighed together, the campus has sufficient integrity to be eligible for state and local listing. However, as previously noted, it does not appear to retain sufficient integrity for listing in the NRHP because of the higher integrity thresholds of the federal registration program.

5.3.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

C-1 Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

C-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

C-3 Disturb any human remains, including those interred outside of dedicated cemeteries.

The IS/NOP, included as Appendix B, substantiates that impacts associated with the following thresholds would be less than significant; therefore, these impacts will not be further addressed in this DEIR:

- Threshold C-3

This impact is addressed in Chapter 6, *Other CEQA Considerations*, and in Appendix B of this DEIR.

5.3.3 Environmental Impacts

5.3.3.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Initial Study/Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.3-1: The Proposed Project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. [Threshold C-1]

On-Campus Historic Resources

The Grant Elementary School Historic District, is a historic resource that is eligible for listing in the California Register and as a local (City of Santa Monica) Landmark. The historic district is comprised of seven contributing buildings and three contributing site and landscape features, as shown in Table 5.3-4. None of the historic district contributors were found to be individually eligible for listing. No other buildings and improvements on the campus are eligible for listing or considered historical resources for purposes of CEQA.

As discussed in the historic resources impacts assessment prepared for the Proposed Project, a project has the potential to impact a historical resource if the project causes a "substantial adverse change" to the significance of a historical resource. Substantial adverse change is the demolition or material alteration in an adverse manner of those physical characteristics of a historical resource that convey its significance and justify its inclusion in, or eligibility for, the CRHR.

Implementation of the Proposed Project would include multiple improvements to the Grant ES campus, which would be implemented across three phases and over approximately six years, between summer 2024 and summer 2030. The majority of the proposed improvements would be in areas of the campus that do not contain historical resources, including alterations to Building A, reconfiguration of open spaces and parking lots, and removal of all existing portable structures. Because these proposed improvements would not involve buildings and features that are within the boundaries of the historic district, they would not result in impacts to the historic district (ARG 2023).

Additional aspects of the Proposed Project would occur within the boundaries of the historic district, including the alteration of two district contributors (Building G and the central garden) and the removal of a portion of one district contributor (Building B).

Alterations to Historic District Contributors

Alterations to Building G, a historic district contributor, would occur during Phase 1 of the Proposed Project, which would include renovation and expansion of the existing library (Building F, which is not in the historic district) and improvement to the Central Garden. The library would be expanded and renovated to add 250 square feet of space to the west in a currently paved area. Buildings F (Library) and G (Computer Lab/Classrooms) would be combined by removing the western wall of Building F and eastern wall of Building G to create a new Library and Maker space, totaling approximately 5,955 square feet. All proposed improvement during Phase 1 of the Proposed Project, including alteration to Building G, would occur within the interior of the existing building and would not require any building removal.

Proposed improvements to Building G would require extensive alterations to Building G; however, most of these alterations would affect interior spaces, which do not contain any character-defining features. Exterior alterations to Building G would be less intensive, and the consolidation of Buildings F and G would not be visible from exterior vantage points. This consolidation would not alter the massing or appearance of the building. Existing door openings along the west façade of Building G would be replaced with new, larger, retracting doors. The new openings would be visually compatible with the historic district's simple architectural vocabulary. Specifically, to complement historic conditions, the new retracting doors would have rectilinear forms, would be framed in steel, and would be articulated with simple geometric details that take inspiration from the geometric window grilles on the adjacent Building D. Their installation would modify the appearance of Building G, but not to the extent that the building would not be able to convey its historical and visual association with the historic district. Its form, massing, and materials would remain largely intact, and the building would continue to read as a product of Great Depression-era construction. Building G would continue to be a district contributor at Project completion.

The campus's historic district features a Central Garden with mature specimen trees that would be preserved. Walkways and seating for students and faculty would be provided in the courtyard to increase pedestrian circulation in this area of the campus. California native plantings would be provided in the central garden near the existing mature trees. The Proposed Project would require the removal and potential relocation of one tree (windmill palm) to accommodate an ADA ramp leading to Building D; however no sensitive tree species would be removed. New ADA-accessible paved paths would be added to facilitate access across the space; existing barriers to entry, including low concrete perimeter benches, would be removed; and new trees and drought-tolerant plant beds would be added to enhance the landscape and activate the space. However, the courtyard would retain its essential form and configuration, and all existing trees that articulate the space would remain in place—including two mature specimens that are believed to predate the school's original construction. The central courtyard, like Building G, would also continue to be a district contributor upon completion of the Proposed Project.

Partial Demolition of a Historic District Contributor

Phase 3 of the Proposed Project would require approximately 3,545 square feet of demolition of the existing 6,830-square-foot Building B, a contributor to the historic district, which would include the removal of one kindergarten classroom and one special education classroom from the southern end of Building B.

A new 23,645-square-foot, two-story (34-foot maximum height) classroom building would be developed to replace the removed portion of Building B and would be located within the boundaries of the historic district. The new building would include one teaming studio, two preschool classrooms, one transition kindergarten classroom, and four kindergarten classrooms on the ground floor. The second floor would include eight upper-elementary classrooms. An existing breezeway on the east façade of Building B, which faces the central courtyard, would be retained and incorporated into the new classroom building to retain a sense of visual continuity between the replacement building and other district contributors dating to the 1930s and '40s.

Per the CEQA Guidelines, the demolition of a historical resource is typically considered an unavoidable impact that cannot be mitigated to a level of less than significant. However, in the context of a historic district, this principle applies to the historic district as a whole, not to any single building or feature. In many instances it is possible for limited demolition to take place in a district without adversely affecting the integrity of the entire district, provided that sufficient historic fabric remains to adequately convey the reasons underpinning the historical significance of the historic district. Consistent with this guidance, the Proposed Project would not result in a substantial adverse change to the significance of the Grant Elementary School Historic District.

Although Building B is a historic district contributor, it is at the southwest section of the historic district and is not publicly visible. Building B is adjacent to single-family residences along the Pearl Court alley, which obscure views of the building from public vantage points. Additionally, Building B is also less articulated than some other district contributors like the public-facing Buildings D and E, and it has already been altered with the construction of an addition to its north façade in 1954. Thus, Building B does not play a singularly significant role in expressing the significance of the historic district to the extent that the partial demolition of the existing building would compromise the integrity of the historic district in its entirety.

The retention of the existing breezeway on the east façade of Building B and its subsequent incorporation into the design of the new two-story classroom building would also reduce the visual impact of demolition and new construction on the historic district. Retention of the breezeway would ease the visual transition between the core of the historic district and adjacent new construction.

As a whole, the Grant Elementary School Historic District would retain its character-defining features upon completion of the Proposed Project. Despite the partial demolition of Building B, the historic district would retain nine of its ten contributing features (90 percent), including six of its seven contributing buildings (86 percent), which is enough of the district's historic fabric and contributing features to convey its historical significance.

Impacts to the Historic District Related to New Construction

Phase 2 of the Proposed Project would include the construction of a new 10,626-square-foot, one-story classroom building with six classrooms and a rooftop garden directly south of Building C. The new building would not be within the historic district, but would be adjacent to its boundary and would be partially visible from within the historic district. However, the new building would be physically detached from the nearest district contributor (Building C) and it would be set far back enough from Building C and other district

contributors to where it would not overwhelm the prevailing scale or character of the historic district. Its presence also would not compromise key views of the historic district, which is oriented inward and is principally experienced from within the central courtyard and from the north on Pearl Street. By contrast, the new classroom building would be on an ancillary site to the rear of the historic district overlooking the utilitarian rear façade of Building C; this site does not provide important views of the historic district.

Summary

The Proposed Project would include alterations to two historic district contributors, demolition and replacement of one historic district contributor, and construction of one new building adjacent to the historic district. These changes would have a nominal impact on the historic district as a whole and would not result in the demolition of material impairment of the entire district. The historic district would lose a portion of one contributor (Building B), but it would retain the vast majority of its contributing elements and character-defining features. Thus, the historic district would continue to retain most of its historic fabric, and would continue to be eligible for listing in the CRHR and as a local (City of Santa Monica) Landmark at completion of the Proposed Project. Therefore, impacts to the Grant Elementary School Historic District would be **less than significant**.

Off-Campus Historic Resources

The Grant ES campus is near two historical resources—the Baxter Residence at 2450 25th Street and adjacent to the eastern boundary of the campus along 24th Court, and the Sunset Park Residential Historic District adjacent to the northern boundary of the campus along Pearl Street. Implementation of the Proposed Project would be confined to the boundaries of the Grant ES campus, and the proposed changes to the campus would not compromise the significance or integrity of either of these historical resources. Thus, the Proposed Project would not result in impacts to any off-campus historical resources in the vicinity of the Grant ES campus. Therefore, impacts would be **less than significant**.

Impact 5.3-2: The Proposed Project would not cause a substantial adverse change in the significance of an archaeological resources pursuant to Section 15064.5. [Threshold C-2]

Based on the cultural resources record search results, negative pedestrian survey, negative Sacred Lands File search results, and review of historic USGS topographic quadrangle maps and USDA historic aerial photographs, the potential for buried historic or prehistoric archaeological resources in the undeveloped portions of the campus is considered low (Cogstone 2023). However, although the majority of the campus has already been subjected to grading activities associated with existing development, the campus may still contain buried deposits in undeveloped areas and in sediments that are located beneath the previous level of disturbance. Construction of the Proposed Project would involve ground disturbance, earthwork, and excavation across portions of the campus. Therefore, there is a potential for unknown buried resources to be uncovered during ground-disturbing activities, and impacts are considered **potentially significant**. Implementation of **Mitigation Measure CUL-1** would reduce impacts to less than significant levels.

5.3.4 Mitigation Measures

Impact 5.3-2

CUL-1 Prior to issuance of any permits allowing ground-disturbing activities for the Proposed Project (for each individual phase of the Proposed Project), the District shall ensure that an archaeologist who meets the Secretary of the Interior's standards for professional archaeology has been retained for the Proposed Project and will be on-call during all grading and other significant ground-disturbing activities that would occur beneath the existing artificial fill. The Qualified Archaeologist shall ensure that the following measures are followed for the Proposed Project:

- Prior to any ground disturbance, the Qualified Archaeologist, or their designee, shall provide worker environmental awareness protection training to construction personnel regarding regulatory requirements for the protection of cultural (prehistoric and historic) resources. As part of this training, construction personnel shall be briefed on proper procedures to follow should unanticipated cultural or paleontological resources be made during construction.

- In the event that a prehistoric archeological site (such as any unusual amounts of stone, bone, or shell) or a historic-period archaeological site (such as concentrated deposits of bottles or bricks, amethyst glass, or other historic refuse), is uncovered during grading or other construction activities, all ground-disturbing activity within 50 feet of the discovery shall be halted. The District shall be notified of the potential find and a qualified archeologist shall be retained to investigate its significance.

- If significant Native American cultural resources are discovered for which a treatment plan must be prepared, the project applicant or the archaeologist on call shall contact the applicable Native American tribal representative(s). If requested by the Native American tribe(s), the project applicant or archaeologist on call shall, in good faith, consult on the discovery and its disposition (e.g., avoidance, preservation, reburial, return of artifacts to tribe).

- Any previously undiscovered resources found during construction will be recorded on appropriate California Department of Parks and Recreation 523 forms and evaluated for significance under all applicable regulatory criteria. If the archaeologist determines that the find does not meet the California Register of Historic Resources standards of significance, construction may proceed. If the find is determined to be significant by the qualified archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with the District to follow accepted professional standards such as further testing for evaluation or data recovery, as necessary. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, and analyzes and interprets the results.

5.3.5 Level of Significance After Mitigation

Mitigation Measure CUL-1 would be implemented as part of the Proposed Project and would require cultural resources sensitivity training for construction workers, avoidance of any previously unidentified archaeological sites, and appropriate treatment of unearthed archaeological resources during construction. Potential impacts to unknown resources would be mitigated to **less than significant** through the implementation of **Mitigation Measure CUL-1**.

5.3.6 Cumulative Impacts

Development of the Proposed Project and related projects have the potential to encounter and potentially degrade historic resources and cultural resources. However, similar to the Proposed Project, each related project would be expected to comply with PRC Section 15064.5, perform site-specific cultural analyses, implement mitigation measures if needed, and comply with other applicable regulatory compliance measures. The Proposed Project would not result in an adverse change in the significance of a historical resource. The Grant ES campus does not contain known archeological resources or human remains. However, because the Proposed Project would conduct earthwork activities on previously undisturbed portions of the campus, the Proposed Project would require mitigation measures to minimize its impact to potential archeological materials to a less than significant level and reduce the potential for the project to contribute to cumulative impacts to cultural resources. Therefore, the Proposed Project's contribution to cumulative cultural resource impacts would be considered less than cumulatively considerable, and the Proposed Project's impacts would be **less than significant**.

5.3.7 References

Architectural Resources Group (ARG). 2022, January. *Grant Elementary School Campus Plan Project Historical Resources Inventory Report*.

———. 2023, March. *Grant Elementary School Campus Plan Project Historical Resources Impact Assessment*.

Bureau of Land Management (BLM). 2023. *Native American Graves Protection and Repatriation Act*.

Cogstone. 2023, August. Archaeological and Paleontological Resources Assessment for the Grant Elementary School Campus Master Plan Project, City of Santa Monica, Los Angeles County, California.

Grimmer, Anne E. and Kay D. Weeks. 2010, August. New Exterior Additions to Historic Buildings: Preservation Concerns. Preservation Brief 14. Prepared for the National Park Service. Washington, DC.

National Park Service (NPS). 1997a. How to Complete the National Register Registration Form. National Register Bulletin 16A.

———. 1997b. How to Apply the National Register Criteria for Evaluation. National Register Bulletin 15.

United States Department of Agriculture (USDA). 2023. *Archaeological Resources Protection*.

5.4 ENERGY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for energy-related impacts associated with the Grant Elementary School Campus Master Plan (Proposed Project) and ways in which it would reduce unnecessary energy consumption, consistent with the suggestions in Appendix F of the CEQA Guidelines. Energy service providers to the Grant ES campus include Southern California Edison (SCE) for electrical service and Southern California Gas Company (SoCalGas) for natural gas.

During the Initial Study/Notice of Preparation (IS/NOP) public review period a California Environmental Quality Act (CEQA) scoping meeting was conducted on February 7, 2023. However, comments pertaining to energy were not raised during this review period. The IS/NOP and all scoping comment letters are included as Appendices B and C of this document.

5.4.1 Environmental Setting

Section 21100(b)(3) of the CEQA Guidelines requires that an EIR include a detailed description of mitigation measures proposed to minimize significant effects on the environment, including but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy. Appendix F of the State CEQA Guidelines states that, to ensure that energy implications are considered in project decisions, the potential energy implications of a project shall be considered in an EIR, to the extent relevant and applicable to the project. Appendix F further states that a project's energy consumption and proposed conservation measures may be addressed, as relevant and applicable, in the project description, environmental setting, and impact analysis portions of technical sections as well as through mitigation measures and alternatives.

In accordance with Appendices G and F of the State CEQA Guidelines, this DEIR includes relevant information and analyses that address the energy implications of the Proposed Project. This section summarizes the Proposed Project's anticipated energy needs, impacts, and conservation measures. Other aspects of the Proposed Project's energy implications are discussed elsewhere in this DEIR, including Chapter 3, *Project Description*, and Sections 5.2, *Air Quality*; and 5.7, *Greenhouse Gas Emissions*.

5.4.1.1 REGULATORY BACKGROUND

Federal Regulations

Federal Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 was established in response to the 1973 oil crisis. The act created the Strategic Petroleum Reserve, established vehicle fuel economy standards, and prohibited the export of US crude oil (with a few limited exceptions). It also created Corporate Average Fuel Economy (CAFE) standards for passenger cars starting in model year 1978. The CAFE standards are updated periodically to account for changes in vehicle technologies, driver behavior, and/or driving conditions.

The federal government issued new CAFE standards in 2012 for model years 2017 to 2025 that required a fleet average of 54.5 miles per gallon (mpg) for model year 2025. However, on March 30, 2020, the

US Environmental Protection Agency (EPA) finalized an updated CAFE and greenhouse gas (GHG) emissions standards for passenger cars and light trucks and established new standards covering model years 2021 through 2026, known as the Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021–2026. Under SAFE, the fuel economy standards will increase 1.5 percent per year compared to the 5 percent per year under the CAFE standards established in 2012. Overall, SAFE requires a fleet average of 40.4 mpg for model year 2026 vehicles (85 Federal Register 24174 (April 30, 2020)).

On December 21, 2021, under direction of Executive Order (EO) 13990 issued by President Biden, the National Highway Traffic Safety Administration repealed Safer Affordable Fuel Efficient Vehicles Rule Part One, which had preempted state and local laws related to fuel economy standards. In addition, on March 31, 2022, the National Highway Traffic Safety Administration finalized new fuel standards in response to EO 13990. Fuel efficiency under the standards proposed will increase 8 percent annually for model years 2024 to 2025 and 10 percent annually for model year 2026. Overall, the new CAFE standards require a fleet average of 49 mpg for passenger vehicles and light trucks for model year 2026, which would be a 10 mpg increase relative to model year 2021 (NHTSA 2022).

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (Public Law 110-140) seeks to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. It also seeks to improve the energy performance of the federal government. The Act set higher CAFE standards; the Renewable Fuel Standard; appliance energy efficiency standards; building energy efficiency standards; and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration (USEPA 2022).

Energy Policy Act of 2005

Passed by Congress in July 2005, the Energy Policy Act includes a comprehensive set of provisions to address energy issues. This Act includes tax incentives for energy conservation improvements in commercial and residential buildings, fossil fuel production and clean coal facilities, and construction and operation of nuclear power plants, among other things. Subsidies are also included for geothermal, wind energy, and other alternative energy producers.

National Energy Policy

Established in 2001 by the National Energy Policy Development Group, the National Energy Policy is designed to help the private sector and state and local governments promote dependable, affordable, and environmentally sound production and distribution of energy for the future. Key issues addressed by the energy policy are energy conservation, repair and expansion of energy infrastructure, and ways of increasing energy supplies while protecting the environment.

Natural Gas Pipeline Safety Act of 1968

The Natural Gas Pipeline Safety Act of 1968 authorizes the United States Department of Transportation to regulate pipeline transportation of flammable, toxic, or corrosive natural gas and other gases as well as the transportation and storage of liquefied natural gas. The Pipeline and Hazardous Materials Safety Administration within the Department of Transportation develops and enforces regulations for the safe, reliable, and environmentally sound operation of the nation's 2.6-million-mile pipeline transportation system.

State Regulations

California Energy Commission

The California Energy Commission (CEC) was created in 1974 under the Warren-Alquist Act as the State's principal energy planning organization to meet the energy challenges facing the state in response to the 1973 oil embargo. The CEC is charged with six basic responsibilities when designing state energy policy:

- Forecast statewide electricity needs.
- License power plants to meet those needs.
- Promote energy conservation and efficiency measures.
- Develop renewable energy resources and alternative energy technologies.
- Promote research, development and demonstration.
- Plan for and direct the state's response to energy emergencies.

California Public Utilities Commission

In September 2008, the California Public Utilities Commission (CPUC) adopted the Long-Term Energy Efficiency Strategic Plan, which provides a framework for energy efficiency in California through the year 2020 and beyond. It articulates a long-term vision, as well as goals for each economic sector, identifying specific near-term, mid-term, and long-term strategies to assist in achieving these goals. This Plan sets forth the following four goals, known as Big Bold Energy Efficiency Strategies, to achieve significant reductions in energy demand:

- All new residential construction in California will be zero net energy by 2020.
- All new commercial construction in California will be zero net energy by 2030.
- Heating, ventilation, and air conditioning (HVAC) systems will be transformed to ensure that their energy performance is optimal for California's climate.
- All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

With respect to the commercial sector, the Long-Term Energy Efficiency Strategic Plan notes that commercial buildings, which include schools, hospitals, and public buildings, consume more electricity than any other end-use sector in California. The commercial sector's five-billion-plus square feet of space accounts

for 38 percent of the State's power use and over 25 percent of natural gas consumption. Lighting, cooling, refrigeration, and ventilation account for 75 percent of all commercial electric use, while space heating, water heating, and cooking account for over 90 percent of gas use. In 2006, schools and colleges were in the top five facility types for electricity and gas consumption, accounting for approximately 10 percent of State's electricity and gas use.

The CPUC and CEC have adopted the following goals to achieve zero net energy levels by 2030 in the commercial sector:

- **Goal 1:** New construction will increasingly embrace zero net energy performance (including clean, distributed generation), reaching 100 percent penetration of new starts in 2030.
- **Goal 2:** 50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation.
- **Goal 3:** Transform the commercial lighting market through technological advancement and innovative utility initiatives.

Renewables Portfolio Standard

Senate Bills 1078, 107, X1-2, and Executive Order S-14-08

The California Renewables Portfolio Standard (RPS) Program was established in 2002 under Senate Bills (SB) 1078 (Sher) and 107 (Simitian). The RPS program required investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. Initially under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. EO S-14-08 was signed in November 2008, which expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). The CPUC is required to provide quarterly reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the state. For year 2020, the three largest retail energy utilities provided an average of 43 percent of their supplies from renewable energy sources. Community choice aggregators provided an average of 41 percent of their supplies from renewable sources (CPUC 2021).

Senate Bill 350

Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the RPS by establishing a goal of 50 percent of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent System Operator into a regional organization to promote the development of regional electricity transmission markets in the western

states and to improve the access of consumers served by the California Independent System Operator to those markets, pursuant to a specified process.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, which replaces the SB 350 requirements. Under SB 100, the RPS for public-owned facilities and retail sellers consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. SB 100 also established a new RPS requirement of 50 percent by 2026. Furthermore, the bill establishes an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Senate Bill 1020

SB 1020 was signed into law on September 16, 2022. It requires renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent by 2040. Additionally, SB 1020 requires all State agencies to procure 100 percent of electricity from renewable energy and zero-carbon resources by 2035.

Appliance Efficiency Regulations

California's Appliance Efficiency Regulations contain energy performance, energy design, water performance, and water design standards for appliances (including refrigerators, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings) that are sold or offered for sale in California (California Code of Regulations [CCR] Title 20, Sections 1600 to 1608). These standards are updated regularly to allow consideration of new energy efficiency technologies and methods (CEC 2017).

California Energy Code

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 (24 CCR Part 6). The code requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

On August 11, 2021, the CEC adopted the 2022 Building Energy Efficiency Standards, which were subsequently approved by the California Building Standards Commission in December 2021. The 2022 standards went into effect on January 1, 2023, replacing the 2019 standards. The 2022 standards include prescriptive photovoltaic system and battery requirements for high-rise, multifamily buildings (i.e., more than three stories) and noncommercial buildings such as hotels, offices, medical offices, restaurants, retail stores, schools, warehouses, theaters, and convention centers (CEC 2021).

California Green Building Standards

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards, CALGreen (24 CCR Part 11), as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[1] The mandatory provisions of CALGreen became effective January 1, 2011. In 2021, the CEC approved the 2022 CALGreen, which went into effect on January 1, 2023, replacing the 2019 standards.

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the CAFE standards under *Federal Regulations* in Section 5.4.1.1). In January 2012, the California Air Resources Board approved the Pavley Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions (CARB 2017).

Executive Order N-79-20

On September 23, 2020, EO N-79-20 was issued to set a time frame for the transition to zero-emissions (ZE) passenger vehicles, trucks, and off-road equipment. It directs the California Air Resources Board to develop and propose:

- Passenger vehicle and truck regulations requiring increasing volumes of new ZEVs (zero-emission vehicles) sold in the California toward the target of 100 percent of in-state sales by 2035.
- Medium- and heavy-duty vehicle regulations requiring increasing volumes of new ZE trucks and buses sold and operated in California toward the target of 100 percent of the fleet transitioning to ZEVs by 2045 everywhere feasible, and for all drayage trucks to be ZE by 2035.
- Strategies to achieve 100 percent zero emissions from all off-road vehicles and equipment operations in California by 2035, in cooperation with other state agencies, the EPA, and local air districts.

[1] The green building standards became mandatory in the 2010 edition of the code.

Regional

SCAG's 2020-2045 RTP/SCS

The 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), Connect SoCal, was adopted on September 3, 2020, and is an update to the 2016-2040 RTP/SCS (SCAG 2020). In general, the RTP/SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light duty trucks and thereby reduce energy consumption from these sources.

Connect SoCal focuses on the continued efforts of the previous RTP/SCSs to integrate transportation and land use strategies in development of the SCAG region through the horizon year 2045 (SCAG 2020). It forecasts that implementation of the plan will reduce vehicle miles traveled (VMT) per capita in year 2045 by 4.1 percent compared to baseline conditions for that year. Connect SoCal includes a "Core Vision" that centers on maintaining and better managing the transportation network for moving people and goods; expanding mobility choices by locating housing, jobs, and transit closer together; and increasing investments in transit and complete streets (SCAG 2020).

Local

Santa Monica–Malibu Unified School District Districtwide Plan for Sustainability

The District adopted its Districtwide Plan for Sustainability in 2019 to provide a strategic roadmap for formalizing and uniting the District's many existing sustainability initiatives; incorporating sustainability into Education Services and all aspects of student learning; and integrating climate protection, resource efficiency, waste management, and other sustainability practices into District operations. The Sustainability Plan establishes a framework for assessment and progress on each focus area by documenting baseline conditions, establishing key goals and performance indicators, highlighting current initiatives and best practices, recommending improvement strategies, and anticipating project costs and funding mechanisms (SMMUSD 2019). The Sustainability Plan builds on and advances the District's existing sustainability commitments by identifying goals and recommended strategies over eight sustainability focus areas: climate; education and engagement; energy efficiency and renewable energy; water; solid waste; transportation; food, nutrition, and wellness; and green building and operations.

5.4.1.2 EXISTING CONDITIONS

Electricity

The campus is in SCE's service area, which spans much of Southern California—from Orange and Riverside counties in the south to Santa Barbara County in the west to Mono County in the north (CEC 2022a). Total electricity consumption in SCE's service area was 103,597 gigawatt-hours in 2020 (CEC 2022c).[2] Sources of electricity sold by SCE in 2021, the latest year for which data are available, were:

[2] One gigawatt-hour is equivalent to one million kilowatt-hours.

- 31.4 percent renewable, consisting mostly of solar and wind
- 2.3 percent large hydroelectric
- 22.3 percent natural gas
- 9.2 percent nuclear
- 0.2 percent other
- 34.6 percent unspecified sources—that is, not traceable to specific sources (CEC 2022d)[3]

The Grant ES campus generates electricity demand from uses such as heating, cooling, and ventilation of buildings; operation of electrical systems; lighting; and use of on-site equipment and appliances. Electricity use data from CalEEMod are based on information provided by the District. The existing campus consumes approximately 47,402 kilowatt-hours per year.[4] Existing estimated electricity consumption for the campus is shown in Table 5.4-1, *Existing Campus Electricity Consumption.*

Table 5.4-1 Existing Campus Electricity Consumption

Land Use	Electricity (kWh/year)
Elementary School	47,402

kWh = kilowatt-hour

Natural Gas

SoCalGas provides gas service in the City of Santa Monica, including the Grant ES campus. The service area of SoCalGas spans much of the southern half of California, from Imperial County in the southeast to San Luis Obispo County in the northwest to part of Fresno County in the north to Riverside County and most of San Bernardino County in the east (CEC 2022b). Total natural gas consumption in SoCalGas's service area was 691,096 million cubic feet for 2020 (CEC 2022d). Natural gas use data from CalEEMod are based on information provided by the District. The existing campus consumes approximately 610,000 kilo-British thermal units per year.[5] Existing estimated natural gas consumption for the campus is shown in Table 5.5-2, *Existing Campus Natural Gas Consumption.*

Table 5.4-2 Existing Campus Natural Gas Consumption

Land Use	Natural Gas (kBTU/year)
Elementary School	610,00

kBTU = kilo-British thermal unit

[3] The electricity sources listed reflect changes after the 2013 closure of the San Onofre Nuclear Generating Station, which is owned by SCE.
[4] Based on information provided by the District for year 2019.
[5] Based on information provided by the District for year 2019.

Fuel Consumption

California is among the top producers of petroleum in the country, with crude oil pipelines throughout the state connecting to oil refineries in the Los Angeles, the San Francisco Bay, and the Central Valley regions. California is also one of the top consumers of fuel for transportation. This sector accounted for approximately 35 percent of California's total energy demand in 2020, which amounted to approximately 2,355.5 trillion British thermal units (USEIA 2020a). In 2020, California's transportation sector consumed approximately 433 million barrels of petroleum fuels, or 18,186 million gallons (USEIA 2020b). According to the CEC, California's 2021 fuel sales were approximately 13,818 million gallons of gasoline and 3,744 million gallons of diesel (CEC 2022e). In Los Angeles County, approximately 3,061 million gallons of gasoline and 224 million gallons of diesel fuel were sold in 2021 (CEC 2022e).

5.4.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

E-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

E-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

5.4.3 Environmental Impacts

5.4.3.1 METHODOLOGY

Project Design Features

The Proposed Project would include features that would reduce criteria air pollutant emissions:

- **PDF ENE-1.** New buildings are required to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and CALGreen (Title 24, Part 11).

In CEQA Guidelines Appendix F, Energy Conservation, to ensure energy implications are considered in project decisions, CEQA requires that EIRs include a discussion of the potential impacts of proposed projects, with particular emphasis on avoiding or reducing wasteful, unnecessary, or inefficient use of energy resources, which would include decreasing overall per capita energy consumption; decreasing reliance on fossil fuels such as coal, natural gas, and oil; and increasing reliance on renewable energy sources. Environmental effects may include the Proposed Project's energy requirements and its energy use efficiencies by amount and fuel type during demolition, construction, and operation; the effects of the Proposed Project on local and regional energy supplies; the effects of the Proposed Project on peak and base period demands for electricity and other forms of energy; the degree to which the Proposed Project complies with existing energy standards; the effects of the Proposed Project on energy resources; and the Proposed Project's projected transportation energy use requirements and overall use of efficient transportation alternatives, if applicable. The energy and fuel usage information in this section is based on the following:

- **Building Energy.** CalEEMod default energy rates, which are based on the CEC's 2018-2030 Uncalibrated Commercial Sector Forecast and the 2019 Residential Appliance Saturation Survey, are used to quantify electricity and natural gas use. Use of the CalEEMod default energy rates results in conservative estimates compared to the recently adopted 2022 Building Energy Efficiency Standards because the 2019 Residential Appliance Saturation Survey counted energy data for homes built between 1935 to 2015 with an average construction year of 1974. It is anticipated new buildings under the 2022 Standards would generally result in lower electricity use. Furthermore, the carbon intensity factor is based on the carbon dioxide equivalent (CO_2e) intensity factor of 452 pounds per megawatt hour (lbs./MWh) as reported in SCE's 2021 Sustainability Report (SCE 2022). Overall, using the fourth assessment report global warming potentials (AR4 GWPs) and the default CalEEMod intensity factors of 0.033 lb./MWh for methane (CH_4) and 0.004 lb./MWh for nitrous oxide (N_2O), the adjusted intensity factor for CO_2 is 449.98 lbs./MWh.

- **Construction Fuel Usage.** Fuel usage associated with construction-related vehicle trips was obtained from EMFAC2021, version 1.0.3, and OFFROAD2021, version 1.0.1. Construction equipment data were obtained from the District. Where specific information regarding proposed project-related construction activities was not available, construction assumptions were based on CalEEMod defaults.

5.4.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Initial Study/Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.4-1: Implementation of the Proposed Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. [Threshold E-1]

Short-Term Construction Impacts

Construction of development associated with the Proposed Project would create temporary increased demands for electricity and vehicle fuels compared to existing conditions and would result in short-term transportation-related energy use.

Electrical Energy

Construction activities associated with the Proposed Project would require electricity to power the construction equipment. The electricity use during construction would vary during different phases of construction. The majority of construction equipment during demolition and site preparation would be gas or diesel powered, and the later construction phases would require electricity-powered equipment for interior construction and architectural coatings. Overall, the use of electricity would be temporary in nature and would fluctuate according to the phase of construction. Additionally, it is anticipated that the majority of electric-powered construction equipment would be hand tools (e.g., power drills, table saws, compressors) and lighting, which would result in minimal electricity usage during construction activities. Therefore,

construction activities of the Proposed Project would not result in wasteful, inefficient, or unnecessary electricity demands as electricity consumption would be limited to tasks necessary to complete the Proposed Project's construction, and impacts would be **less than significant**.

Natural Gas Energy

It is not anticipated that construction equipment used for development accommodated by the Proposed Project would be powered by natural gas, and no natural gas demand is anticipated during construction. Therefore, **no impact** is anticipated with respect to natural gas usage during the Proposed Project's construction.

Liquid Fuels and Transportation Energy

Transportation energy use depends on the type and number of trips, VMT, fuel efficiency of vehicles, and travel mode. Additionally, transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. Energy consumption for each of the three phases of construction was calculated using the CalEEMod (version 2022.1) computer model and data from the EMFAC2021, version 1.0.2, and OFFROAD2021, version 1.0.3, databases. The results are shown in Table 5.4-3, *Construction-Related Fuel Usage*.

Table 5.4-3 Construction-Related Fuel Usage

	Gas		Diesel		Electricity	
Proposed Project Component	**VMT**	**Gallons**	**VMT**	**Gallons**	**VMT**	**kWh**
Construction Worker Commute	113,137	4,300	148	4	3,651	1,334
Construction Vendor Trips	3,134	595	23,010	3,173	3,134	595
Construction Truck Haul Trips	3	1	8,483	1,372	3	1
Construction Off-Road Equipment	N/A	0	N/A	86,747	N/A	0
Total	**116,274**	**4,896**	**31,641**	**91,296**	**3,651**	**1,334**

Source: CalEEMod Version 2022.1; EMFAC2021, Version 1.0.2; OFFROAD2021, Version 1.0.3.
Notes: VMT = vehicle miles traveled; kWh = kilowatt-hour

The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary. It is anticipated that the majority of off-road construction equipment, such as those used during demolition and grading, would be gas or diesel powered. In addition, all construction equipment would cease operating upon completion of the Proposed Project's construction. Thus, impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure. Furthermore, to limit wasteful and unnecessary energy consumption, the construction contractors are anticipated to minimize nonessential idling of construction equipment during construction, in accordance with 13 CCR Article 4.8, Chapter 9, Section 2449, which limits nonessential idling of diesel-powered off-road equipment to five minutes or less.

The Proposed Project would not result in wasteful, inefficient, or unnecessary use of energy during construction. It is anticipated that the construction equipment would be well maintained and meet the appropriate tier ratings per EPA emissions standards, so that adequate energy efficiency is achieved. Construction trips would not result in unnecessary use of energy since the campus is centrally located and is served by numerous regional freeway systems (e.g., Interstate [I]-10) that provide the most direct routes from various areas of the region. Electrical energy would be available for use during construction from existing power lines and connections, precluding the use of less efficient generators. Thus, energy use during construction of the Proposed Project would not be considered inefficient, wasteful, or unnecessary. Impacts would be **less than significant**.

Long-Term Impacts During Operation

Operation of the Proposed Project would create additional demands for electricity and natural gas compared to existing conditions due to the increase in building square footage. Operational use of energy would also include heating, cooling, and ventilation of buildings; water heating; operation of electrical systems, use of on-campus equipment and appliances; and indoor and outdoor lighting.

Electrical Energy

The proposed net increase in electricity consumption from the Proposed Project is shown in Table 5.4-4.

Table 5.4-4 Net Operation-Related Electricity Consumption

Land Use	Electricity (kWh/year)
Elementary School (Full Buildout)	510,580
Parking Lot (Full Buildout)	19,975
Total	**530,555**
Existing Elementary School	47,402
Net Operation-Related Electricity Consumption	483,153

Source: See Appendix G, Energy.
Notes: kWh=kilowatt-hour
For the most conservative results, electricity consumption from the Proposed Project does not account for energy reductions from existing buildings to be demolished. In addition, these estimates conservatively assume that electricity use from the parking lot (lighting) is new and does not assume any energy reductions from use of higher efficiency lighting or HVAC units.

Electrical service to the campus would continue to be provided by SCE through connections to existing off-campus electrical lines and new on-campus infrastructure, as needed for each phase. The Proposed Project would add approximately 73,071 square feet of building area to the campus and would reconfigure the playfield and playgrounds, and redevelop the parking area. As shown in the table, the net new electricity demand from these additional uses from the elementary school would total 483,153 kilowatt-hours per year. While the Proposed Project would generate new energy demand at the site, it would be required to comply with the applicable Building Energy Efficiency Standards and CALGreen requirements as well as the District's Sustainability Plan, including measures for energy efficient lighting and higher efficiency HVAC units. In addition, the Building Energy Efficiency Standards mandate an increase in building energy efficiency every three years, the new buildings to be constructed would be more energy efficient than the existing school

buildings to be replaced (CEC 2022g). In addition, as noted in Chapter 3, *Project Description*, the Proposed Project would be solar ready and would include features such as occupancy sensors for classrooms and offices that more efficiently use energy. These features would comply with the goals in Appendix F of the CEQA Guidelines, because the Proposed Project would promote the use of renewable energy and decrease reliance on fossil fuels to meet the electricity demands of the campus.

Because the Proposed Project would comply with these regulations and would provide features to decrease electricity use by the campus, it would not result in wasteful, inefficient, or unnecessary electricity demands even though the Proposed Project would consume more energy. Therefore, operation of the Proposed Project would result in a **less than significant** impact related to electricity.

Natural Gas Energy

The net new natural gas consumption associated with the Proposed Project is shown in Table 5.4-5. As seen in the table, the net new natural gas demand by the new elementary school buildings would total 1,102,714 kilo-British thermal units per year following buildout of the Proposed Project. Development associated with the Proposed Project would be built to meet the Building Energy Efficiency Standards, including measures for higher efficiency HVAC units for building heating. The Proposed Project would comply with the goals in Appendix F of the CEQA Guidelines, because these measures would reduce reliance on fossil fuels for the campus. It would not result in wasteful, inefficient, or unnecessary natural gas demands. Therefore, operation of the Proposed Project would result in **less than significant** impacts with respect to natural gas usage.

Table 5.4-5 Net Operation-Related Natural Gas Consumption

Land Use	Natural Gas (kBTU/year)
Elementary School	1,712,714
Existing Elementary School (2019)	610,000
Net Operation-Related Electricity Consumption	1,102,714

Source: See Appendix G, Energy.
Note: kBTU=kilo-British thermal units.
For the most conservative results, natural gas consumption from the Proposed Project does not account for energy reductions from existing buildings to be demolished.

Transportation Energy

The Proposed Project would result in the consumption of transportation energy during operation from the use of motor vehicles. The efficiency of the motor vehicles in use (average miles per gallon) is unknown and highly variable. Thus, estimates of transportation energy use are based on the overall VMT and related transportation energy use. The Project-related VMT would primarily come from students and staff. However, because student capacity and staffing would not increase or change after full buildout of the three construction phases, implementation of the Proposed Project would not result in additional trips or an increase in VMT and would not result in additional reliance on fossil fuel consumption. In addition, the Proposed Project would include electric vehicle charging stations, which would contribute to reducing reliance on fossil fuels. Therefore, there would be **no impact** with respect to operation-related fuel usage.

Impact 5.4-2: The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. [Threshold E-2])

The following evaluates consistency of the Proposed Project with California's RPS program and the Santa Monica–Malibu Unified School District Districtwide Plan for Sustainability.

California Renewables Portfolio Standard Program

The state's electricity grid is transitioning to renewable energy under California's RPS Program. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The RPS goals have been updated since adoption of SB 1078 in 2002. In general, California has RPS requirements of 33 percent renewable energy by 2020 (SB X1-2), 44 percent by 2024, 50 percent by 2026, 52 percent by 2027, 60 percent by 2030, 90 percent by 2035, 95 percent by 2040, and 100 percent by 2045. The RPS requirements established under SB 100 are also applicable to publicly owned utilities. The statewide RPS requirements do not directly apply to individual development projects, but to utilities and energy providers such as SCE, whose compliance with RPS requirements would contribute to the state objective of transitioning to renewable energy. The land uses accommodated by the Proposed Project would not change (school use) and would comply with the current and future iterations of the Building Energy Efficiency Standards and CALGreen. For instance, the Proposed Project would be solar ready and would establish lighting and equipment efficiency standards for all new equipment that meet or exceed Title 24 standards, in accordance with the Districtwide Plan for Sustainability. Therefore, implementation of the Proposed Project would not conflict with or obstruct implementation of California's RPS Program and impacts would be **less than significant**.

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SCAG adopted the 2020-2045 RTP/SCS, Connect SoCal, in September 2020. Connect SoCal finds that land use strategies that focus on new housing and job growth in areas rich with destinations and mobility options would be consistent with a land use development pattern that supports and complements the proposed transportation network. The overarching strategy in Connect SoCal is to plan for the southern California region to grow in more compact communities in transit priority areas and priority growth areas; provide neighborhoods with efficient and plentiful public transit; establish abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserve more of the region's remaining natural lands and farmlands (SCAG 2020). Connect SoCal's transportation projects help more efficiently distribute population, housing, and employment growth, and forecast development is generally consistent with regional-level general plan data to promote active transportation and reduce energy consumption. As shown in Section 5.6, *Greenhouse Gas Emissions*, the Proposed Project would provide redeveloped and modernized facilities for the existing and future students of Grant ES but would not result in an increase in student capacity or conflict with the goals in the RTP/SCS. The Proposed Project would not generate an increase in VMT and would not generate additional transportation energy demand or fossil fuel consumption from transportation. Therefore, implementation of the Proposed Project would not interfere with implementation of Connect SoCal, and impacts would be **less than significant**.

Santa Monica–Malibu Unified School District Districtwide Plan for Sustainability

Adopted by the District in 2019, the Sustainability Plan is intended to provide a road map to formalize and unite the District's existing sustainability initiatives in addition to incorporating and integrating sustainability practices into student learning and District operations.

While most of the measures under each focus area in the Sustainability Plan apply more broadly to District actions rather than to individual projects, the Proposed Project is consistent with the broad strategies outlined in the Sustainability Plan, particularly for the energy efficiency and renewable energy focus area. For instance, implementation of the Proposed Project would be required to comply with the latest Building Energy Efficiency Standards and CALGreen standards and would be solar ready. In addition, the Proposed Project would establish lighting- and equipment-efficiency standards for all new equipment that meet or exceed the California Building Standards Code. Therefore, the Proposed Project would not interfere with implementation of the District's Sustainability Plan, and impacts would be **less than significant**.

5.4.4 Mitigation Measures

No mitigation measures required.

5.4.5 Level of Significance After Mitigation

All impacts are **less than significant**.

5.4.6 Cumulative Impacts

The areas considered for cumulative impacts to electricity and natural gas supplies are the service areas of SCE and SoCalGas, respectively, described above in Section 5.4.1. Other development projects in the service area would generate increased electricity and natural gas demands. However, as with development associated with the Proposed Project, all projects within the SCE and SoCalGas service areas would be required to comply with the Building Energy Efficiency Standards and CALGreen, which would contribute to minimizing wasteful energy consumption. Therefore, cumulative impacts would be **less than significant**, and the Proposed Project's impacts would not be cumulatively considerable.

5.4.7 References

California Air Pollution Control Officers Association (CAPCOA). 2022. California Emissions Estimator Model (CalEEMod). Version 2022.1.0. Prepared by: ICF in collaboration with Sacramento Metropolitan Air Quality Management District.

California Air Resources Board (CARB). 2017, January 18. California's Advanced Clean Cars Midterm Review. https://ww2.arb.ca.gov/sites/default/files/2020-01/ACC%20MTR%20Summary_Ac.pdf.

California Energy Commission (CEC). 2017, January. 2016 Appliance Efficiency Regulations. https://pdf4pro.com/cdn/2016-appliance-efficiency-regulations-5104f7.pdf.

———. 2018a, May 9. Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. News release. https://www.energy.ca.gov/news/2018-05/energy-commission-adopts-standards-requiring-solar-systems-new-homes-first.

———. 2018b. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf.

———. 2021. May 19. Amendments to the Building Energy Efficiency Standards (2022 Energy Code) Draft Environmental Report. CEC-400-2021-077-D.

———. 2022a, January 24 (updated). Electric Utility Service Area California, 2020. https://cecgis-caenergy.opendata.arcgis.com/documents/CAEnergy::electric-utility-service-areas/explore.

———. 2022b, January 24 (updated). Natural Gas Detailed Utility Service Area California, 2020. https://cecgis-caenergy.opendata.arcgis.com/documents/natural-gas-utility-service-area-california-2020/explore.

———. 2022c, February 11 (accessed). Electricity Consumption by Planning Area. http://www.ecdms.energy.ca.gov/elecbyplan.aspx.

———. 2022d, February 11 (accessed). Gas Consumption by Planning Area. http://www.ecdms.energy.ca.gov/gasbyplan.aspx.

———. 2022e. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results. https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting.

———. 2022g, August. 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. https://www.energy.ca.gov/sites/default/files/2022-08/CEC-400-2022-010_CMF.pdf.

California Public Utilities Commission (CPUC). 2021, May. 2021 Padilla Report: Costs and Savings for the RPS Program (Public Utilities Code Section 913.3). https://www.cpuc.ca.gov/-/media/cpuc-website/industries-and-topics/documents/energy/rps/2021-padilla-report_final.pdf

———. 2023, July 20 (accessed). 2021 Power Content Label: Southern California Edison. https://www.energy.ca.gov/filebrowser/download/4676.

National Highway Traffic Safety Administration (NHTSA). 2021, August 5. USDOT Proposes Improved Fuel Economy Standards for MY 2024-2026 Passenger Cars and Light Trucks. https://www.nhtsa.gov/press-releases/fuel-economy-standards-2024-2026-proposal.

Santa Monica Malibu Unified School District (SMMUSD). 2019, February. Districtwide Plan for Sustainability. http://fip.smmusd.org/Sustainability032119.pdf.

Southern California Association of Governments (SCAG). 2020, September 3. Connect SoCal: The 2020–2045 Regional Transportation Plan / Sustainable Communities Strategy of the Southern California Association of Governments. https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx.

United States Energy Information Administration (EIA). 2020a. Table F33: Total Energy Consumption, Price, and Expenditure Estimates. https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_te.pdf.

———. 2020b. Table F16: Total Petroleum Consumption Estimates, https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_te.pdf.

United States Environmental Protection Agency (USEPA). 2022, February 14 (accessed). Summary of the Energy Independence and Security Act Public Law 110-140 (2007). https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act.

5. Environmental Analysis
ENERGY

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5.5 GEOLOGY AND SOILS

This section of the Draft Environmental Impact Report (DEIR) evaluates the Grant Elementary School Campus Master Plan Project's (Proposed Project) potential impacts to paleontological resources in the City of Santa Monica. The analysis in this section is based in part on the following technical reports:

- *Archaeological and Paleontological Resources Assessment for the Grant Elementary Campus Master Plan Project*, Cogstone, October 2023
- *Geotechnical Investigation Report*, Converse Consultants, December 2021

Complete copies of these technical reports are provided in Appendix F3 and Appendix H, respectively, of this Draft EIR.

The SMMUSD determined that an EIR would be required for the Proposed Project and issued an Initial Study/Notice of Preparation (IS/NOP) on January 13, 2023. A California Environmental Quality Act (CEQA) scoping meeting was conducted on February 7, 2023. No comment letters were received in response to the NOP related to geology and soils, including paleontological resources. The IS/NOP and all scoping comment letters are included as Appendices B and C of this DEIR.

5.5.1 Environmental Setting

State and local laws, regulations, plans, or guidelines related to paleontological resources that are applicable to the Proposed Project are summarized in this section.

5.5.1.1 REGULATORY BACKGROUND

State

California Public Resources Code

Requirements for paleontological resource management are included in PRC Division 5, Chapter 1.7, Section 5097.5, which states:

> A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

These statutes prohibit the removal, without permission, of any paleontological site or feature from land under the jurisdiction of the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, local agencies are required to comply with PRC Section 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others. PRC Section 5097.5 also establishes the removal of paleontological resources as a misdemeanor and requires

reasonable mitigation of adverse impacts to paleontological resources from developments on public (i.e., state, county, city, and district) land.

California Code of Regulations

Title 14, Section 4307: No person shall destroy, disturb, mutilate, or remove earth, sand, gravel, oil, minerals, rocks, paleontological features, or features of caves.

Regional

Society for Vertebrate Paleontology Professional Standards

The Society for Vertebrate Paleontology (SVP) has established standard guidelines for acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation. Most practicing professional paleontologists in the nation adhere closely to the SVP's assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. Most California State regulatory agencies accept the SVP standard guidelines as a measure of professional practice.

As defined by the SVP, significant nonrenewable paleontological resources are:

> [F]ossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years). (SVP 2010, p.11)

Numerous paleontological studies have developed criteria for the assessment of significance for fossil discoveries. In general, these studies assess fossils as significant if one or more of the following criteria apply:

1) The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;

2) The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;

3) The fossils provide data regarding the development of biological communities or interaction between palaeobotanical and paleozoological biotas;

4) The fossils demonstrate unusual or spectacular circumstances in the history of life; or

5) The fossils are in short supply and/or are in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

A geologic unit known to contain significant fossils is considered "sensitive" to adverse impacts if there is a high probability that earth-moving or ground-disturbing activities in that rock unit will either directly or

indirectly disturb, or destroy, fossil remains. The limits of the entire rock formation, both areal and stratigraphic, therefore define the scope of the paleontological potential in each case (SVP 1995, p. 23).

Fossils are contained within surficial sediments or bedrock and are therefore not observable or detectable unless exposed by erosion or human activity. Paleontologists cannot know either the quality or quantity of fossils prior to natural erosion or human-caused exposure. As a result, even in the absence of surface fossils, it is necessary to assess the sensitivity of rock units based on their known potential to produce significant fossils elsewhere within the same geologic unit (both within and outside of the study area), a similar geologic unit, or based on whether the unit in question was deposited in a type of environment that is known to be favorable for fossil preservation. Monitoring by experienced paleontologists greatly increases the probability that fossils will be discovered during ground-disturbing activities and that, if these remains are significant, successful mitigation and salvage efforts may be undertaken to prevent adverse impacts to these resources.

Paleontological Sensitivity

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In its "Standard Guidelines for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources," the SVP defines four categories of paleontological sensitivity (potential) for rock units: high, low, undetermined, and no potential (SVP 2010, p. 1–2).

- **High Potential.** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. Rocks units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations and some volcaniclastic formations (e. g., ashes or tephras), and some low-grade metamorphic rocks which contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils (e. g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones, etc.). Rock units which contain potentially datable organic remains older than late Holocene, including deposits associated with animal nests or middens, and rock units which may contain new vertebrate deposits, traces, or trackways are also classified as having high potential.

- **Low Potential.** Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule, e.g., basalt flows or Recent colluvium. Rock units with low potential typically will not require impact mitigation measures to protect fossils.

- **Undetermined Potential.** Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined

potential. Further study is necessary to determine if these rock units have high or low potential to contain significant paleontological resources. A field survey by a qualified professional paleontologist to specifically determine the paleontological resource potential of these rock units is required before a paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy.

- **No Potential.** Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources.

For geologic units with high potential, full-time monitoring is generally recommended during any Proposed Project–related ground disturbance (SVP 2010). For geologic units with low potential, full-time monitoring would not generally be required. For geologic units with undetermined potential, field surveys by a qualified vertebrate paleontologist should be conducted to specifically determine the palaeontologic potential of the rock units present in the area of the Proposed Project.

Local

City of Santa Monica General Plan

The Land Use and Circulation Element of the Santa Monica General Plan includes the following goal and policy that relate to paleontological resources:

Goal HP1: Preserve and protect historic resources in Santa Monica through land use decision-making process.

- **Policy HP1.10.** Review proposed development for potential impacts on unique archeological resources, paleontological resources, and incorporate appropriate mitigation measures to protect or document resources.

5.5.1.2 REGIONAL GEOLOGIC SETTING

The Grant ES campus is in the Los Angeles Basin, a sedimentary basin that includes the coastal plains of Los Angeles and Orange counties and out to Catalina Island. This region is bounded by the Santa Ana Mountains to the east, the Santa Monica Mountains to the north, and the San Joaquin Hills to the south. The marine Los Angeles Basin began to develop in the early Miocene, about 23 million years ago. Through time the basin transitioned to terrestrial deposition by the middle Pleistocene, about 1 million years ago.

The area is part of the coastal section of the northernmost Peninsular Range Geomorphic Province and is characterized by elongated northwest-trending mountain ridges separated by sediment-floored valleys. Subparallel faults branching off from the San Andreas Fault to the east create the local mountains and hills. The Peninsular Ranges Geomorphic Province is in the southwestern corner of California and is bounded by the Transverse Ranges Geomorphic Province to the north and the Colorado Desert Geomorphic Province to the east (Cogstone 2022).

5.5.1.3 LOCAL GEOLOGY AND PALEONTOLOGY

According to geologic mapping, the Grant ES campus is late Pleistocene (129,000 to 11,700 years ago), old shallow marine deposits on wave-cut surface. Various amounts of modern artificial fill and natural alluvial soils are present from the previous development of the school and were noted during the pedestrian survey (Converse Consulting 2021). The existing fill encountered in the borings extended to depths of approximately 2 to 3 feet below the ground surface. The geologic units are summarized based on information in Appendix F1 in geochronological order, from oldest to youngest.

Old Shallow Marine Deposits, Late Pleistocene

These floodplain deposits consist of poorly sorted, permeable clays to sands. Deposits are poorly consolidated and may be capped by poorly to moderately developed soils. These sediments were deposited by streams and rivers on canyon floors and in the flat floodplains of the area of the campus.

Artificial Fill, Modern

In California, most artificial fill is less than 100 years old and is associated with construction activities. The campus has been previously developed and contains moderately dense, fine to medium-graded silty sands, with small amounts of clay placed during prior development (Converse consultants 2021).

5.5.1.4 PALEONTOLOGICAL RESOURCES

Paleontological resources are fossils, or recognizable remains or evidence of past life on Earth, including bones, shells, leaves, tracks, burrows, and impressions. Paleontological resources are generally found within sedimentary rock formations. The City of Santa Monica rests on surface deposits of younger and older Quaternary alluvium, derived primarily from the Santa Monica Mountains to the north. The younger (i.e., Holocene, past 11,700 years) alluvial deposits do not contain significant vertebrate fossils, but these deposits are underlain by older (i.e., Pleistocene, 11,700 to 1.6 million years) Quaternary deposits that contain significant vertebrate fossils at varying depths, beginning as shallow as 6 feet beneath the ground surface. The campus is mapped as late Pleistocene old alluvial fan deposits. A records search and surveys were conducted for the Proposed Project.

Fossils of Monterey cypress (*Hesperocyparis macrocarpa*), Monterey pine (*Pinus radiata*), and Torrey pine (*Pinus sp. cf. P. torreyana*) have been found in middle to late Pleistocene deposits in the Wilshire District of Los Angeles. Fossils of Monterey cypress are also known from middle to late Pleistocene deposits in Costa Mesa, California, and the late Pleistocene Rancho La Brea asphalt seeps of the Wilshire District of Los Angeles (Cogstone 2022).

Methods to Identify Known Paleontological Resources

To evaluate the Proposed Project's potential effects on significant paleontological resources, an assessment of the campus was completed that included archival research and a pedestrian survey. The archival research included a desktop review of geologic mapping and scientific literature and a museum records search by the Los Angeles County Natural History Museum (NHMLA). The methodology and results of these studies are summarized below.

5. Environmental Analysis
GEOLOGY AND SOILS

Paleontological Records Search

A record search of the campus was obtained from the NHMLA. Additional records from the University of California Museum of Paleontology database, the PaleoBiology Database, and print sources were also reviewed for fossil records near the campus (Cogstone 2022). The NHMLA did not report any fossil localities at the school campus; however, as shown in Table 5.5-1, *Fossil Localities*, there are several fossil localities near the campus. Two Pleistocene localities within one mile of the campus in Santa Monica produced ground sloth, horse, and American lion.

The records search revealed that all the fossils previously recovered within a five-mile radius were at least six feet deep in deposits mapped as Pleistocene at the surface.

Table 5.5-1 Fossil Localities

Common Name	Taxon	Location	Approximate Distance from Grant ES (miles)	Formation Mapped at the Surface	Age	Locality	Depth
American Lion	*Panthera Atrox*	South of Olympic Blvd. on Michigan Ave. east of Cloverfield Blvd., Santa Monica	0.75	Younger alluvial fan (Qya)	Pleistocene	LACM 5462	6 feet
Ground sloth	*Paramylon*	Near Rose Ave. and Penmar Ave., Santa Monica	0.9	Younger alluvial fan (Qya)	Pleistocene	LACM 7879	>11 feet bgs
Horse	*Equus*		-				
Bison	*Bison sp.*	Southeast corner of Airport Blvd. and Manchester Ave.	6	Older alluvium (Qoe)	Pleistocene	LACM 4942	16 feet
Mammoth	*Mammuthus sp.*		-				
Hare	*Lepus*		-				
Elephant	*Proboscidea*	Los Angeles International Airport, Tom Bradley International Terminal	6	Older alluvium (Qoe)	Pleistocene	LACM 3264	25 feet
Mastodon	*Mammut sp.*	Manchester Ave. and Airport Blvd., Westchester	6	Older alluvial fan (Qoa)	Pleistocene	LACM 1180	13.5 feet
Horse	*Equus sp.*	Culver City East	5	Younger alluvial fan (Qya)	Pleistocene	unlisted	unknown
Camel	*Camelops sp.*						
Camel	*(Camelops sp.)*	Outfall Sewer at Exposition Blvd., Culver City	4	Younger alluvial fan (Qya)	Pleistocene	LAMC 3366	Shallow but unknown
Mastodon	*Mammut sp.*	Outfall Sewer at Rodeo, Culver City	5	Younger alluvial fan (Qya)	Pleistocene	LAMC 3367	Shallow but unknown
Horse	*Equus sp.*	Outfall Sewer Section 15, Sentous Ave. east	5	Younger alluvial fan (Qya)	Pleistocene	LAMC 3368	Shallow but unknown

Table 5.5-1 Fossil Localities

Common Name	Taxon	Location	Approximate Distance from Grant ES (miles)	Formation Mapped at the Surface	Age	Locality	Depth
		of Ballona Creek, Culver City					
Horse	*Equidae*	Outfall Sewer Section 10, Culver City	6	Younger alluvial fan (Qya)	Pleistocene	LAMC 3369	Shallow but unknown
Saber-toothed cat	*Smilodon sp.*	Outfall Sewer saber-tooth, Culver City	6	Younger alluvial fan (Qya))	Pleistocene	LAMC 3370	Shallow but unknown
Antique bison	*Bison antiquus*	Outfall Sewer Trench 19, Culver City	6	Younger alluvial fan (Qya))	Late Pleistocene	LACM 3371	Shallow but unknown
Horse	*Equus sp.*	Outfall Sewer, Culver City	6	Younger alluvial fan (Qya)	Late Pleistocene	LACM 3372	Shallow but unknown
Camel	*Camelops sp.*		-				
Deer	*Odocoileus sp.*		-				
Antique bison	*Bison antiquus*		-				
Bottae's pocket gopher	*Thomomys bottae*		-				
Mammoth	*Mammuthus sp.*	Near Jacob St. and Sentney Ave., west of Ballona Creek Culver City	5	Younger alluvial fan (Qya)	Pleistocene	LACM 4250	Unknown

Source: Cogstone 2022

Surveys

A survey of the campus was conducted by a trained paleontologist on May 4, 2022. The pedestrian survey consisted of 10-meter-wide transects because the campus is developed. Ground visibility was very poor (less than 2 percent) due to hardscaping and landscaping. All exposed areas with alluvial fans had been hardscaped and landscaped. Digital photographs were taken of the campus, including ground surface visibility and items of interest (see Appendix F3) (Cogstone 2022).

Paleontological Sensitivity

The Potential Fossil Yield Classification (PFYC) system, developed by professional resource managers in the Bureau of Land Management, has a multilevel scale based on demonstrated yield of fossils. The PFYC system provides additional guidance regarding assessment and management for different fossil yield rankings. The probability of finding significant fossils in a project area can be broadly predicted from previous records of

fossils recovered from the geologic units present in and/or adjacent to a study area. The geological setting and the number of known fossil localities help determine the paleontological sensitivity according to PFYC criteria. See Appendix F3 of this DEIR for the Paleontological Sensitivity Ranking Criteria matrix.

Using the PFYC system, geologic units are classified according to the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts within the known extent of the geological unit. Although significant localities may occasionally occur in a geologic unit, a few widely scattered important fossils or localities do not necessarily indicate a higher PFYC value; instead, the relative abundance of localities is intended to be the major determinant for the value assignment.

As described in Table 5.5-2, *Paleontological Sensitivity Survey*, the older alluvium less than five feet below the modern surface is assigned a low potential for fossils (PFYC 2) due to the lack of fossils in these deposits. Older alluvium sediments more than five feet below the modern surface are assigned a moderate potential (PFYC 3) due to similar deposits producing fossils at that depth near the campus. Artificial fill has very low potential for fossils (PFYC 1).

Table 5.5-2 Paleontological Sensitivity Survey

	PFYC Rankings				
Rock Unit	5. Very High	4. High	3. Moderate	2. Low	1. Very Low
Older alluvium, middle to late Pleistocene			More than five feet deep	Less than five feet deep	
Artificial fill, modern					X

Source: Cogstone 2022.

5.5.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

G-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)
- ii) Strong seismic ground shaking.
- iii) Seismic-related ground failure, including liquefaction.
- iv) Landslides.

G-2 Result in substantial soil erosion or the loss of topsoil.

G-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

G-4 Be located on expansive soil, as defined in Table 18-1B of the Uniform building Code (1994), creating substantial direct or indirect risks to life or property.

G-5 Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

G-6 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The IS/NOP, included as Appendix B of this DEIR, substantiates that impacts associated with the following thresholds would be less than significant; therefore, these impacts will not be further addressed in this DEIR:

- Threshold G-1
- Threshold G-2
- Threshold G-3
- Threshold G-4
- Threshold G-5

These impacts are addressed in Chapter 6, *Other CEQA Considerations*, and in Appendix B of this DEIR.

5.5.3 Environmental Impacts

5.5.3.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the IS/NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.5-1: Buildout of the Proposed Project would not directly or indirectly destroy a unique paleontological resource. [Threshold G-6])

No known paleontological resources were identified within the campus based on the paleontological records search and pedestrian reconnaissance survey; however, as shown in Table 5.5-1, there are several fossil localities within five miles of the Grant ES campus. The records search revealed that all the fossils previously recovered within a five-mile radius were a minimum of 6 to 11 feet deep in deposits mapped as Pleistocene at the surface.

As shown in Table 5.5-2, the campus has low to moderate paleontological sensitivity. Although no paleontological resources were previously found on the campus, construction of the Proposed Project would require excavation and minor grading, increasing the potential to uncover paleontological resources. Therefore, ground-disturbing activities may have the potential to disturb and unearth significant paleontological resources

either at the surface or at depth. If fossils are encountered during Project-related earthwork, they would be at risk of damage or destruction from construction activities. Ground-disturbing activities for the Proposed Project could therefore result in a **significant impact** to unique paleontological resources. **Mitigation Measure GEO-1**, which requires paleontological monitoring during excavations into native sediments of older alluvium below a depth of five feet, would reduce potential impacts to any unknown paleontological resources within the campus.

5.5.4 Mitigation Measures

Impact 5.5-1

GEO-1 Prior to the commencement of any on-site excavation or grading activities that would occur beneath the existing artificial fill, the District shall retain a qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP 2010) (Qualified Paleontologist). The Qualified Paleontologist shall provide technical and compliance oversight of all work as it relates to paleontological resources, shall be responsible for ensuring the employee training provisions are implemented during ground-disturbing activities for the Proposed Project, and shall report to the campus in the event potential paleontological resources are encountered.

A Paleontological Resources Management Plan (PRMP) shall be prepared by the Qualified Paleontologist that incorporates all available geologic data for the Proposed Project to determine the necessary level of effort for monitoring based on the planned rate of excavation and grading activities, the materials being excavated, and the depth of excavation. The PRMP shall establish the ground rules for the entire paleontological resource mitigation program. The Qualified Paleontologist will implement the PRMP as the project paleontologist, program supervisor, and principal investigator. The PRMP shall incorporate the results of the paleontological resources assessments, geotechnical investigation, and the final engineering/grading plans for the project including pertinent geological and paleontological literature, geologic maps, and known fossil locality information. The PRMP shall detail processes and procedures for paleontological monitoring, fossil salvaging (if needed), reporting, and curation (if needed). The PRMP shall also require the Qualified Paleontologist to prepare a report of the findings of the monitoring efforts after construction is completed. The PRMP shall also require the Qualified Paleontologist to obtain a curatorial arrangement with a qualified repository (e.g., Los Angeles County Natural History Museum) prior to construction if significant paleontological resources are discovered and require curation.

A paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials, shall work under the direction of the Qualified Paleontologist and shall be on-site during excavations into native sediments of older alluvium below a depth of five feet and native sediments of young alluvium below a depth of 20 feet, or at a depth otherwise indicated by the Qualified Paleontologist in the PRMP. Drilling or pile driving activities, regardless of depth, have a low potential to produce fossils meeting significance

criteria because any fossils brought up by the auger during drilling will not have information about formation, depth, or context.

In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor shall temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery shall be delineated with a 50-foot radius buffer, or other distance to be determined by the Qualified Paleontologist. Fossil remains collected during the monitoring and salvage portion of the program shall be cleaned, repaired, sorted, and catalogued. Once documentation and collection of the find is completed, the paleontological monitor will allow grading to recommence in the area of the find. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in a scientific institution with permanent paleontological collections, such as the Los Angeles County Natural History Museum.

A final Paleontological Monitoring and Data Recovery Report shall be completed that outlines the results of the monitoring program. This report shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.

5.5.5 Level of Significance After Mitigation

Potential impacts to unknown paleontological resources that could qualify as unique paleontological resources, would be mitigated to less than significant through the implementation of **Mitigation Measure GEO-1**. Impact to paleontological resources would be **less than significant**.

5.5.6 Cumulative Impacts

Paleontological impacts related to the Proposed Project would be specific to the Grant ES campus and would not combine to result in cumulative impacts. Compliance with state and local regulations would be required of all developments in the city and within the District. Similarly, all development projects would also require site-specific paleontological analysis that could lead to mitigation requiring monitoring and recovery, identification, and curation of any resources discovered. The Proposed Project has included a mitigation measure that would reduce the potential for project-related activities to contribute to cumulative impacts to paleontological resources. The Proposed Project's contribution to cumulative paleontological resource impacts would be less than cumulatively considerable; therefore, project impacts would be less than significant.

5.5.7 References

Cogstone. 2023, October. Archaeological and Paleontological Resources Assessment for the Grant Elementary Campus Master Plan Project, City of Santa Monica, Los Angeles County, California.

Converse Consulting. 2021, December 9. *Geotechnical Investigation Report*.

Society of Vertebrate Paleontology (SVP). 1995. Assessment and Mitigation of Adverse Impacts to Nonrenewable Palaeontologic Resources: Standard Guidelines. SVP News Bulletin 163:22–27.

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———. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology. https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf.

5.6 GREENHOUSE GAS EMISSIONS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Grant Elementary School Campus Master Plan (Proposed Project) to cumulatively contribute to greenhouse gas (GHG) emissions impacts. Because no single project is large enough to result in a measurable increase in global concentrations of GHG, climate change impacts of a project are considered on a cumulative basis. This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (South Coast AQMD). GHG emissions modeling was conducted using the California Emissions Estimator Model (CalEEMod), version 2022.1.0, and model outputs are in Appendix D of this DEIR. Cumulative impacts related to GHG emissions are based on the regional boundaries of the South Coast Air Basin (SoCAB).

During the Initial Study/Notice of Preparation (IS/NOP) public review period a California Environmental Quality Act (CEQA) scoping meeting was conducted on February 7, 2023. One comment pertaining to greenhouse gas emissions was received during this review period. The IS/NOP and all scoping comment letters are included as Appendices B and C of this document.

5.6.1 Environmental Setting

5.6.1.1 TERMINOLOGY

The following are definitions for terms used throughout this section.

- **Greenhouse gases (GHG).** Gases in the atmosphere absorb infrared light, thereby retaining heat in the atmosphere and contributing to a greenhouse effect.
- **Global warming potential (GWP).** Metric used to describe how much heat a molecule of a greenhouse gas absorbs relative to a molecule of carbon dioxide (CO_2) over a given period of time (20, 100, and 500 years). CO_2 has a GWP of 1.
- **Carbon-dioxide equivalent (CO_2e).** The standard unit to measure the amount of greenhouse gases in terms of the amount of CO_2 that would cause the same amount of warming. CO_2e is based on the GWP ratios between the various GHGs relative to CO_2.
- **$MTCO_2e$.** Metric ton of CO_2e.
- **$MMTCO_2e$.** Million metric tons of CO_2e.

Greenhouse Gases and Climate Change

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHGs, to the atmosphere. The primary source of these GHGs is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed in the 20th and 21st centuries. Other GHGs identified by the IPCC

that contribute to global warming to a lesser extent are nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).[1,2] The major GHGs applicable to the Proposed Project are briefly described.

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH_4)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in landfills and water treatment facilities.
- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities as well as during the combustion of fossil fuels and solid waste.

GHGs are dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 5.6-1, *GHG Emissions and Their Relative Global Warming Potential Compared to CO_2*. The GWP is used to convert GHGs to CO_2-equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Fourth Assessment Report (AR4) GWP values for CH_4, a project that generates 10 MT of CH_4 would be equivalent to 250 MT of CO_2.[3]

Table 5.6-1 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2

GHGs	Second Assessment Report Global Warming Potential Relative to CO_2[1]	Fourth Assessment Report Global Warming Potential Relative to CO_2[1]	Fifth Assessment Report Global Warming Potential Relative to CO_2[1]
Carbon Dioxide (CO_2)	1	1	1
Methane (CH_4)[2]	21	25	28
Nitrous Oxide (N_2O)	310	298	265

Source: IPCC 1995, 2007, 2013.
Notes: The IPCC published updated GWP values in its Fifth Assessment Report (AR5) that reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO_2. However, GWP values identified in AR4 are used by South Coast AQMD to maintain consistency in statewide GHG emissions modeling. In addition, the 2022 Scoping Plan Update was based on the GWP values in AR6.
1 Based on 100-year time horizon of the GWP of the air pollutant compared to CO_2.
2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

1 Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant because it is considered part of the feedback loop rather than a primary cause of change.

2 Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017a). However, state and national GHG inventories do not include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

3 The global warming potential of a GHG is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

Human Influence on Climate Change

For approximately 1,000 years before the Industrial Revolution, the amount of GHGs in the atmosphere remained relatively constant. During the 20th century scientists observed a rapid change in the climate and the quantity of climate change pollutants in the Earth's atmosphere that is attributable to human activities. The amount of CO_2 in the atmosphere has increased by more than 35 percent since preindustrial times and has increased at an average rate of 1.4 parts per million per year since 1960, mainly due to the combustion of fossil fuels and deforestation (IPCC 2007). These recent changes in the quantity and concentration of climate change pollutants far exceed the extremes of the ice ages, and the global mean temperature is warming at a rate that cannot be explained by natural causes alone. Human activities are directly altering the chemical composition of the atmosphere through the buildup of climate change pollutants (CAT 2006). In the past, gradual changes in the earth's temperature changed the distribution of species, availability of water, etc. Human activities are accelerating this process so that environmental impacts associated with climate change no longer occur in a geologic time frame but within a human lifetime (IPCC 2007).

Like the variability in the projections of the expected increase in global surface temperatures, the environmental consequences of gradual changes in the Earth's temperature are hard to predict. Projections of climate change depend heavily upon future human activity. Therefore, climate models are based on different emission scenarios that account for historical trends in emissions and on observations of the climate record that assess the human influence of the trend and projections for extreme weather events. Climate-change scenarios are affected by varying degrees of uncertainty. For example, there are varying degrees of certainty on the magnitude of the trends for:

- Warmer and fewer cold days and nights over most land areas.
- Warmer and more frequent hot days and nights over most land areas.
- An increase in the frequency of warm spells and heat waves over most land areas.
- An increase in frequency of heavy precipitation events (or proportion of total rainfall from heavy falls) over most areas.
- Larger areas affected by drought.
- Intense tropical cyclone activity increases.
- Increased incidence of extreme high sea level (excluding tsunamis).

Potential Climate Change Impacts for California

Observed changes over the last several decades across the western United States reveal clear signs of climate change. Statewide, average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada (CCCC 2012). The years from 2014 through 2016 showed unprecedented temperatures, with 2014 being the warmest (OEHHA 2018). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 5.6 to 8.8°F, depending on emissions levels (CNRA 2019).

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In California and western North America, observations of the climate have shown: 1) a trend toward warmer winter and spring temperatures; 2) a smaller fraction of precipitation falling as snow; 3) a decrease in the amount of spring snow accumulation in the lower- and middle-elevation mountain zones; 4) advanced shift in the timing of snowmelt of 5 to 30 days earlier in the spring; and 5) a similar shift (5 to 30 days earlier) in the timing of spring flower blooms (CAT 2006). Statewide precipitation has become increasingly variable from year to year, with the driest consecutive three years from 2020 to 2022 (NOAA 2023). According to the California Climate Action Team—a committee of state agency secretaries and the heads of agencies, boards, and departments, led by the California Environmental Protection Agency—even if actions could be taken to immediately curtail climate change emissions, the potency of emissions that have already built up, their long atmospheric lifetimes (see Table 5.6-1), and the inertia of the Earth's climate system could produce as much as 0.6°C (1.1°F) of additional warming. Consequently, some impacts from climate change are now considered unavoidable. Global climate change risks to California are shown in Table 5.6-2, *Summary of GHG Emissions Risks to California*, and include impacts to public health, water resources, agriculture, coastal sea level, forest and biological resources, and energy.

Table 5.6-2 Summary of GHG Emissions Risks to California

Impact Category	Potential Risk
Public Health Impacts	Heat waves will be more frequent, hotter, and longer Fewer extremely cold nights Poor air quality made worse Higher temperatures increase ground-level ozone levels
Water Resources Impacts	Decreasing Sierra Nevada snowpack Challenges in securing adequate water supply Potential reduction in hydropower Loss of winter recreation
Agricultural Impacts	Increasing temperature Increasing threats from pests and pathogens Expanded ranges of agricultural weeds Declining productivity Irregular blooms and harvests
Coastal Sea Level Impacts	Accelerated sea level rise Increasing coastal floods Shrinking beaches Worsened impacts on infrastructure
Forest and Biological Resource Impacts	Increased risk and severity of wildfires Lengthening of the wildfire season Movement of forest areas Conversion of forest to grassland Declining forest productivity Increasing threats from pests and pathogens Shifting vegetation and species distribution Altered timing of migration and mating habits Loss of sensitive or slow-moving species
Energy Demand Impacts	Potential reduction in hydropower Increased energy demand

Sources: CEC 2006; CEC 2009; CCCC 2012; CNRA 2014.

Specific climate change impacts that could affect the state of California include:

- **Water Resources Impacts.** By late this century, all projections show drying, and half of the projections suggest 30-year average precipitation will decline by more than 10 percent below the historical average. This drying trend is caused by an apparent decline in the frequency of rain and snowfall. Even in projections with relatively small or no declines in precipitation, central and southern parts of the state can be expected to be drier from the warming effects alone—the spring snowpack will melt sooner, and the moisture in soils will evaporate during long dry summer months (CCCC 2012).

- **Wildfire Risks.** Earlier snowmelt, higher temperatures, and longer dry periods over a longer fire season will directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning. Human activities will continue to be the biggest factor in ignition risk. The number of large fires statewide is estimated to increase from 58 percent to 128 percent above historical levels by 2085. Under the same emissions scenario, estimated burned area will increase by 57 percent to 169 percent, depending on location (CCCC 2012).

- **Health Impacts.** Many of the gravest threats to public health in California stem from the increase of extreme conditions—principally, more frequent, more intense, and longer heat waves. Particular concern centers on the increasing tendency for multiple hot days in succession and simultaneous heat waves in several regions throughout the state. Public health could also be affected by climate change impacts on air quality, food production, the amount and quality of water supplies, energy pricing and availability, and the spread of infectious diseases. Higher temperatures also increase ground-level ozone levels. Furthermore, wildfires can increase particulate air pollution in the major air basins of California (CCCC 2012).

- **Increase Energy Demand.** Increases in average temperature and higher frequency of extreme heat events combined with new residential development across the state will drive up the demand for cooling in the increasingly hot and longer summer season and decrease demand for heating in the cooler season. Warmer, drier summers also increase system losses at natural gas plants (reduced efficiency in the electricity generation process at higher temperatures) and hydropower plants (lower reservoir levels). Transmission of electricity will also be affected by climate change. Transmission lines lose 7 percent to 8 percent of transmitting capacity in high temperatures while needing to transport greater loads. This means that more electricity will need to be produced to make up for both the loss in capacity and the growing demand (CCCC 2012).

5.6.1.2 REGULATORY BACKGROUND

Federal, state, and local laws, regulations, plans, or guidelines related to greenhouse gas emissions that are applicable to the Proposed Project are summarized in this section.

Federal

United States Environmental Protection Agency

The US Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not impose any emission reduction requirements, but allow the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

To regulate GHGs from passenger vehicles, EPA was required to issue an endangerment finding. The finding identified emissions of six key GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the Proposed Project's GHG emissions inventory because they constitute the majority of GHG emissions and, according to guidance by the South Coast Air Quality Management District (South Coast AQMD), are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

US Mandatory Reporting Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 $MTCO_2e$ or more per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2021 to 2026)

The federal government issued new Corporate Average Fuel Economy (CAFE) standards in 2012 for model years 2017 to 2025, which required a fleet average of 54.5 miles per gallon (mpg) in 2025. On March 30, 2020, the EPA finalized an updated CAFE and GHG emissions standards for passenger cars and light trucks and established new standards covering model years 2021 through 2026, known as the Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021 to 2026. Under SAFE, the fuel economy standards will increase 1.5 percent per year compared to the 5 percent per year under the CAFE standards established in 2012. Overall, SAFE requires a fleet average of 40.4 mpg for model year 2026 vehicles (Vol. 85 Federal Register 24174 (April 30, 2020)).

On December 21, 2021, under direction of Executive Order (EO) 13990 issued by President Biden, the National Highway Traffic Safety Administration repealed Safer Affordable Fuel Efficient Vehicles Rule Part One, which had preempted state and local laws related to fuel economy standards. In addition, on March 31, 2022, the National Highway Traffic Safety Administration finalized new fuel standards in response to EO 13990. Fuel efficiency under the standards proposed will increase 8 percent annually for model years 2024 to 2025 and 10 percent annual for model year 2026. Overall, the new CAFE standards require a fleet average of 49 mpg for passenger vehicles and light trucks for model year 2026, which would be a 10 mpg increase relative to model year 2021 (NHTSA 2022).

State

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in EO S-03-05 and EO B-30-15, EO B-55-18, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32), and SB 375.

Executive Order S-03-05

EO S-03-05 was signed June 1, 2005, and set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in EO S-03-05. The California Air Resources Board (CARB) prepared the 2008 Scoping Plan to outline a plan to achieve the GHG emissions reduction targets of AB 32.

Executive Order B-30-15

EO B-30-15, signed April 29, 2015, set a goal of reducing GHG emissions within the state to 40 percent of 1990 levels by year 2030. EO B-30-15 also directed CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in EO S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaption strategy, "Safeguarding California", in order to ensure climate change is accounted for in state planning and investment decisions.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the EO B-30-15 goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires CARB to prioritize direct emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

2022 Climate Change Scoping Plan

CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) on December 15, 2022, which lays out a path to achieve carbon neutrality by 2045 or earlier and to reduce the State's anthropogenic GHG emissions (CARB 2022). The Scoping Plan provides updates to the previously adopted 2017 Scoping Plan and addresses the carbon neutrality goals of EO B-55-18 (discussed below) and the ambitious GHG reduction target as directed by AB 1279. Previous Scoping Plans focused on specific GHG reduction targets for our industrial, energy, and transportation sectors—to meet 1990 levels by 2020, and then the more aggressive 40 percent below that for the 2030 target. The 2022 Scoping Plan updates the target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. Carbon neutrality takes it one step further by expanding actions to capture and store carbon including through natural and working lands and mechanical technologies, while drastically reducing anthropogenic sources of carbon pollution at the same time.

The path forward was informed by the recent Sixth Assessment Report (AR6) of the IPCC, and the measures would achieve 85 percent below 1990 levels by 2045 in accordance with AB 1279. CARB's 2022 Scoping Plan identifies strategies as shown in Table 5.6-3, *Priority Strategies for Local Government Climate Action Plans*, that would be most impactful at the local level for ensuring substantial progress toward the State's carbon neutrality goals.

Table 5.6-3 Priority Strategies for Local Government Climate Action Plans

Priority Area	Priority Strategies
Transportation Electrification	Convert local government fleets to zero-emission vehicles (ZEV) and provide EV charging at public sites.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans).
Vehicle Miles Traveled (VMT) Reduction	Reduce or eliminate minimum parking standards.
	Implement Complete Streets policies and investments, consistent with general plan circulation element requirements.
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking
	Implement parking pricing or transportation demand management pricing strategies.
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing allowable density of the neighborhood).
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements)
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses.
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers).
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances.

Table 5.6-3 Priority Strategies for Local Government Climate Action Plans

Priority Area	Priority Strategies
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing).
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings).

Source: CARB 2022.

Based on Appendix D of the 2022 CARB Climate Change Scoping Plan, for residential and mixed-use development projects, CARB recommends first demonstrating that these land use development projects are aligned with State climate goals based on the attributes of land use development that reduce operational GHG emissions while simultaneously advancing fair housing. A project that accommodates growth in a manner consistent with the GHG and equity goals of SB 32 has all the following attributes:

- Transportation Electrification
  - Provides electric vehicle (EV) charging infrastructure that, at a minimum, meets the most ambitious voluntary standards in the California Green Building Standards Code at the time of project approval.
- Vehicle Miles Traveled (VMT) Reduction
  - Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).
  - Does not result in the loss or conversion of the State's natural and working lands.
  - Consists of transit-supportive densities (minimum of 20 residential dwelling units/acre), or is in proximity to existing transit stops (within a half mile), or satisfies more detailed and stringent criteria specified in the region's Sustainable Communities Strategy (SCS).
  - Reduces parking requirements by:
    - Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or
    - Providing residential parking supply at a ratio of <1 parking space per dwelling unit; or
    - For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.
  - At least 20 percent of the units are affordable to lower-income residents.
  - Results in no net loss of existing affordable units.
- Building Decarbonization

- Uses all electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking. (CARB 2022)

If the first approach to demonstrating consistency is not applicable (as in the case of this school modernization project), the second approach to project-level alignment with state climate goals is to achieve net-zero GHG emissions. The third approach is to align with GHG thresholds of significance, which many local air quality management and air pollution control districts have developed or adopted (CARB 2022). The Proposed Project is in the jurisdiction of South Coast AQMD, which has identified a screening-level threshold of 3,000 $MTCO_2e$ annually for all land use types.

Senate Bill 375

SB 375, the Sustainable Communities and Climate Protection Act, was adopted in 2008 to connect the GHG emissions reduction targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPO). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial counties. Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target.

2017 Update to the SB 375 Targets

CARB is required to update the targets for the MPOs every eight years. CARB adopted revised SB 375 targets for the MPOs in March 2018. The updated targets became effective in October 2018. All SCSs adopted after October 1, 2018, are subject to these new targets. CARB's updated SB 375 targets for the SCAG region were an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018).

The targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update (for SB 32), while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of "percent per capita" reductions in GHG emissions from automobiles and light trucks relative to 2005; this excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies, such as statewide road user pricing. The proposed targets call for greater per-capita GHG emission reductions from SB 375 than are currently in place, which for 2035 translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs to achieve the SB 375 targets. CARB foresees that the additional GHG emissions reductions in 2035 may be achieved from land use changes, transportation investment, and technology strategies (CARB 2018).

SCAG's 2020-2045 RTP/SCS

SB 375 requires each MPO to prepare a sustainable communities strategy in its regional transportation plan (RTP). For the SCAG region, the 2020-2045 RTP/SCS, Connect SoCal, was adopted on September 3, 2020, and is an update to the 2016-2040 RTP/SCS (SCAG 2020). In general, the RTP/SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

Connect SoCal focuses on the continued efforts of the previous RTP/SCSs to integrate transportation and land use strategies in development of the SCAG region through the horizon year 2045 (SCAG 2020). Connect SoCal forecasts that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. It also forecasts that implementation of the plan will reduce VMT per capita in year 2045 by 4.1 percent compared to baseline conditions for that year. Connect SoCal includes a "Core Vision" that centers on maintaining and better managing the transportation network for moving people and goods while expanding mobility choices by locating housing, jobs, and transit closer together and increasing investments in transit and complete streets (SCAG 2020).

Transportation-Sector-Specific Regulations

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and was anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards under "Federal" laws, above). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combined the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles (ZEV) into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent less GHG emissions and 75 percent less smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new low carbon fuel standard (LCFS) for transportation fuels sold in the state. EO S-01-07 set a declining standard for GHG emissions measured in grams of CO_2e per unit of fuel energy sold in California. The LCFS required a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applied to refiners, blenders, producers, and importers of transportation fuels and used market-based mechanisms to allow these providers to choose the most economically feasible methods for reducing emissions during the "fuel cycle."

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate ZEVs in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). EO B-16-2012 also directed the number of ZEVs in California's state vehicle fleet to increase through the normal course of fleet replacement, so that at least 10 percent of fleet purchases of light-duty vehicles are ZEVs by 2015 and at least 25 percent by 2020. The EO also established a target for the transportation sector of reducing GHG emissions to 80 percent below 1990 levels.

Executive Order N-79-20

On September 23, 2020, Governor Newsom signed EO N-79-20, whose goal is that 100 percent of in-state sales of new passenger cars and trucks will be zero emission (ZE) by 2035. Additionally, the fleet goals for trucks are that 100 percent of drayage trucks are ZE by 2035, and 100 percent of medium- and heavy-duty vehicles in the state are ZE by 2045, where feasible. The Executive Order's goal for the State is to transition to 100 percent ZE off-road vehicles and equipment by 2035, where feasible. On August 25, 2022, CARB adopted the Advanced Clean Cars II (ACC II) regulations that codifies the EO goal of 100 percent of in-state sales of new passenger vehicles and trucks are ZE by 2035. Starting in year 2026, ACC II requires that 35 percent of new vehicles sold be ZE or plug-in hybrids.

Renewables Portfolio: Carbon Neutrality Regulations

Senate Bills 1078, 107, and X1-2, and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewable portfolio standard (RPS) established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. EO S-14-08 was signed in November 2008, which expanded the state's RPS to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production decreases indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

Senate Bill 350 (de Leon) was signed into law in September 2015 and established tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100. Under SB 100, the RPS for public-owned facilities and retail sellers is 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. SB 100

also established a new RPS requirement of 50 percent by 2026. The bill establishes an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Energy Efficiency Regulations

California Building Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 (California Code of Regulations [CCR], Title 24, Part 6). These standards require the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

On August 11, 2021, the CEC adopted the 2022 Building Energy Efficiency Standards, which were subsequently approved by the California Building Standards Commission in December 2021. The 2022 standards went into effect on January 1, 2023. The 2022 standards include prescriptive photovoltaic system and battery requirements for high-rise, multifamily buildings (i.e., more than three stories) and noncommercial buildings such as hotels, offices, medical offices, restaurants, retail stores, schools, warehouses, theaters, and convention centers (CEC 2021).

California Green Building Standards Code

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. CALGreen was adopted as Part 11 of the California Building Standards Code (24 CCR) and established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The mandatory provisions of CALGreen became effective January 1, 2011. In 2021, the CEC approved the 2022 CALGreen, which went into effect on January 1, 2023.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR Sections 1601 to 1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Solid Waste Diversion Regulations

AB 939: Integrated Waste Management Act of 1989

California's Integrated Waste Management Act of 1989 set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting (Public Resources Code Section 40050 et seq.). In 2008, the requirements were

modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act required that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses. Section 5.408 of CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

AB 1327

The California Solid Waste Reuse and Recycling Access Act (AB 1327) required areas to be set aside for collecting and loading recyclable materials in development projects (Public Resources Code Section 42900 et seq.). The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

AB 1826

In October 2014 Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses and multifamily residential dwellings with five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed with food waste.

Water Efficiency Regulations

SBX7-7

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed "SBX7-7." SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 required urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

AB 1881: Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or an equivalent. AB 1881 also required the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including

irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Short-Lived Climate Pollutant Reduction Strategy

Senate Bill 1383

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and methane. Black carbon is the light-absorbing component of fine particulate matter produced during the incomplete combustion of fuels. SB 1383 required the state board, no later than January 1, 2018, to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The bill also established targets for reducing organic waste in landfills. On March 14, 2017, CARB adopted the Short-Lived Climate Pollutant Reduction Strategy, which identifies the state's approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s, despite the tripling of diesel fuel use (CARB 2017a). In-use on-road rules were expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. South Coast AQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces particulate emissions from these char broilers by over 80 percent (CARB 2017a). Additionally, South Coast AQMD Rule 445 limits installation of new fireplaces in the South Coast Air Basin.

Local

Santa Monica–Malibu Unified School District Districtwide Plan for Sustainability

The District adopted its Districtwide Plan for Sustainability (Sustainability Plan) in 2019 to provide a strategic roadmap for formalizing and uniting the District's many existing sustainability initiatives; incorporating sustainability into Education Services and all aspects of student learning; and integrating climate protection, resource efficiency, waste management, and other sustainability practices into District operations. The Sustainability Plan establishes a framework for assessment and progress on each focus area by documenting baseline conditions, establishing key goals and performance indicators, highlighting current initiatives and best practices, recommending improvement strategies, and anticipating project costs and funding mechanisms (SMMUSD 2019). The Sustainability Plan builds on and advances the District's existing sustainability commitments by identifying goals and recommended strategies over the following eight sustainability focus areas: climate, education and engagement, energy efficiency and renewables, water, solid waste, transportation, food, nutrition and wellness, green building and operations.

5.6.1.3 EXISTING CONDITIONS

California's GHG Sources and Relative Contribution

In 2021, the statewide GHG emissions inventory was updated for 2000 to 2019 emissions using the GWPs in IPCC's AR4 (IPCC 2013). Based on these GWPs, California produced 418.2 $MMTCO_2e$ GHG emissions in 2019. California's transportation sector was the single largest generator of GHG emissions, producing 39.7 percent of the state's total emissions. Industrial sector emissions made up 21.1 percent, and electric power generation made up 14.1 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (10.5 percent), agriculture and forestry (7.6 percent), high GWP emissions (4.9 percent), and recycling and waste (2.1 percent) (CARB 2021).

Since the peak level in 2004, California's GHG emission share generally followed a decreasing trend. In 2016, California statewide GHG emissions dropped below the AB 32 target for year 2020 of 431 $MMTCO_2e$ and have remained below this target. In 2019, emissions from routine GHG-emitting activities statewide were almost 13 $MMTCO_2e$ lower than the AB 32 target for year 2020. Per-capita GHG emissions in California have dropped from a 2001 peak of 14.0 $MTCO_2e$ per person to 10.5 $MTCO_2e$ per person in 2019, a 25 percent decrease.

Transportation emissions continued to decline in 2019 statewide as they had done in 2018, with even more substantial reductions due to a significant increase in renewable diesel. Since 2008, California's electricity sector has followed an overall downward trend in emissions. In 2019, solar power generation continued its rapid growth since 2013. Emissions from high-GWP gases comprised 4.9 percent of California's emissions in 2019. This continues the increasing trend as the gases replace ozone-depleting substances being phased out under the 1987 Montreal Protocol. Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product) has declined 45 percent since the 2001 peak, though the state's gross domestic product grew 63 percent during this period (CARB 2021).

Existing Grant Elementary School GHG Emissions

The existing Grant elementary school campus currently generates GHG emissions from transportation (student, staff, and vendor vehicle trips), area sources (consumer products and cleaning supplies), energy use, water use and wastewater generation, and solid waste disposal. In addition, the existing campus utilizes a solar photovoltaic system to generate electricity to be used by the campus. Table 5.6-4, *Existing GHG Emissions*, shows existing emissions associated with building energy use by Grant ES.

Table 5.6-4 Existing GHG Emissions[1,2]

Source	GHG Emissions ($MTCO_2e$)
Energy[1]	43

Source: SMMUSD

[1] Existing emissions are based only on GHG emissions related to building electricity and natural gas use in 2019 on the Grant ES campus, because the District does not have data available for other GHG sources. These emissions do not reflect the energy savings from use of the photovoltaic system.

[2] As student capacity is not anticipated to increase, the GHG emissions from wastewater and solid waste generation are not anticipated to increase upon buildout of the Proposed Project. Therefore, these emissions have not been added to the existing GHG emissions table or Table 5.6-5, Project-Related Net GHG Emissions.

5.6.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

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

5.6.2.1 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

South Coast AQMD adopted a significance threshold of 10,000 $MTCO_2e$ per year for permitted (stationary) sources of GHG emissions for which South Coast AQMD is the designated lead agency. To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, South Coast AQMD convened a GHG CEQA Significance Threshold Working Group. Based on the last Working Group meeting in September 2010 (Meeting No. 15), the South Coast AQMD Working Group identified a tiered approach for evaluating GHG emissions for development projects where South Coast AQMD is not the lead agency (South Coast AQMD 2010a). The following tiered approach has not been formally adopted by South Coast AQMD.

- **Tier 1.** If a project is exempt from CEQA, project-level and contribution to significant cumulative GHG emissions are less than significant.

- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (e.g., city or county), project-level and contribution to significant cumulative GHG emissions are less than significant.

- **Tier 3.** If GHG emissions are less than the screening-level criterion, project-level and contribution to significant cumulative GHG emissions are less than significant.

  For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, South Coast AQMD Working Group requires an assessment of GHG emissions. Project-related GHG emissions include on-road transportation, energy use, water use, wastewater generation, solid waste disposal, area sources, off-road emissions, and construction activities. The South Coast AQMD Working Group decided that because construction activities would result in a "one-time" net increase in GHG emissions, construction activities should be amortized into the operational phase GHG emissions inventory based on the service life of a building. For buildings in general, it is reasonable to look at a 30-year time frame, since this is a typical interval before a new building requires the first major renovation. South Coast AQMD Working Group identified a screening-level threshold of 3,000 $MTCO_2e$ annually for all land use types (bright-line screening level). The bright-line screening-level criteria are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds.

Therefore, projects that do not exceed the bright-line threshold would have a nominal and less than cumulatively considerable impact on GHG emissions. South Coast AQMD Working Group recommends use of the 3,000 $MTCO_2e$ interim bright-line screening-level criterion for all project types (South Coast AQMD 2010b).

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

The South Coast AQMD Working Group's bright-line screening-level criterion of 3,000 $MTCO_2e$ per year is used as the significance threshold for the Proposed Project. If the project operation-phase emissions exceed this criterion, GHG emissions would be considered potentially significant without mitigation measures.

5.6.2.2 MASS EMISSIONS AND HEALTH EFFECTS

On December 24, 2018, in *Sierra Club et al. v. County of Fresno et al.* (Friant Ranch), the California Supreme Court determined that the EIR for the proposed Friant Ranch project failed to adequately analyze the project's air quality impacts on human health. The EIR prepared for the project, which involved a master planned retirement community in Fresno County, showed that project-related mass emissions would exceed the San Joaquin Valley Air Pollution Control District's regional significance thresholds. In its findings, the California Supreme Court affirmed the holding of the Court of Appeal that EIRs for projects must not only identify impacts to human health, but also provide an "analysis of the correlation between the project's emissions and human health impacts" related to each criterion air pollutant that exceeds the regional significance thresholds or explain why it could not make such a connection. In general, the ruling focuses on the correlation of emissions of toxic air contaminants and criteria air pollutants and their impact to human health.

In 2009, the EPA issued an endangerment finding for six GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and SF_6—to regulate GHG emissions from passenger vehicles. The endangerment finding is based on evidence that shows an increase in mortality and morbidity associated with increases in average temperatures, which increase the likelihood of heat waves and ozone levels. The effects of climate change are identified in Table 5.6-2. Though identified effects such as sea level rise and increased extreme weather can indirectly impact human health, neither the EPA nor CARB has established ambient air quality standards for GHG emissions. The state's GHG reduction strategy outlines a path to avoid the most catastrophic effects of climate change, and the state's GHG reduction goals and strategies are based on the path to reducing statewide cumulative GHGs outlined in AB 32, SB 32, and EO S-03-05.

Because no single project is large enough to result in a measurable increase in global concentration of GHG emissions, climate change impacts of a project are considered on a cumulative basis. Without federal ambient air quality standards for GHG emissions and given the cumulative nature of GHG emissions and the AQMD's significance thresholds, which are tied to reducing the state's cumulative GHG emissions, it is not feasible at this time to connect the project's specific GHG emissions to the potential health impacts of climate change.

5.6.3 Environmental Impacts

5.6.3.1 METHODOLOGY

Proposed Project's Design Features

The Proposed Project would include features that would reduce criteria air pollutant emissions:

- **PDF GHG-1.** New buildings are required to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and CALGreen (Title 24, Part 11).
- **PDF AQ-4.** The District has committed to the use of off-road construction equipment that meets the US EPA Tier 4 Final emissions standards for off-road diesel-powered construction equipment with more than 25 horsepower.

This GHG evaluation was prepared in accordance with the requirements of CEQA to determine if significant GHG impacts are likely in conjunction with the Proposed Project. South Coast AQMD has published guidelines that are intended to provide local governments with guidance for analyzing and mitigating environmental impacts, and they were used in this analysis. The analysis in this section is based on buildout of the Proposed Project, in consideration of the existing facilities to remain onsite, as modeled using CalEEMod, version 2022.1, for short-term construction emissions:

Construction Phase

Construction would entail building and asphalt demolition and debris haul, site preparation, rough grading, fine grading, utilities trenching, building construction, paving, architectural coating, and finishing and landscaping over 3.80 acres of the 6.01-acre campus. The Proposed Project was modeled over three construction phases, with Phase 1 occurring over a period of 12 months between summer 2024 and summer 2025, Phase 2 occurring over 24 months between summer 2025 and summer 2027, and Phase 3 occurring over 24 months from summer 2028 and summer 2030. Annual construction emissions were amortized over 30 years and included in the emissions inventory to account for one-time GHG emissions from the construction of the Proposed Project (South Coast AQMD 2009).

Operational Phase

Following completion of construction over the three construction phases, the campus would operate in a manner similar to existing conditions. In addition, because enrollment, staffing, and types of activities used by both the school and the community would operate in the same manner as existing conditions, the Proposed Project would not result in an increase in mobile emissions, which generally contribute the majority of GHG emissions associated with a project. Similarly, as student capacity is not anticipated to increase, solid waste generation and wastewater use also would not increase. Therefore, operation of the Proposed Project was described qualitatively.

Life cycle emissions are not included in the GHG analysis, consistent with California Resources Agency directives.[4] Black carbon emissions are not included in the GHG analysis because CARB does not include this short-lived climate pollutant in the state's 2022 Scoping Plan inventory but treats it separately.[5] Additionally, though not anticipated, industrial sources of emissions that require a permit from South Coast AQMD (permitted sources) are not included in the Proposed Project's community inventory since they have separate emission reduction requirements. GHG modeling is in Appendix D of this DEIR.

5.6.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Initial Study/Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.6-1: The Proposed Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. [Threshold GHG-1])

Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

Construction

Implementation of the Proposed Project would result in the redevelopment and modernization of the Grant ES campus.

Annual average construction emissions were amortized over 30 years and included in the emissions inventory to account for one-time GHG emissions from the three construction phases of the Proposed Project (South Coast AQMD 2009). The construction-related emissions are quantified and shown in Table 5.6-5, *Project-Related Net GHG Emissions*.

[4] Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions, found that life-cycle analyses were not warranted for project-specific CEQA analyses in most situations for a variety of reasons, including lack of control over some sources and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the Proposed Project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials is also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

[5] Particulate matter emissions, which include black carbon, are analyzed in Section 5.2, *Air Quality*. Black carbon emissions have sharply declined due to efforts to reduce on-road and off-road vehicle emissions, especially diesel particulate matter. The State's existing air quality policies will virtually eliminate black carbon emissions from on-road diesel engines within 10 years (CARB 2017a).

Table 5.6-5 Proposed Project-Related Net GHG Emissions

Source	GHG Emissions[1] $MTCO_2e$ Per Year
Mobile[1]	0
Area	2
Energy[2]	200
Water[1]	1
Solid Waste[1]	0
Refrigerants[1]	0
Amortized Construction Emissions[3]	32
Total Emissions	**234**
Existing Building Energy GHG Emissions[4]	**43**
Net Change in Emissions	**191**
South Coast AQMD Bright-Line Threshold	3,000 $MTCO_2e$/Yr.
Exceeds Bright-Line Threshold?	**No**

Source: CalEEMod, Version 2022.1.0.

Notes: MTons = metric tons; $MTCO_2e$ = metric ton of carbon dioxide equivalent

[1] Because student capacity is not anticipated to increase, the Proposed Project would not result in an increase in emissions from mobile sources, solid waste generation, refrigerants, or wastewater generation. Emissions from water use are based on the increase in landscaped area.

[2] Energy use includes both new buildings and existing buildings to remain and is based on CalEEMod default rates for energy.

[3] Total construction emissions for all three phases of construction are amortized over 30 years per South Coast AQMD methodology (South Coast AQMD 2009).

[4] Existing building energy emissions only include data related to existing building energy GHG emissions in 2019 because the District does not have data available for other GHG sources.

Operation

The operational emissions are quantified and shown in Table 5.6-5. Implementation of the Proposed Project would result in the redevelopment and modernization of the Grant Elementary School campus. Because student capacity and staffing would not increase or change after full buildout of the three construction phases, the Proposed Project would not result in an increase in emissions from mobile sources, solid waste generation, or wastewater generation, and GHG emissions from the Proposed Project would be minimal. In addition, GHG emissions from building energy use would be minimized because the portable building classrooms and older buildings on the campus, which were constructed prior to modern building energy codes, would be replaced with newer, more energy-efficient buildings that meet the current California Building and Energy Efficiency Standards. The Building Energy Efficiency Standards mandate an increase in building energy efficiency every three years, so the new proposed buildings would be more energy efficient than the existing school buildings (CEC 2022). The proposed new classroom buildings would be equipped to support photovoltaic systems in addition to building features such as occupancy sensors for classrooms and offices, which would offset and reduce building energy use.

5. Environmental Analysis
GREENHOUSE GAS EMISSIONS

Summary

As identified above, the Proposed Project would result in a one-time increase in construction emissions and a nominal increase in GHG emissions over the Proposed Project's lifetime. Overall, the redevelopment and operation of the Proposed Project would not generate annual emissions that exceed the South Coast AQMD Working Group bright-line threshold of 3,000 $MTCO_2e$ per year (South Coast AQMD 2010). Therefore, the Proposed Project's cumulative contribution to GHG emissions from construction and operational activities would be **less than significant**.

Impact 5.6-2: The Proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. [Threshold GHG-2])

Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan, the Districtwide Plan for Sustainability, and the SCAG's RTP/SCS. A consistency analysis with these plans is presented below.

CARB 2022 Scoping Plan

CARB's latest Climate Change Scoping Plan (2022) outlines the State's strategies to reduce GHG emissions in accordance with the targets established under AB 32, SB 32, and AB 1279. The Scoping Plan is applicable to State agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Statewide strategies to reduce GHG emissions in the 2022 Climate Change Scoping Plan include: implementing SB 100, which expands the RPS to 60 percent by 2030; expanding the LCFS to 18 percent by 2030; implementing the Mobile Source Strategy to deploy ZE buses and trucks; implementing the Sustainable Freight Action Plan; implementing the Short-Lived Climate Pollutant Reduction Strategy, which reduces methane and hydrofluorocarbons to 40 percent below 2013 levels by 2030 and black carbon emissions to 50 percent below 2013 levels by 2030; continuing to implement SB 375; creating a post-2020 Cap-and-Trade Program; and developing an Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Other statewide strategies to reduce GHG emissions include the LCFS, California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the CAFE standards, and other early action measures as necessary to ensure the State is on target to achieve the GHG emissions reduction goals of AB 32, SB 32, and AB 1279. In addition, new developments are required to comply with the current Building Energy Efficiency Standards and CALGreen. The Proposed Project would comply with these GHG emissions reduction measures since they are statewide strategies. The Proposed Project's GHG emissions would be reduced from compliance with statewide measures that have been adopted since AB 32, SB 32, and AB 1279 were adopted. Therefore, impacts would be **less than significant**.

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SCAG adopted the 2020-2045 RTP/SCS (Connect SoCal) in September 2020. Connect SoCal finds that land use strategies that focus on new housing and job growth in areas rich with destinations and mobility options would be consistent with a land use development pattern that supports and complements the proposed transportation network. The overarching strategy in Connect SoCal is to plan for the southern California region to grow in more compact communities in transit priority areas and priority growth areas; provide neighborhoods with efficient and plentiful public transit; establish abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserve more of the region's remaining natural lands and farmlands (SCAG 2020). Connect SoCal's transportation projects help more efficiently distribute population, housing, and employment growth, and forecast development is generally consistent with regional-level general plan data to promote active transportation and reduce GHG emissions. The projected regional development, when integrated with the proposed regional transportation network in Connect SoCal, would reduce per-capita GHG emissions related to vehicular travel and achieve the GHG reduction per capita targets for the SCAG region.

SCAG's goal is that the RTP/SCS is used by land use planning jurisdictions, such as cities and counties, for prioritizing transportation projects, encouraging behavior change, and furthering regional strategies that can shape Southern California's transportation and land use development for years to come (SCAG 2020). School districts, including SMMUSD, were not engaged in development of the RTP/SCS. There are no projects from the SCAG RTP/SCS Project List Technical Report that are within or near the Grant ES campus (see RTP/SCS Project List Technical Report 2020 Tables 1 through 3). The Safe Routes to School program is listed in the FTIP Projects List for greater Los Angeles County. As shown in SCAG RTP/SCS Table 5.4, 2035 Greenhouse Gas Emission Reduction Calculation, multimodal options reflect approximately 3.7 percent of the total strategies, and Safe Routes to School is only one of the multimodal strategies that includes transit, pedestrian, and bicycles.

The Proposed Project is not a transportation project, new housing development project, or mixed-use project with regional interest that would result in increased VMT that may affect the region's ability to meet targeted GHG reductions identified in the RTP/SCS. The Grant ES campus has had an operational school since 1936. School attendance boundaries would not change, and there would be no increase in students traveling to the campus from a greater distance beyond the current attendance boundary. Therefore, the Proposed Project would not result in an increase in VMT and corresponding GHG emissions. Therefore, the Proposed Project would not interfere or conflict with SCAG's ability to implement the regional strategies in Connect SoCal.

The District's commitment to promoting sustainable transportation is highlighted in the Board Policy 5030: Student Wellness, Board Exhibit 5030: Student Wellness, and the 2019 Board-approved Districtwide Plan for Sustainability (SMMUSD 2019). These plans and features supported by the District contribute to the reduction of GHG emissions.

Connect SoCal does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency to governments and developers. The Proposed Project would redevelop and modernize facilities for the existing and future students of Grant ES within an existing

operational school campus and would not change underlying zoning or uses on the campus. The Proposed Project would continue to serve the local student population in the surrounding communities, and the District would continue to have a commitment to supporting multimodal transportation options to the Grant ES campus and all District campuses. Since the modernized school campus would continue to be a local-serving land use and because the Proposed Project would not result in an increase in student capacity or staff or reduce options to safe multimodal access to campus, the Proposed Project would not generate an increase in VMT. Therefore, the Proposed Project would not interfere with SCAG's ability to implement the regional strategies in Connect SoCal, and impacts would be **less than significant**.

Santa Monica–Malibu Unified School District Districtwide Plan for Sustainability

Adopted by the District in 2019, the Sustainability Plan is intended to provide a road map to formalize and unite the District's existing sustainability initiatives in addition to incorporating and integrating sustainability practices into student learning and District operations. As seen under Impact 5.4-2 of Chapter 5.4, *Energy*, the Proposed Project is consistent with the broad strategies in the Sustainability Plan, which would reduce GHG emissions through energy efficiency. Therefore, the Proposed Project would not interfere with implementation of the District's Sustainability Plan, and impacts would be **less than significant.**

5.6.4 Mitigation Measures

No mitigation measures required.

5.6.5 Level of Significance After Mitigation

All impacts are **less than significant**.

5.6.6 Cumulative Impacts

Project-related GHG emissions are not confined to a particular air basin but are dispersed worldwide. Therefore, Impact 5.6-1 is not a project-specific impact, but the Proposed Project's contribution to a cumulative impact. Implementation of the Proposed Project would not result in annual emissions that would exceed South Coast AQMD's bright-line threshold. Therefore, project-related GHG emissions and their contribution to global climate change would not be cumulatively considerable, and GHG emissions impacts would be **less than significant**.

5.6.7 References

California Air Pollution Control Officers Association (CAPCOA). 2022. California Emissions Estimator Model (CalEEMod). Version 2022.1.0. Prepared by ICF in collaboration with Sacramento Metropolitan Air Quality Management District.

California Air Resources Board. 2008, October. Climate Change Proposed Scoping Plan: A Framework for Change.

———. 2014, May 15. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006. http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm.

———. 2017a, March. Short-Lived Climate Pollutant Reduction Strategy. https://www.arb.ca.gov/cc/shortlived/shortlived.htm.

———. 2017b, November. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf.

———. 2018, February. Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets. https://www.arb.ca.gov/cc/sb375/sb375_target_update_final_staff_report_feb2018.pdf.

———. 2019, July 25. California and Major Automakers Reach Groundbreaking Framework Agreement on Clean Emission Standards. Press release #19-33. https://ww2.arb.ca.gov/news/california-and-major-automakers-reach-groundbreaking-framework-agreement-clean-emission.

———. 2021, July 28. California Greenhouse Gas 2000-2019 Emissions Trends and Indicators Report. https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf.

———. 2022, May 2 (accessed). 2022 Scoping Plan Update: Scenario Concepts Technical Workshop Presentations. https://ww2.arb.ca.gov/resources/documents/2022-scoping-plan-update-scenario-concepts-technical-workshop-presentations.

California Climate Action Team (CAT). 2006, March. Climate Action Team Report to Governor Schwarzenegger and the Legislature.

California Climate Change Center (CCCC). 2012, July. Our Changing Climate 2012: Vulnerability and Adaptation to the Increasing Risks from Climate Change in California.

California Energy Commission (CEC). 2006. Our Changing Climate: Assessing the Risks to California. 2006 Biennial Report. CEC-500-2006-077. California Climate Change Center.

———. 2009, May. The Future Is Now: An Update on Climate Change Science, Impacts, and Response Options for California. CEC-500-2008-0077.

———. 2018a, March. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf.

———. 2018b, May 9. Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. News Release. https://www.energy.ca.gov/news/2018-05/energy-commission-adopts-standards-requiring-solar-systems-new-homes-first.

———. 2021, May 19. Amendments to the Building Energy Efficiency Standards (2022 Energy Code) Draft Environmental Impact Report. CEC-400-2021-077-D.

———. 2022h, August. 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. https://www.energy.ca.gov/sites/default/files/2022-08/CEC-400-2022-010_CMF.pdf.

California Natural Resources Agency (CNRA). 2014, July. Safeguarding California: Reducing Climate Risk: An Update to the 2009 California Climate Adaptation Strategy. https://resources.ca.gov/CNRALegacyFiles/docs/climate/Final_Safeguarding_CA_Plan_July_31_2014.pdf.

———. 2019, January 16. California's Fourth Climate Change Assessment: Statewide Summary Report. https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf.

Governor's Office of Planning and Research (OPR). 2008, June. CEQA and Climate Change: Addressing Climate Change through CEQA Review. Technical Advisory. https://opr.ca.gov/docs/june08-ceqa.pdf.

Intergovernmental Panel on Climate Change (IPCC). 1995. *Second Assessment Report: Climate Change 1995*.

———. 2001. *Third Assessment Report: Climate Change 2001*. New York: Cambridge University Press.

———. 2007. *Fourth Assessment Report: Climate Change 2007*. New York: Cambridge University Press.

———. 2013. *Fifth Assessment Report: Climate Change 2013*. New York: Cambridge University Press.

———. 2022. *Sixth Assessment Report: Climate Change 2022*. New York: Cambridge University Press.

International Energy Agency. 2008. Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings, March. https://iea.blob.core.windows.net/assets/3783f5e8-b14c-4c18-b04c-aab7c59d6e92/Building_Codes.pdf.

National Highway Traffic Safety Administration. 2022, April 1. USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026. Accessed July 27, 2022. https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026.

National Oceanic and Atmospheric Administration (NOAA). 2023, January. Annual 2022 Drought Report. https://www.ncei.noaa.gov/access/monitoring/monthly-report/drought/202213.

Office of Environmental Health Hazards Assessment (OEHHA). 2018, May. Indicators of Climate Change in California. https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf.

Santa Monica–Malibu Unified School District (SMMUSD). 2019, February. Districtwide Plan for Sustainability. http://fip.smmusd.org/Sustainability032119.pdf.

South Coast Air Quality Management District (South Coast AQMD). 2009, November 19. GHG Meeting 14 Main Presentation. Greenhouse Gases (GHG) CEQA Significance Threshold Working Group. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2.

———. 2010a, September 28. Agenda for Meeting 15. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2.

———. 2010b, September 28. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group Meeting #15. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf.

Southern California Association of Governments (SCAG). 2020, September 3. Connect SoCal: The 2020–2045 Regional Transportation Plan / Sustainable Communities Strategy of the Southern California Association of Governments. https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx.

Southern California Edison (SCE). 2020. 2020 Sustainability Report. https://www.edison.com/content/dam/eix/documents/sustainability/eix-2020-sustainability-report.pdf.

US Environmental Protection Agency (USEPA). 2009, December. EPA: Greenhouse Gases Threaten Public Health and the Environment: Science overwhelmingly shows greenhouse gas concentrations at unprecedented levels due to human activity. https://archive.epa.gov/epapages/newsroom_archive/newsreleases/08d11a451131bca585257685005bf252.html.

———. 2022, February 11 (accessed). Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act. https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a.

5. Environmental Analysis
GREENHOUSE GAS EMISSIONS

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5.7 HAZARDS AND HAZARDOUS MATERIALS

This section of the DEIR evaluates the potential impacts of the Grant Elementary School Campus Master Plan Project (Proposed Project) on human health and the environment due to exposure to hazardous materials or conditions associated with the Grant ES campus, project construction, and project operations. Potential Project impacts and appropriate mitigation measures or standard conditions are included as necessary.

The analysis in this section is based, in part, upon the following source(s):

- *Phase I Environmental Site Assessment Report: Grant Elementary School 2368 Pearl Street, Santa Monica, California, California, 90405*, NV5 Alta Environmental, April, 2022

A complete copy of this study is in Appendix I to this DEIR.

No comments were received in response to the Initial Study/Notice of Preparation (IS/NOP) in regard to hazards and hazardous materials. The IS/NOP and all scoping comment letters are included as Appendices B and C of this DEIR.

5.7.1 Environmental Setting

Hazardous materials refer generally to substances that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials can include petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals that are used in agriculture, commercial, and industrial uses; businesses; hospitals; schools; and households (such as cleaners, solvents, paints, and pesticides). Accidental releases of hazardous materials can occur from a variety of causes, including traffic accidents, shipping accidents, and industrial/warehouse incidents.

5.7.1.1 REGULATORY BACKGROUND

Federal, state, and local laws, regulations, plans, or guidelines related to hazardous materials that are applicable to the Proposed Project are summarized below.

Federal

United States Environmental Agency

The United States Environmental Protection Agency (EPA) is the primary federal agency that regulates hazardous materials and waste. In general, the EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The agency is responsible for researching and setting national standards for a variety of environmental programs and delegates to states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance. EPA programs promote handling hazardous wastes safely, cleaning up contaminated land, and reducing trash. Under the authority of the Resource Conservation and Recovery Act (RCRA) and in cooperation with state and tribal partners, the EPA's Waste

Management Division manages a hazardous waste program, an underground storage tank program, and a solid waste program that includes development of waste reduction strategies such as recycling.

Title 26, Part 1926 of the Code of Federal Regulations

Title 26, Part 1926 of the Code of Federal Regulations (CFR) establishes standards for general safety and health provisions, occupational health and environmental controls, demolition, toxic and hazardous substances, and other aspects of construction work. For example, it establishes standards for general safety and health, such as development and maintenance of an effective fire protection and prevention program at jobsites. It also establishes standards for occupational health and environmental controls, such as for exposure to lead and asbestos.

Resource Conservation and Recovery Act

Federal hazardous waste laws are generally promulgated under the RCRA of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984. These laws provide for "cradle to grave" regulation of hazardous wastes. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed. The Department of Toxic Substances Control (DTSC) is responsible for implementing the RCRA program as well as California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the Unified Program, the California Environmental Protection Agency (CalEPA) has delegated enforcement authority to the Santa Monica Fire Department for State law regulating hazardous waste producers or generators in Santa Monica.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act (EPCRA), also known as Title III of the Superfund Amendments and Reauthorization Act, was enacted in October 1986. This law requires any infrastructure at the state and local levels to plan for chemical emergencies. Reported information is made publicly available so that interested parties can be informed about potentially dangerous chemicals in their community. EPCRA Sections 301 through 312 are administered by the EPA's Office of Emergency Management. The EPA's Office of Information Analysis and Access implements the program in EPCRA Section 313. In California, Superfund Amendments and Reauthorization Act Title III is implemented through the California Accidental Release Prevention program. The State has delegated local oversight authority of the California Accidental Release Prevention program to the Santa Monica Fire Department.

Hazardous Materials Transportation Act

The US Department of Transportation regulates hazardous materials transportation under CFR Title 49. State agencies that have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. The California State Fire Marshal's Office has oversight authority for hazardous materials liquid pipelines. The California Public Utilities Commission has oversight authority for natural gas pipelines. These agencies also govern permitting for hazardous materials transportation.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies and other resource providers, including the American Red Cross, that: 1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; 2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act as well as individual agency statutory authorities; and 3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency. The Federal Response Plan is part of the National Response Framework, which was most recently updated in October 2019.

Occupational Safety and Health Administration

The federal Occupational Safety and Health Act of 1970 authorizes each state (including California) to establish its own safety and health programs with the U.S. Department of Labor, Occupational Safety and Health Administration's (OSHA) approval. The California Department of Industrial Relations regulates implementation of worker health and safety in California. Cal/OSHA enforcement units conduct on-site evaluations and issue notices of violation to enforce necessary improvements to health and safety practices. California standards for workers dealing with hazardous materials are in Title 8 of the California Code of Regulations (CCR); they include practices for all industries (General Industrial Safety Orders) and specific practices for construction and other industries. Workers at hazardous waste sites (or working with hazardous wastes that might be encountered during excavation of contaminated soil) must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response regulations.

OSHA regulates the demolition, renovation, or construction of buildings involving lead materials (29 CFR Section 1926.62). Federal, state, and local requirements also govern the removal of asbestos or suspected asbestos-containing materials (ACM), including the demolition of structures where asbestos is present. All friable (crushable by hand) ACMs or nonfriable ACMs subject to damage must be abated prior to demolition following all applicable regulations.

State

California Environmental Protection Agency

CalEPA was created in 1991 by Governor's Executive Order. Under the CalEPA umbrella are six boards and departments—Air Resources Board, Department of Resources Recycling and Recovery, Department of Pesticides Regulations, DTSC, Office of Environmental Health Hazard Assessment, and State Water Resources Control Board—to create a cabinet-level voice for the protection of human health and the environment and to ensure the coordinated deployment of state resources. CalEPA oversees the unified hazardous waste and hazardous materials management regulatory program.

California Department of Toxic Substances Control

DTSC is a department of CalEPA, which authorizes DTSC to administer the RCRA program in California to protect people from exposure to hazardous wastes. The department regulates hazardous waste, cleans up existing contamination, and implements regulations to control and reduce the hazardous waste produced in California, primarily under the authority of RCRA and in accordance with the California Hazardous Waste Control Law (California Health and Safety Code [HSC], Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR Divisions 4 and 4.5). Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow state and federal requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

DTSC's Brownfields Restoration and School Evaluation Branch is responsible for assessing, investigating, and cleaning up proposed school sites and existing school sites. The oversight is to ensure that selected properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who will occupy the new school. All proposed school sites and existing school sites that will receive State funding for acquisition or construction are required to go through an environmental review and cleanup process under DTSC's oversight.

Government Code Section 65962.5

Government Code Section 65962.5 requires, among other items, that the DTSC compile and update as appropriate, but at least annually, a list of the following sites and submit the list to the Secretary for Environmental Protection.

> (a) (1) All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.
>
> (2) All land designated as hazardous waste property or border zone property pursuant to former Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.
>
> (3) All information received by the Department of Toxic Substances Control pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land.
>
> (4) All sites listed pursuant to Section 25356 of the Health and Safety Code.

Government Code Section 65962.5 also requires that:

> (b) The State Department of Health Services shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Section 116395 of the Health and Safety Code.

(c) The State Water Resources Control Board shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all of the following:

(1) All underground storage tanks for which an unauthorized release report is filed pursuant to Section 25295 of the Health and Safety Code.

(2) All solid waste disposal facilities from which there is a migration of hazardous waste and for which a California regional water quality control board has notified the Department of Toxic Substances Control pursuant to subdivision (e) of Section 13273 of the Water Code.

(3) All cease and desist orders issued after January 1, 1986, pursuant to Section 13301 of the Water Code, and all cleanup or abatement orders issued after January 1, 1986, pursuant to Section 13304 of the Water Code, which concern the discharge of wastes that are hazardous materials.

(d) The local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations, shall compile as appropriate, but at least annually, and shall submit to the Department of Resources Recycling and Recovery, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste. The Department of Resources Recycling and Recovery shall compile the local lists into a statewide list, which shall be submitted to the Secretary for Environmental Protection and shall be available to any person who requests the information.

California Occupational Health and Safety Administration

Occupational safety standards in federal and state laws minimize worker safety risks from both physical and chemical hazards in the workplace. Cal/OSHA is responsible for developing and enforcing workplace safety standards and ensuring worker safety in the handling and use of hazardous materials.

California Building Code

The State of California provides a minimum standard for building design through the California Building Code (CBC) (24 CCR Part 2). The 2022 CBC is based on the 2021 International Building Code but has been modified for California conditions. It is updated every three years, most recently in July 2022 with an effective date of January 1, 2023. The CBC, as adopted by local cities or counties, may be further modified based on local conditions. Typical fire safety requirements of the CBC include the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Department of Forestry and Fire Protection

California Department of Forestry and Fire Protection (CAL FIRE) is dedicated to the fire protection and stewardship of over 31 million acres of California's wildlands. The Office of the State Fire Marshal supports CAL FIRE's mission to protect life and property through fire prevention engineering programs, law and code enforcement, and education. It provides for fire prevention by enforcing fire-related laws in State-owned

or -operated buildings; investigating arson fires; licensing those who inspect and service fire protection systems; approving fireworks for use in California; regulating the use of chemical flame retardants; evaluating building materials against fire safety standards; regulating hazardous liquid pipelines; and tracking incident statistics for local and state government emergency response agencies. The California Fire Plan is the State's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and contribute to ecosystem health. The California Fire Plan is a cooperative effort between the State Board of Forestry and Fire Protection and CAL FIRE.

California Fire Code

The California Fire Code (CFC) is in 24 CCR Part 9. It is also updated every three years, most recently in 2022 with an effective date of January 1, 2023. The 2022 CFC is based on the 2021 International Fire Code but has been modified for California conditions. The CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Similar to the CBC, the CFC is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions.

California Governor's Office of Emergency Services

Through Assembly Bill (AB) 38, the governor's office established the California Emergency Management Agency on January 1, 2009. The agency merged the duties, powers, purposes, and responsibilities of the former Governor's Office of Emergency Services with those of the Governor's Office of Homeland Security. CalEMA was responsible for the coordination of overall state agency response to major disasters in support of local government, for ensuring the state's readiness to respond to and recover from all hazards—natural, man-made, emergencies, and disasters—and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts. On July 1, 2013, Governor Edmund G. Brown Jr.'s Reorganization Plan #2 eliminated CalEMA and restored it to the Governor's Office as Cal OES, merging it with the Office of Public Safety Communications.

Hazardous Materials Management Act

A hazardous material is any substance that possesses qualities or characteristics that could produce physical damage to the environment and/or cause deleterious effects upon human health (22 CCR, Division 4.5). The Hazardous Materials Management Act (22 CCR, Division 4.5) requires that businesses and public entities handling or storing certain amounts of hazardous materials prepare a hazardous materials business plan that includes an inventory of hazardous materials stored on-site (above specified quantities), an emergency response plan, and an employee training program. Businesses that use, store, or handle 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas at standard temperature and pressure require a hazardous materials business plan. Plans must be prepared prior to facility operation and are reviewed/updated biennially (or within 30 days of a change).

California Accidental Release Prevention Program

California Accidental Release Prevention Program includes the Federal Accidental Release Prevention Program with certain additions specific to California and pursuant to HSC Article 2, Chapter 6.95. The purpose of this program is to prevent the accidental release of regulated substances. Businesses using regulated substances exceeding a threshold quantity are evaluated under this program to determine the potential for and impacts of accidental releases. Depending on the potential hazards, business owners may be required to develop and submit a risk management plan.

Regulations for Hazardous Materials in Structures

Asbestos is regulated as a hazardous air pollutant under the Clean Air Act and as a potential worker safety hazard under the authority of OSHA. Cal/OSHA considers ACM a hazardous substance when a bulk sample contains more than 0.1 percent asbestos by weight and requires a qualified contractor licensed to handle asbestos. Any activity that involves cutting, grinding, or drilling during building renovation or demolition or relocation of underground utilities could release friable asbestos fibers unless proper precautions are taken.

Lead is regulated as a hazardous material, and inorganic lead is regulated as a toxic air contaminant. Lead-containing paints, according to Cal/OSHA, are defined as paints reported with any detectable levels of lead by paint chip analysis (8 CCR Section 1532.1(d)). When disturbed for construction purposes, these surfaces are subject to Cal/OSHA exposure assessment requirements.

Several regulations and guidelines pertain to abatement of and protection from exposure to ACM and lead-based paint:

- Lead-based paint
  - 8 CCR Subchapter 4, Construction Safety Orders, Section 1532.1
  - 29 CFR 1926, Subpart D
- Asbestos
  - 8 CCR Subchapter 4, Section 1529
  - 29 CFR 1926, Subpart Z
  - 40 CFR 61, Subpart M

These rules and regulations provide exposure limits, exposure monitoring, respiratory protection, and good working practice for workers exposed to lead and ACM. In California, ACM and lead-based-paint abatement must be performed and monitored by contractors with appropriate certification from the California Department of Health Services. HSC Sections 17920.10 and 105255 require lead to be contained during demolition activities.

Polychlorinated biphenyls (PCBs) were commonly used in the small capacitor in fluorescent light ballasts through 1979. PCB regulations are included in 40 CFR Section 761, which requires the material to be incinerated. The entire lighting fixture does not need special handling and disposal as long as the ballast (electrical box) is not leaking. The nonleaking ballasts can be removed and recycled or disposed of properly.

Hazardous Waste Control

HSC, Division 20, Chapter 6.5, and 22 CCR, Division 4.5, Environmental Health Standards for the Management of Hazardous Waste, address how hazardous waste must be handled, stored, transported, treated, and disposed. They provide an effective process for hazardous waste management planning at the local level to ensure adequate handling, storing, transporting, treating, and disposing of hazardous materials.

Regional

South Coast AQMD Rules and Regulations

All projects in the South Coast Air Basin (are subject to South Coast Air Quality Management District (AQMD) rules and regulations in effect at the time of activity.

- **Rule 403, Fugitive Dust.** This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth-moving and grading activities.

- **Rule 1403, Asbestos Emissions from Demolition/Renovation Activities.** The purpose of this rule is to specify work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of ACM. The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

Local

Certified Unified Program Agency

A certified Unified Program agency (CUPA) is a local agency that has been certified by CalEPA to implement the local Unified Program. The CUPA can be a county, city, or joint powers authority. A "participating agency" is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. A "designated agency" is a local agency that has not been certified by CalEPA to become a CUPA but is the responsible local agency that would implement the six Unified Programs until it is certified. Currently, there are 83 CUPAs in California.

The Santa Monica Fire Department (SMFD) is the designated CUPA for the City and is the primary local agency with responsibility for implementing federal and state laws pertaining to hazardous materials management. The SMFD maintains 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 (SMFD 2018).

Santa Monica Fire Department

The SMFD provides fire protection and emergency services to the city of Santa Monica, including the Grant ES campus. The SMFD is the CUPA that implements the following programs consistent with State and federal regulations:

- Hazardous Materials Release Response Plans and Inventory Program
- California Accidental Release Prevention Program
- Aboveground Storage Tank Program
- Underground Storage Tank Program

The County of Los Angeles Fire Department, Health and Hazardous Materials Division, is the CUPA that administers the City's Hazardous Waste Generator Program, but the SMFD is the primary CUPA for the City Santa Monica (LA County Fire Department 2009).

Federal and State statutes as well as local laws and programs regulate the use, storage, and transportation of hazardous materials and hazardous waste. These regulations can reduce the danger that hazardous substances may pose to people under normal daily circumstances and as a result of emergencies and disasters.

Santa Monica Municipal Code

Chapter 5.24, Hazardous Materials Release Response Plans And Inventory

Section 5.24 establishes a hazardous materials release response plan. The ordinance requires all businesses that handle any hazardous material or mixture containing hazardous materials to establish and implement a business plan for emergency response to a release or threatened release of hazardous materials. 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.

Emergency Response Plan

The City Office of Emergency Management has prepared the Multi Hazard Functional Emergency Plan. This plan addresses the City's response to natural or human-caused disasters. It provides an overview of operational concepts and identifies components of the City's emergency/disaster management organization with the Standardized Emergency Management Systems and the National Incident Management System. The plan focuses on large-scale events and emphasizes emergency/disaster planning, volunteer training, public outreach, and resources for disaster response (City of Santa Monica 2013).

The City also prepared the All Hazards Mitigation Plan, which includes resources and information to assist City residents, public- and private-sector organizations, and others interested in planning for natural hazards. The mitigation plan provides a list of activities that may assist the City in reducing risk and preventing loss from future natural hazard events. The action items address multiple hazard issues and the activities to be

undertaken in the event of earthquakes, landslides, flooding, tsunamis, wildfires, and severe windstorms/thunderstorms (City of Santa Monica 2016).

City of Santa Monica General Plan

The City's General Plan is primarily a policy document that sets goals concerning the community and gives direction to growth and development. In addition, it outlines the programs that were developed to accomplish the goals and policies of the General Plan.

Safety Element

The City of Santa Monica General Plan's Safety Element creates a cohesive guide consisting of specific policy-oriented implementation measures. The intention is to reduce the potential for loss of life, injuries, damage to property, and social and economic dislocation resulting from major hazards throughout the community. The Safety Element has the following goals and policies related to hazards and hazardous materials:

Goal 5: Minimize threats to public health and safety from hazardous materials by strengthening local code enforcement actions, especially the potential of multiple releases caused by earthquakes.

- **Policy 5.1.** The use, storage, and transportation of toxic, explosive, and other hazardous and extremely hazardous materials shall be strictly controlled to prevent unauthorized discharges.
- **Policy 5.1.2.** The City shall continue to manage the Hazardous Materials Disclosure Program to identify and regulate business handling types and quantities of extremely hazardous materials, or hazardous materials in greater than consumer types and quantities.
- **Policy 5.2.** Coordinate regional objectives for hazardous materials management with adjacent jurisdictions.

5.7.1.2 EXISTING CONDITIONS

On-Campus and Adjacent Uses

The Grant ES campus is surrounded by low-density family residential neighborhoods immediately to the north, south, west, and east. Multifamily residential uses are 0.10 mile south of campus along Ocean Park Boulevard. The campus is surrounded by properties zoned for Low-Density Residential (R1) and Medium Density Residential (R3) (Santa Monica 2015). The surrounding residential neighborhood streets include Pearl Street, Pearl Place (alley), 24th Court (alley), and 24th Street. Pico Boulevard to the north and Ocean Park Boulevard to the south are each one block from the campus and are transportation corridors.

Site History

A 1928 historical aerial photograph shows the campus site as undeveloped. The 1938 Santa Monica United States Department of Agriculture (USDA) historical aerial photograph shows two large rectangular buildings on the site. These two buildings are existing buildings C and D on the campus. Four additional buildings were

added to the campus as shown on the 1952 USDA historical aerial photograph. The school is identified as "Grant Sch" on the 1950 USGS topographic quadrangle map. No other historical uses were mapped for the campus site.

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) for Grant Elementary School was prepared in April 2022. No evidence of a recognized environmental condition was identified during the assessment. However, the Phase I ESA concluded that, based on the age of the buildings, there is a possibility for lead-based paint (LBP), arsenic, ACM, pesticides, and PCBs (polychlorinated biphenyls) in caulking residues in the shallow soil.

Hazardous Materials Site Database Search

A review of five databases from federal, state, and local environmental regulatory agencies was conducted to identify properties near the campus with reported unauthorized releases of hazardous materials and to identify properties that use, generate, store, treat, or dispose of hazardous materials and chemicals or release hazardous materials that may impact the campus. A list of the databases and summary of the findings regarding the campus and adjacent properties follow.

- GeoTracker: State Water Resources Control Board (SWRCB 2023)
- EnviroStor: Department of Toxic Substances Control (DTSC 2023)
- EJScreen: US Environmental Protection Agency (EPA 2023a)
- EnviroMapper: US Environmental Protection Agency (EPA 2023b)
- Solid Waste Information System (SWIS): California Department of Resources Recovery and Recycling (CalRecycle 2023)

The Phase I ESA identified properties within a one-mile radius of the campus that are listed on federal, state, and/or local regulatory agency databases. The listed sites are considered unlikely to impact the campus based upon factors that include:

- The nature of the listing
- The use of the site
- When the site was listed and its current listed status
- The developmental density of the setting
- The distance between the listed and subject sites as related to the distance that releases are likely to migrate based on local surface and subsurface drainage conditions
- The presence of intervening drainage divides and/or the inferred groundwater movement.

The assessment identified no evidence of a recognized environmental condition for the campus.

Hazardous Building Materials and Chemical Storage Areas

Hazardous Building Materials

Several of the buildings on campus were constructed prior to 1980 (Buildings A, B, C, D, E, F, G, H, and K). There is potential for lead from LBP to be present in on-site structures built prior to 1978. ACMs may also be present in structures built before 1990.

Storage Tanks

No aboveground storage tanks (AST), underground storage tanks (UST), or septic tanks are recorded for the campus.

Polychlorinated Biphenyls

PCBs were historically used as coolants, insulating materials, and lubricants in electrical materials, such as transformers. PCBs were also used widely in caulking and elastic sealant materials, particularly from 1950 through the 1970s, until they were banned in 1979. DTSC guidance indicates that PCBs may exist in soil near exterior caulking in buildings meeting the age criteria and adjacent unpaved areas. No electrical or mechanical equipment suspected of containing PCBs was identified during reconnaissance for the Phase I ESA.

5.7.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

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

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

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

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

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

H-6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

H-7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

The IS/NOP, included as Appendix B, substantiates that impacts associated with the following thresholds would be less than significant; therefore, these impacts will not be further addressed in the DEIR:

- Threshold H-5
- Threshold H-7

These impacts are addressed in Chapter 6, *Other CEQA Considerations*, and in Appendix B of this DEIR.

5.7.3 Environmental Impacts

5.7.3.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Initial Study/Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

IMPACT 5.7.1: 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 [Thresholds H-1]

Construction

Small amounts of commonly used hazardous substances, such as gasoline, diesel fuel, lubricating oil, grease, glues, and solvents would be used and transported to the Grant ES campus during construction of the Proposed Project. These materials are used routinely for similar types of construction projects, and the use of these materials would be temporary during construction activities of the Proposed Project. Any potential spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable state and local regulations for the cleanup and disposal of that contaminant. All contaminated waste encountered would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility.

Federal, state, and local regulations govern the disposal of wastes identified as hazardous that could be produced during removal of existing asphalt and storage buildings, as well as during construction activities. All materials would be handled, transported, used, and disposed of in accordance with all federal, state, and local laws regulating the management and use of hazardous materials, including the Federal RCRA, which includes requirements for hazardous solid waste management; the DTSC Environmental Health Standards for the Management of Hazardous Waste (22 CCR Division 4.5), which include standards for generators and transporters of hazardous waste; South Coast AQMD Rules governing work practice requirements for renovation and demolition activities; and Cal/OSHA, which includes standards for workplace health and safety. Furthermore, strict adherence to all emergency response plan requirements set forth by the City of

Santa Monica and Los Angeles County Fire Department would be required through the duration of the Proposed Project's construction. Therefore, impacts related to the routine transport, use, or disposal of hazardous materials during construction of each phase of the Proposed Project would be **less than significant**.

Operation

The campus would continue to operate in the same manner as current conditions. Small amounts of hazardous materials that could be used for maintenance of campus facilities and landscaped areas include chemical reagents, solvents, fuels, paints, cleansers, pesticides, and fertilizers. These materials would be similar to those currently used at the campus and throughout the campus. The management, use, storage, and transportation of such hazardous materials is subject to current local, state, and federal laws. Additionally, SMMUSD has a School Safety Plan that outlines procedures to address evacuation, clean up, and communication protocols to protect students and staff in the event of a hazardous materials spill (District 2018), and Grant ES provides Safety Guidelines and Emergency Information to prepare staff, parents, and students in case of an emergency. Therefore, impacts related to the routine transport, use, or disposal of hazardous materials during operation of the Proposed Project would be **less than significant**.

IMPACT 5.7-2: The Proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. [Threshold H-2]

Construction

As described above, construction of the Proposed Project could potentially involve the use of hazardous materials, including gasoline, diesel fuel, lubricating oil, grease, solvents, and other chemicals. These materials are used routinely for similar types of construction projects, and the use of these materials would be temporary during construction activities of the Proposed Project. Any potential spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable state and local regulations for the cleanup and disposal of that contaminant. All contaminated waste encountered would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility. All materials would be handled, transported, used, and disposed of in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Compliance with these regulations would reduce the potential for hazardous materials to be released to the environment during construction.

Based on the age of on-site structures that are proposed for renovation and demolition, hazardous building materials such as LBP, ACMs, and PCBs may be present within the structures. As identified by the Phase I ESA, no electrical or mechanical equipment suspected of containing PCBs was identified. However, these hazardous materials may also be present in the shallow soils at the campus. The removal of building materials and disturbance of contaminated soils may result in the release of hazardous materials into the environment. Exposure of construction workers or members of the public to these substances could result from direct contact with the substance during demolition and/or grading activities, incidental ingestion of the substance, and/or inhalation of airborne dust released from dried hazardous materials.

As described above, properties within a one-mile radius of the campus that are listed on federal, state, and/or local regulatory agency databases are unlikely to impact the campus. Additionally, as identified by the Phase I ESA, no ASTs, USTs, or septic tanks are recorded for the campus. Though no violations, leaks, spills, or releases are reported, based the age of the campus, an inherent environmental risk associated with hazardous building materials may have affected the soils and/or groundwater at the campus. Impacts would be **potentially significant** due to the potential presence of hazardous building materials and soil contamination at the campus and the potential for the Proposed Project to result in the release of these materials to the environment. **Mitigation Measures HAZ-1** and **HAZ-2** would be implemented prior to building demolition and during construction to ensure that hazardous materials are properly identified and disposed of in a manner that minimizes the potential for significant hazards to the public or to the environment, to the extent feasible.

Operation

During operations, hazardous materials that could be used for maintenance of campus facilities and landscaped areas include chemical reagents, solvents, fuels, paints, cleansers, pesticides, and fertilizers. These materials would be similar to those currently used at the campus and throughout the campus. The management, use, storage, and transportation of such hazardous materials is subject to local, state, and federal laws. As described in Impact 5.7-2, the District has a School Safety Plan that outlines procedures to address evacuation, clean up, and communication protocols to protect students and staff in the event of a hazardous materials spill (SMMUSD 2018), and Grant ES provides Safety Guidelines and Emergency Information to prepare staff, parents and students in case of an emergency. Therefore, operational impacts associated with the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be **less than significant**.

Impact 5.7-3: The Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school. [Threshold H-3]

Construction

The Proposed Project would be constructed within an existing school, and no other existing or proposed schools are within 0.25 mile of the campus. As described in Impacts 5.7-1 and 5.7-2, the Proposed Project's construction activities may involve the use of hazardous materials, such as fuels, oils, mechanical fluids, and other chemicals. These materials are not considered acutely hazardous and would be used in limited quantities. In addition, the transportation, storage, use, and disposal of such hazardous materials during construction activities would be conducted in accordance with applicable federal, state, and local statutes and regulations.

Demolition, remediation, and renovation of existing buildings and earth-moving activities at the campus could result in the release of hazardous building materials and soil contaminants such as ACMs, LBP, and PCBs. Release of these hazardous materials may create a hazard for the public, with the potential to affect students, staff, and visitors at Grant ES, resulting in a **potentially significant** impact. However, compliance with regulatory requirements and implementation of **Mitigation Measures HAZ-1** and **HAZ-2** would

ensure that such materials would be properly removed, handled, and disposed. These measures would minimize the potential for the release of hazardous building materials and soil contaminants during construction activities and would ensure that students, faculty, and visitors at Grant ES are not exposed to hazardous material releases.

Operation

During operations, hazardous materials that could be used for maintenance of campus facilities and landscaped areas include chemical reagents, solvents, fuels, paints, cleansers, pesticides, and fertilizers. These materials would be similar to those currently used at the campus and throughout the District. As such, the minor and limited use of hazardous materials on the campus during operations would not be expected to adversely affect students, faculty, and visitors at Grant ES. Adherence to federal, state, and local regulations would minimize risks associated with hazardous emissions in proximity to schools. Therefore, operational impacts associated with hazardous emissions or handling of hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school would be **less than significant**.

Impact 5.7-4: The Proposed Project would not be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code § 65962.5 and, as a result, would create a significant hazard to the public or the environment. [Threshold H-4]

California Government Code Section 65962.5 requires CalEPA to develop a list (updated at least annually) of hazardous waste and substances release sites, known as the Cortese List or California Superfund. DTSC is responsible for a portion of the information on the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

As part of the Phase I ESA, EDR was contracted to perform a radius search of governmental databases for the Proposed Project. According to the radius search, the campus was listed on the ECHO database; however, no violations were reported. Additionally, according to the two HWTZ HAZNET database listings, this facility disposed of 8.4 tons of asbestos-containing waste in 1995, and 0.06 P unit of 352 other organic solids in 2009. The RCRA Non-Generators/No Longer Regulated database listings show that the school is not a generator of hazardous waste in 2018. Based on the database results, neither a release of hazardous materials nor the presence of a naturally occurring hazardous material that would pose a threat to public health or the environment is anticipated. The campus is not on any other state and federal hazardous materials sites. Therefore, the Proposed Project would not create a significant hazard to the public or the environment from being on a hazardous materials site compiled pursuant to Government Code Section 65962.5. Impacts would be **less than significant**.

Impact 5.7-5: Development of the Proposed Project would not affect the implementation of an emergency responder or evacuation plan. [Threshold H-6]

During each phase of Project construction, construction vehicles, including employees, vendors, and equipment, would be traveling to and from the campus. Construction activities may occur during the school year; therefore, all construction staging areas and access locations would be well identified so that access for

construction vehicles and emergency responders is maintained. As identified in Section 5.11, *Transportation*, the campus would continue to be accessible to emergency responders, including SMFD, via Pearl Street, 24th Court, 24th Street, and Pearl Place during construction and operation of the proposed project. Project-related increases in traffic on the surrounding roadways would not be sufficient to affect emergency response in the area. To address fire and emergency access needs, the Proposed Project would be required to incorporate all applicable design and safety requirements from the most current adopted fire codes, building codes, and nationally recognized fire and life safety standards of the City of Santa Monica and the SMFD.

The Proposed Project would also be subject to review by the Division of State Architect (DSA), who oversees design and construction for K–12 schools. The Proposed Project would be required to comply with all design standards established by DSA, including Policy 07-03, "Fire Department and Emergency Access Roadways and School Drop-Off Areas." The purpose of this policy is to establish requirements based on State Fire Marshal Regulations in Titles 19 and 24 of the California Code of Regulations and the California Vehicle Code for fire and emergency access roadways on public school or community college campuses, including fire and emergency access roadways combined with student drop-off and pick-up areas. DSA would review project plans to ensure that plans, specifications, and construction comply with California's building codes (24 CCR). In addition, the City and the SMFD would be responsible for reviewing the Proposed Project's compliance with related codes and standards prior to issuance of building permits. Therefore, construction and operation of the Proposed Project would not affect the implementation of an emergency responder or evacuation plan, and impacts would be **less than significant**.

5.7.4 Mitigation Measures

Impacts 5.7-2 and 5.7-3

HAZ-1 Prior to demolition or renovation activities, the existing buildings proposed for demolition or renovation will be inspected by a qualified environmental specialist for the presence of hazardous building materials, including asbestos containing materials asbestos-containing material (ACM), lead-based paint (LBP), and polychlorinated biphenyl (PCB). If hazardous building materials are detected, abatement and removal of these materials will be conducted in accordance with applicable federal, state, and local guidelines as follows:

- In the event that ACM and LBP are found on the campus, notice shall be provided to South Coast Air Quality Management District (AQMD), and any demolition activities likely to disturb ACM and LBP shall be carried out by a contractor trained and qualified to conduct lead- or asbestos-related construction work in conformance with South Coast AQMD, California Department of Industrial Relations, Department of Toxic Substances Control (DTSC), and other applicable requirements. If found, ACM and LBP will be disposed of at an appropriately permitted facility.
- If PCBs are found on the campus, these materials shall be managed in accordance with the Metallic Discards Act of 1991 (Public Resources Code Sections 42160–42185) and other state and federal guidelines and regulations. Demolition plans and contract specifications will incorporate any necessary abatement measures in compliance with the

Metallic Discards Act, particularly Section 42175, Materials Requiring Special Handling, for the removal of PCB-containing materials.

- Once hazardous building materials are removed, a follow-up inspection shall be performed of the existing buildings prior to demolition or renovation to confirm that the hazardous items have been removed to an acceptable level per DTSC requirements before commencing with demolition activities.

HAZ-2 The District will retain a licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer with more than 2 years of experience conducting hazardous material and contamination assessments to conduct soil sampling. The soil sampling will be conducted prior to any disturbance of the area(s) suspected of potential contamination to evaluate shallow soil conditions with respect to lead-based paint residues from on-site structures built prior to 1990 and chemicals commonly used at dry cleaners, including chlorinated solvents, due to historical uses at nearby properties. If the soil sampling identifies the presence of contaminated soils, the contractor shall prepare and implement a contaminated soils removal action workplan for removal of affected soils on-site. Affected soils shall be excavated and disposed of off-campus at a landfill permitted to accept such waste, and the campus shall be cleaned to an acceptable level per DTSC requirements.

After the District confirms that the affected soils have been removed through the collection of soil samples in the excavation areas, the excavation shall be backfilled and compacted with clean soil, and the contractor will prepare a Completion Report that documents the removal and presents analytical results for the confirmation samples.

5.7.5 Level of Significance After Mitigation

Mitigation Measures HAZ-1 and HAZ-2 would ensure proper handling of hazardous building materials (e.g., ACMs and LBPs) and potentially contaminated soils during construction to ensure the safety of humans and the environment. The mitigation measures would reduce potential impacts associated with the routine transport, storage, production, use, or disposal of hazardous materials hazards to less than significant. Impact 5.7-2 and 5.-7.3 would be reduced to **less-than-significant with mitigation**.

5.7.6 Cumulative Impacts

The area considered for cumulative impacts is the City of Santa Monica. Hazards and hazardous waste impacts are typically unique to each site and do not usually contribute to cumulative impacts. Cumulative development projects would be required to assess potential hazardous materials impacts on the development site prior to grading. The Proposed Project and cumulative projects would be required to comply with laws and regulations governing hazardous materials and hazardous waters used and generated, as described in Section 5.7.1, *Environmental Setting*. Therefore, cumulative impacts related to hazards and hazardous materials would be **less than significant** after regulatory compliance.

5.7.7 References

California Department of Resources Recycling and Recovery (CalRecycle). 2023, June 9 (accessed). SWIS Facility/Site Search. Database search. https://www2.calrecycle.ca.gov/SolidWaste/Site/Search.

Department of Toxic Substances Control (DTSC). 2023, June 9 (accessed). EnviroStor. Database search. http://www.envirostor.dtsc.ca.gov/public/.

Los Angeles County. 2018a, February (amended). Santa Monica Mountains Land Use Plan: A Component of the Santa Monica Mountains Local Coastal Program. County of Los Angeles Department of Regional Planning. https://planning.lacounty.gov/assets/upl/project/coastal_amended-LUP-maps.pdf.

——— 2018b. Santa Monica Mountains Local Implementation Program: A Component of the Santa Monica Mountains Local Coastal Program. County of Los Angeles Department of Regional Planning. Amended February 2018. https://planning.lacounty.gov/assets/upl/project/coastal_amended-LIP-maps.pdf

Los Angeles County Fire Department Health and Hazardous Materials Division. 2009, December 3 (revised). Compliance Guideline for Hazardous Wastes and Materials. https://fire.lacounty.gov/wp-content/uploads/2019/09/HHMD-Compliance-Guidance-Document-2-1.pdf.

NV5 Alta Environmental. 2022, April 4. *Phase I Environmental Site Assessment Report.*

Santa Monica, City of. 2013. Multi Hazard Functional Emergency Plan 2013. https://www.smgov.net/Departments/OEM/Preparedness/Multi-Hazard_Plan.aspx.

———. 2015, July 24. Santa Monica Land Use and Circulation Element.

——— 2016, October 4. All Hazard Mitigation Plan. https://www.smgov.net/uploadedFiles/Departments/OEM/Video_Archive/SantaMonica_AHMP_03.20.2019.pdf.

State Water Resources Control Board (SWRCB). 2023, June 9 (accessed). GeoTracker. Database search. http://geotracker.waterboards.ca.gov/.

US Environmental Protection Agency (USEPA). 2023a, June 9 (accessed). EJSCREEN. Database search. https://ejscreen.epa.gov/mapper/.

———. 2023b, January 9 (accessed). EnviroMapper for EnviroFacts. Database search. https://enviro.epa.gov/enviro/em4ef.home.

5. Environmental Analysis
HAZARDS AND HAZARDOUS MATERIALS

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5.8 HYDROLOGY AND WATER QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the Grant Elementary School Campus Master Plan Project's (Proposed Project) potential impacts to hydrology and water quality conditions in the City of Santa Monica. The analysis in this section in based, in part, on the following technical reports:

- *Geotechnical Investigation Report: Library and Classroom Renovations Project, Grant Elementary School, 2368 Pearl Street, Santa Monica, Los Angeles County, California*, Converse Consultants, December 9, 2021

A complete copy of this technical report is provided in Appendix H of this DEIR.

A California Environmental Quality Act (CEQA) scoping meeting was conducted on February 7, 2023. However, comments pertaining to hydrology and water quality were not raised during the public review period. The IS/NOP and all scoping comment letters are included as Appendices B and C of this document.

5.8.1 Environmental Setting

5.8.1.1 REGULATORY BACKGROUND

Federal, state, and local laws, regulations, plans, or guidelines related to hydrology and water quality are summarized in this section.

Federal

Clean Water Act

The Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1972. The CWA is the principal statute governing water quality. It establishes the basic structure for regulating discharges of pollutants into the waters of the United States[1] and gives the federal Environmental Protection Agency (EPA) the authority to implement pollution-control programs, such as setting wastewater standards for industry. The statute's goal is to end all discharges entirely and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates both the direct and indirect discharge of pollutants into the nation's waters. The CWA sets water quality standards for all contaminants in surface waters and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges, requires states to establish site-specific water quality standards for navigable bodies of water, and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA also funded the construction of sewage treatment plants and recognized the need for planning to address nonpoint sources of pollution. The following CWA Sections assist in ensuring water quality in surrounding water bodies.

[1] Waters of the US generally include surface waters—lakes, rivers streams, bays, the ocean, dry streambeds, wetlands—and storm sewers that are tributary to any surface water body.

- **Section 208** of the CWA requires the use of best management practices (BMPs) to control discharge of pollutants in stormwater during construction.

- **Section 303(d)** requires creation of a list of impaired water bodies by states, territories, and authorized tribes; evaluation of lawful activities that may impact impaired water bodies;[2] and preparation of plans to improve the quality of these water bodies. Water bodies on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution-control technology.

- **Section 402(p)** establishes a framework to control water pollution by regulating point-source discharges under the National Pollutant Discharge Elimination System (NPDES) permit program. Point-source discharges are readily identifiable, discrete inputs where waste is discharged to the receiving waters from a pipe or drain. Nonpoint discharges occur over a wide area and are associated with particular land uses (such as urban runoff from streets and stormwater from construction sites).

National Pollution Discharge Elimination System

Under the NPDES program (under Section 402 of the CWA), all facilities that discharge pollutants from any point source into waters of the U.S. must have a NPDES permit. The term "pollutant" broadly applies to any type of industrial, municipal, and agricultural waste discharged into water. Point sources can be publicly owned treatment works, industrial facilities, and urban runoff. The NPDES program addresses certain agricultural activities, but the majority are considered nonpoint sources and are exempt from NPDES regulation. Direct sources discharge directly to receiving waters, and indirect sources discharge to publicly owned treatment works, which in turn discharge to receiving waters. Under the national program, NPDES permits are issued only for direct, point-source discharges. The NPDES has a variety of measures designed to minimize and reduce pollutant discharges. All counties with storm drain systems that serve a population of 50,000 or more, as well as construction sites one acre or more in size, must file for and obtain an NPDES permit.

State

State Water Resources Control Board

Responsibility for the protection of water quality in California rests with the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCB). The SWRCB establishes statewide policies and regulations for the implementation of water quality control programs mandated by federal and state water quality statutes and regulations. The RWQCBs develop and implement Water Quality Control Plans (Basin Plans) that consider regional beneficial uses, water quality characteristics, and water quality problems. In cases where the Basin Plan does not contain a standard for a particular pollutant, other criteria are used to establish a standard. Other criteria may be applied from SWRCB documents (e.g., the Inland Surface Waters Plan and the Pollutant Policy Document, California Toxics Rule) or from EPA water quality criteria developed under Section 304(a) of the CWA. Numeric criteria are required by the CWA for many priority toxic pollutants. To fill in the gap between the water quality control plans and CWA requirements, on May 18, 2000,

[2] Impaired water bodies are water bodies that do not meet or are not expected to meet water quality standards.

the EPA promulgated the California Toxics Rule based on the Administrator's determination that numeric criteria are necessary in California to protect human health and the environment. These federal criteria are numeric water quality criteria for priority toxic pollutants and other provisions for water quality standards legally applicable in California for inland surface waters, enclosed bays, and estuaries for all purposes and programs under the CWA.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Water Code Sections 13000 et seq.) is the basic water quality control law for California. Under this Act, the SWRCB has ultimate control over state water rights and water quality policy. In California, the EPA has delegated authority to issue NPDES permits to the SWRCB. The state is divided into nine regions related to water quality and quantity characteristics. The SWRCB, through its nine RWQCBs carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a Water Quality Control Plan or Basin Plan that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region's ground and surface water, and local water quality conditions and problems. The Proposed Project's site lies within the jurisdiction of the Los Angeles RWQCB (Region 4).

Waste Discharge Requirements

All dischargers of waste to waters of the state are subject to regulation under the Porter-Cologne Act and the requirement for waste discharge requirements (WDR) is incorporated into the California Water Code. This includes both point- and nonpoint-source dischargers. All current and proposed nonpoint-source discharges to land must be regulated under WDRs, waivers of WDRs, a basin plan prohibition, or some combination of these administrative tools. Discharges of waste directly to State waters would be subject to an individual or general NPDES permit, which also serves as WDRs. The Proposed Project is subject to the Municipal Stormwater NPDES Permit and the Construction General Permit, both of which also serve as WDRs.

The RWQCBs have primary responsibility for issuing WDRs. The RWQCBs may issue individual WDRs to cover individual discharges or general WDRs to cover a category of discharges. WDRs may include effluent limitations or other requirements that are designed to implement applicable water quality control plans, including designated beneficial uses and the water quality objectives established to protect those uses and prevent the creation of nuisance conditions. Violations of WDRs may be addressed by issuing Cleanup and Abatement Orders or Cease and Desist Orders, assessing administrative civil liability, or seeking imposition of judicial civil liability or judicial injunctive relief.

Statewide NPDES General Construction Activity Stormwater Permit

Pursuant to the CWA Section 402(p) and as related to the goals of the Porter-Cologne Water Quality Control Act, the SWRCB has issued a statewide NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ, NPDES No. CAS000002), which was adopted September 8, 2022 and became effective on September 1, 2023. Every construction project that disturbs one acre or more of land requires coverage under the Construction General Permit.

For all sites that are not covered by a Phase I or Phase II MS4 permit, a project must implement post-construction stormwater performance standards as stated in the Construction General Permit. This is applicable for all K-12 schools and community colleges, which includes the Proposed Project.

Statewide Trash Amendments

On April 7, 2015, the SWRCB adopted an amendment to the Water Quality Control Plan for Ocean Waters of California to control trash and Part 1, Trash Provisions, of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California. They are collectively referred to as "the Trash Amendments." The Trash Amendments apply to all surface waters of California and include a land-use-based compliance approach to focus trash controls on areas with high trash-generation rates. Areas such as high density residential, industrial, commercial, mixed urban, and public transportation stations are considered priority land uses. The City has incorporated in its municipal code that any structural or treatment control BMP used for stormwater mitigation must include a full capture trash system.

Water Conservation in Landscaping Act of 2006

The Water Conservation in Landscaping Act includes the State of California's Model Water Efficient Landscape Ordinance (MWELO), which requires cities and counties to adopt landscape water conservation ordinances. The MWELO was revised in July 2015 via Executive Order B-29-15 to address the ongoing drought and build resiliency for future droughts. State law requires all land use agencies, which includes cities and counties, to adopt a water efficient landscape ordinance that is at least as efficient as the MWELO prepared by the California Department of Water Resources. The 2015 revisions to the MWELO improve water conservation in the landscaping sector by promoting efficient landscapes in new developments and retrofitted landscapes. The revisions increase water efficiency by requiring more efficient irrigation systems, incentives for grey water usage, improvements in on-site stormwater capture, and limiting the portion of landscapes that can be covered in high-water-use plants and turf. This applies to residential, commercial, industrial, and institutional projects that require a permit, plan check, or design review. The previous landscape size threshold for new development projects ranged from 2,500 square feet to 5,000 square feet. The size threshold for rehabilitated landscapes has not changed and remains at 2,500 square feet.

The City of Santa Monica has enacted these provisions in the Santa Monica Municipal Code Article 8, Chapter 8.108, Green Building, Landscape Design, Resource Conservation and Construction and Demolition Waste Management Standards.

Regional

Municipal Stormwater NPDES Permit

Stormwater discharges from the County of Los Angeles are regulated under the Waste Discharge Requirements for Municipal Stormwater and Urban Runoff Discharges within the County of Los Angeles, and Incorporated Cities Therein, Except the City of Long Beach (Order No. R4-2012-0175 and NPDES No. CAS004001), including all subsequent amendments through 2016 issued by the Los Angeles RWQCB, which serve as a NPDES permit under the federal CWA. The permittees are required to effectively prohibit non-stormwater

discharges into the municipal storm drain system. Additionally, the City of Santa Monica approved a local Low Impact Development Ordinance equivalency that provides equivalent or greater water quality benefits than those derived from the County's NPDES permit requirements (SWRCB 2015).

Although the Proposed Project is in Los Angeles County, all California K-12 school districts and community college districts are not currently subject to the requirements of the MS4 Permit. The SWRCB is in the process of expanding the Phase II Small MS4 permit to include school districts and community colleges. Once the amendment is adopted, school districts and community college districts will have five years to comply with the Phase II Small MS4 permit.

The new permit would require school districts and community college districts to develop a Stormwater Management Plan that includes a map of stormwater drainage on school properties as well as 1) identifying areas throughout the district that could generate stormwater pollution, 2) training staff on stormwater BMPs, 3) continuing to implement the SWRCB's Construction General Permit, 4) designing and building new construction to meet the permit requirements for stormwater runoff quality and quantity, and 5) documenting activities and submitting an annual report to the SWRCB.

Prior to issuance of the new Phase II MS4 permit, the Proposed Project would be required to comply with the provisions of the SWRCB's post-construction stormwater performance standards. Once the new permit is issued, it is expected that the school districts and community college districts would have to comply with requirements similar to those specified in Section F.5.g, Post Construction Storm Water Management Program, of the existing Phase II MS4 permit. This provision specifies site design and low impact development design standards, source control measures, and sizing criteria for stormwater retention and treatment.

Basin Plan

The Los Angeles RWQCB implements several federal and state laws, the most important of which are the State Porter-Cologne Act and the federal CWA. The Los Angeles Region Basin Plan (1995 and as amended in 2022) was prepared by the Los Angeles RWQCB to comply with the federal CWA and the Porter-Cologne Act. The Basin Plan establishes water quality objectives for surface water and groundwater and implementation programs to meet stated objectives and to protect the beneficial uses of water in the Los Angeles region.

Local

City of Santa Monica Municipal Code

Projects in Santa Monica must also comply with the following requirements of the Santa Monica Municipal Code (SMMC):

- **Chapter 7.10, Runoff Conservation and Sustainable Management.** Codifies requirements of the County MS4 permit to maximize on-site storage of runoff and use of rainwater and stormwater through a hierarchy of construction and post-construction BMP strategies.

- **Section 7.06.450, Water/stormwater runoff mitigation.** Requires permittees to prevent non-stormwater discharge construction sites from entering the storm drain system.

- **Section 7.10.090(x), Runoff reduction requirements for development.** Any structural or treatment control BMP used for rainwater or stormwater mitigation must include a full capture trash system.

- **Section 7.10.100, Runoff requirements for construction activity.** Requires BMPs for all construction activity in the City unless otherwise specified, including a Stormwater Pollution Prevention Plan (SWPPP) and Erosion and Sediment Control Plan.

- **Section 7.12.170, Recycled Water Requirements.** Recycled water will be used within the city's recycled water service area in lieu of potable water for all approved uses consistent with all applicable federal, state, and local laws.

- **Section 7.16.020, Water conservation requirements.** Outlines outdoor watering restrictions to reduce spray and flow to any impermeable surface to limit surface runoff.

- **Section 7.56.030, Stormwater management user fees.** Fees applied to each parcel in the city for the operation, maintenance, improvement and replacement of the existing storm drainage system, future systems and improving stormwater quality.

- **Section 8.108.010, Green Building, Landscape Design, Resource Conservation and Construction and Demolition Waste Management Standards.** Outlines green building design, landscape maintenance, and construction and demolition waste management standards and requirements to minimize ecological impact and to protect, preserve, and restore local air, water, flora, and fauna.

- **Section 9.26.070, Water Efficient Landscaping and Irrigation.** Specifies landscaping regulations to protect water quality, prevent soil erosion, improve aesthetic appearances and aid in energy conservation. All landscaping shall comply with Chapter 8.108 of the SMMC.

2018 Sustainable Water Master Plan

In 2014, the City adopted a Sustainable Water Master Plan (SWMP) with the goal of achieving water supply self-sufficiency in 2020 by eliminating reliance on imported water from the Metropolitan Water District (MWD). Since the adoption of the SWMP, the City has been actively implementing new water supply and conservation programs and policies. In November 2018, the City updated the SWMP to outline measures to achieve water supply self-sufficiency by 2023. The SWMP provides a combination of water demand reduction strategies and increased development of local water supplies. Water reduction is achieved through implementation of various water conservation and efficiency programs designed to permanently reduce residential and commercial water use. Development of new sustainable local water supplies comes from (i) alternate water sources, such as captured rainwater and municipal wastewater for nonpotable uses, (ii) increased efficiency of the City's water treatment systems, and (iii) additional pumping from existing wells and new wells in the local groundwater basin.

Santa Monica Groundwater Sustainability Plan

The Santa Monica Groundwater Sustainability Agency prepared the Groundwater Sustainability Plan (GSP) for the Santa Monica Groundwater Subbasin. The subbasin, which encompasses the Proposed Project, is designated as a medium priority basin and is not in critical overdraft. The GSP, adopted in January 2022 and currently under review by the Department of Water Resources for adequacy, describes groundwater sustainability goals for current and future uses in the subbasin to provide long-term, reliable, and efficient groundwater supplies to agricultural, domestic, municipal, and industrial uses. The groundwater basin is not adjudicated, and the City of Santa Monica is the only municipality that pumps groundwater from this basin. The GSP provides management criteria to ensure that the sustainable yield of the groundwater basin is not exceeded.

Santa Monica Water Neutrality Ordinance

The City of Santa Monica adopted the Water Neutrality Ordinance in May 2017. The ordinance does not allow new residential or commercial developments to exceed the previous water use for the site based on a five-year historic average. The means to achieve water net neutrality is through two options: 1) the installation of water-efficient fixtures and landscaping at the proposed development site or 2) payment of an in-lieu fee that funds the City's Water Neutrality Direct Install Program. The City has prepared water neutrality calculators based on the type of new development or redevelopment, which must be submitted to the City with the project application. The City will provide the baseline 5-year historic water demand for a project's parcel to assist in calculating the existing and proposed water demand.

Santa Monica Efficient Landscape and Irrigation Standards

The City developed "Water Efficient Landscape and Irrigation Standards" (October 2016) to assist project developers in meeting the City's Green Building Ordinance (SMMC 8.108). This document details the design, installation, and maintenance requirements of landscape and irrigation systems in Santa Monica. Prior to the issuance of a building permit, project applicants must submit landscape documentation, including a landscape planting plan with details and specifications, landscape water demand calculations, and a landscape plan submittal verification sheet. If a new irrigation system is part of a project, than an irrigation plan with details and specifications and an irrigation plan submittal verification sheet must also be submitted. The City provides landscape water demand calculators and guidelines for complying with the standards on its website through the Office of Sustainability and the Environment.

5.8.1.2 EXISTING CONDITIONS

Regional and Local Drainage

The Grant ES campus is in the Santa Monica Bay Watershed, more specifically in the Garapito Creek-Frontal Santa Monica Bay subwatershed. The Santa Monica Bay Watershed Management Area encompasses 414 square miles. It extends from the crest of the Santa Monica Mountains on the north, from the Ventura-Los Angeles County line to the west, downtown Los Angeles to the east, and the Pacific Ocean to the south. The smaller Garapito Creek-Frontal Santa Monica Bay subwatershed extends from the Santa Monica Mountains to the

north, Malibu Beach to the west, Westwood and Marina del Rey to the east, and the Pacific Ocean to the south (County of Los Angeles 2021).

The Grant ES campus is currently developed with hardscape and impervious surfaces encompassing the school buildings and parking lots; the pervious areas include landscaping and play fields. The topography in the area is mostly flat with gentle slopes to the south. Currently, runoff is collected via swales and storm drain inlets and conveyed by an internal storm drain system to the City's storm drains beneath 24th Court and Pearl Street (City of Santa Monica 2023a).

Surface Water Quality

Though small compared with watersheds in other parts of California, the Santa Monica Bay Watershed is composed of highly variable geologic and hydrologic characteristics, habitat features, and human activities. According to the Los Angeles RWQCB, the existing beneficial uses at Santa Monica Bay include water contact and noncontact water recreation; commercial and sport fishing; wildlife habitat; marine habitat; and shellfish harvesting. Fish spawning is also a potential beneficial use (SWRCB 2022).

In addition to the establishment of beneficial uses and water quality objectives, another approach to improving water quality is a watershed-based methodology that focuses on all potential pollution sources and not just those associated with point sources. If a body of water does not meet established water quality standards under traditional point source controls, it is listed as an impaired water body under Section 303(d) of the CWA. For 303(d) listed water bodies, a limit is established that defines the maximum amount of pollutants that can be received by that water body.

The major sources of pollutants in Santa Monica Bay are the three publicly owned treatment works. Pollutants from other NPDES discharges have been estimated to contribute less than 2 percent of the total pollutants being discharged to the Bay (SWRCB 2018a). A considerable number of monitoring programs have been implemented in the Santa Monica Bay Watershed. Four statewide monitoring programs—State Mussel Watch, Bay Protection and Toxic Cleanup, Coastal Fish Contamination Program, and Toxic Substances Monitoring—have focused on biological measurements as well. More recently, the state's Surface Water Ambient Monitoring Program has also collected chemical and biological data.

Santa Monica Bay Offshore/Nearshore is listed as an impaired water body, and the pollutants of concern include dichlorodiphenyltrichloroethane (DDT), polychlorinated biphenyls (PCBs), mercury, arsenic, and trash (SWRCB 2018b).

Groundwater and Groundwater Quality

The campus is within the Santa Monica Groundwater Subbasin. The City of Santa Monica supplies potable water through a combination of local groundwater (60 to 70 percent of the total water supply) and imported water from the MWD, which accounts for approximately 30 to 40 percent of the total water supply (City of Santa Monica 2021).

The Geotechnical Exploration report found that groundwater was not encountered to the maximum drilled depth of approximately 21 feet below ground service (bgs) (Converse Consulting 2021). The historical depth of groundwater is documented at approximately 40 feet bgs (Converse Consulting 2021).

The listed beneficial uses of local groundwater are for municipal and domestic supplies, industrial process supply and service supply, and agricultural supply (SWRCB 2022). Although the groundwater subbasin has been affected by releases of chlorinated solvents and other chemicals—such as trichloroethylene (TCE), tetrachloroethylene (PCE), and methyl tertiary butyl ether (MTBE)—the City treats pumped groundwater at the Charnock Water Treatment Facility and blends the treated water with noncontaminated groundwater to achieve the water quality objectives in the Basin Plan (City of Santa Monica 2021).

Recycled Water

The City of Santa Monica owns and operates all potable water and sewerage systems in Santa Monica, serving approximately 93,000 people and over 18,000 service connections. Additionally, the City owns and operates a recycled water distribution system serving customers for nonpotable applications such as irrigation landscaping and toilet flushing. The recycled water system is served by the Santa Monica Urban Runoff Recycling Facility and new Advanced Water Treatment Facility (AWTF), which together produce approximately 1.5 million gallons per day of advanced treated recycled water (City of Santa Monica 2023a). The AWTF also directly injects treated stormwater into the groundwater basin to recharge local supplies (City of Santa Monica 2022).

Flooding

As discussed in the Initial Study (see Appendix B of this DEIR), the campus is within Flood Zone X (Zone X) as designated by the Federal Emergency Management Act. Zone X is an area of minimal flood hazard, usually depicted on Flood Insurance Rate Maps as above the 500-year flood level (FEMA 2021). Additionally, the Grant ES campus is not in a dam inundation area and there are no nearby aboveground water storage tanks that could cause flooding in the unlikely event of a tank failure (Division of Safety of Dams 2023).

5.8.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

HYD-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

HYD-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

HYD-3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in a substantial erosion or siltation on- or off-site.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

iv) Impede or redirect flood flows.

HYD-4 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

HYD-5 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The Initial Study, included as Appendix B, substantiates that impacts associated with the following thresholds would be less than significant:

- Threshold HYD-3 (i) through 3(iv)
- Threshold HYD-4
- Threshold HYD-5

These impacts are addressed in Chapter 6, *Other CEQA Considerations*, and in Appendix B of this DEIR.

5.8.3 Environmental Impacts

5.8.3.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the IS/NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.10-1: The Proposed Project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. [Threshold HYD-1]

Urban runoff from storms or nuisance flows (runoff during dry periods) from development projects can carry pollutants to receiving waters. Runoff can contain pollutants such as oil, fertilizers, pesticides, trash, and sediment. This runoff can flow directly into local streams or into storm drains and continue through pipes until it is released untreated into a local waterway and eventually the ocean. Untreated stormwater runoff degrades water quality in surface waters and groundwater and can affect drinking water, human health, and plant and animal habitats.

The construction and operational phases of the Proposed Project could have the potential to impact water quality. Construction activities may impact water quality due to the erosion of exposed soils. During the operational phase of the Proposed Project, erosion potential would decrease but impacts from urban runoff

would increase. The following is a discussion of the potential impacts that the construction and operational phases of the Proposed Project could have on water resources and quality.

Proposed Project Construction

Clearing, grading, excavation, and construction activities associated with the Proposed Project may impact water quality through soil erosion and increasing the amount of silt and debris carried in runoff. Additionally, the use of construction materials such as fuels, solvents, and paints may present a risk to surface water quality. Finally, the refueling and parking of construction vehicles and other equipment during construction may result in oil, grease, or related pollutant leaks and spills that may discharge into the storm drain system.

Because each of the individual phases of construction of the Proposed Project would disturb less than one acre, the requirements of the SWRCB's Construction General Permit would not apply. However, the Proposed Project would minimize potential erosion and sedimentation impacts through compliance with SMMC Chapter 7.10.100, runoff requirements for construction activity, and the City's Public Works Department standard notes for construction (see Santa Monica 2023b). The City requires that developers implement an effective combination of erosion and sediment control BMPs to prevent erosion and discharges to storm drains.

The recommended BMPs include, but are not limited to:

- Erosion controls (e.g., scheduling, preservation of existing vegetation)
- Sediment controls (e.g., silt fence, plastic coverings, sandbags)
- Tracking controls (e.g., stabilized construction entrance/exit, tire wash)
- Non-storm water management (e.g., dewatering practices, water conservation practices)
- Materials and waste management (e.g., material storage, stockpile management, spill prevention and control, hazardous waste management, concrete waste management, sanitary/septic waste management)
- Good housekeeping practices.

Adherence to the construction BMPs and City's municipal code requirements would reduce the potential for water pollution and prevent the degradation of downstream receiving waters. Construction BMPs would also reduce the potential contamination of stormwater due to sediment and other pollutants such as trash and debris, oil, grease, fuels, other toxic chemicals, construction materials, and nutrients. Therefore, the construction of the Proposed Project would not violate water quality standards or waste discharge requirements and would not otherwise substantially degrade water quality, resulting in a **less than significant impact**.

Proposed Project's Operation

Once the Proposed Project has been constructed, urban runoff could include a variety of contaminants that could impact water quality. Runoff from buildings and parking lots typically contain oils, grease, fuel, antifreeze, byproducts of combustion (such as lead, cadmium, nickel, and other metals), as well as fertilizers, herbicides,

pesticides, and other pollutants. Precipitation at the beginning of the rainy season may result in an initial stormwater runoff with high pollutant concentrations.

The District is not directly regulated under the Los Angeles County MS4 permit, and the Phase II Small MS4 permit for K-12 school districts and community colleges has not yet been issued by the SWRCB. In the interim, the District is required to comply with the post-construction performance standards under the Construction General NPDES Permit. The performance standards specify runoff reduction requirements for all sites not covered by Phase I or Phase II MS4 permits to minimize and mitigate stormwater runoff impacts. The following is a discussion of site-design, source-control, and treatment-control BMPs that would be incorporated into the Proposed Project.

Site Design BMPs

Site design BMPs would be incorporated into the Proposed Project's design to reduce the potential impacts on surface and groundwater quality, thereby reducing stormwater runoff from the existing conditions. These include:

- Incorporate earthen swales, planters, and landscaping to mitigate urban heat island impacts.
- Include mostly native plants and drought-tolerant plants in landscaping plans.
- Use effective irrigation systems to minimize outdoor water usage, such as the proposed stormwater capture and reuse system which would collect and store runoff for site irrigation purposes.

Source Control BMPs

Source control BMPs effectively minimize the potential for typical urban pollutants to contact stormwater, thereby limiting water quality impacts downstream. A variety of source control BMPs would be incorporated into the Proposed Project and implemented throughout the operation of the campus, including the following:

- Educational materials related to urban runoff provided to all employees, students, and staff.
- Inspection and maintenance of site BMPs—catch basins, grate inlets, etc.
- Compliance with the SMMC and Uniform Fire Code.
- Providing storm drain stenciling or signage on all storm drain inlets and catch basins.
- Properly designing and inspecting on a regular basis all trash storage areas, loading docks, outdoor storage areas, and outdoor work areas.

Treatment Control BMPs

Treatment control BMPs (single or in combination) remove anticipated pollutants of concern from runoff. Additionally, low impact design features are proposed for the Proposed Project to avoid and/or minimize impacts to hydrology and water quality. The proposed low-impact design features for the Proposed Project

include flow-through planters and landscaped areas that would collect and treat runoff. These features would connect to the existing storm drain system at the school and are designed to detain peak flows for the 85th percentile storm event prior to discharge into the City's storm drain system. The maintenance requirements, inspection schedule, and staff responsibilities for maintaining the stormwater treatment systems would be provided by the District.

Furthermore, as part of the statewide mandate to reduce trash in receiving waters, the District would adhere to the requirements of the SMMC, which include the installation and maintenance of full-capture trash screening devices at curb inlets, grate inlets, and catch basin inlets. The trash screening devices must be certified by the SWRCB. With the implementation of the BMP features described above as well as compliance with State, County, and local regulations and code requirements, the Proposed Project would have a **less than significant impact** on surface or groundwater quality during the operational phase.

Impact 5.10-2: The Proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Proposed Project may impede sustainable groundwater management of the basin. [Threshold HYD-2]

The City of Santa Monica supplies potable water through a combination of local groundwater (60 to 70 percent of the total water supply) and imported water from the MWD, which accounts for 30 to 40 percent of total water supply (Santa Monica 2021). Additionally, the City injects treated stormwater from the AWTF to replenish local groundwater supplies. While the Proposed Project would result in an increase of approximately 73,701 square feet on the campus, the increase in square footage is needed in order to replace undersized and inflexible facilities (including portable facilities) with larger, flexible spaces that accommodate modern, diverse learning styles and allow for variable uses, such as rotational learning in the classroom and project-based learning that allows simultaneous individualized, small group, and large group instruction and provide enhanced, modern support spaces that already exist—such as libraries, cafeteria, labs, maker spaces, and other student services. The total number of faculty, staff, and students (those who consume water and drive demand) would not change with the additional square feet of physical development.

Additionally, the Proposed Project would include replacement of existing water infrastructure with efficient low-flow fixtures, and all new buildings developed under the Proposed Project would be designed using applicable green building practices, including those of the most current Building Energy Efficiency Standards (24 CCR Part 6) and California Green Building Standards Code (24 CCR Part 11). The new building spaces would accommodate the current capacity of students and provide closer access to water and restrooms as opposed to current conditions, in which students walk to other buildings from the portable classrooms. The facilities and water infrastructure would serve to meet existing demand.

Regarding outdoor landscaping, the total landscaped/irrigated areas onsite would increase by 5,100 square feet, including the learning garden, after completion of phased development. However, irrigation for landscaped areas would be in part supplied with an on-campus cistern that captures stormwater from the low-impact design features and pumps it to the on-site irrigation system. Therefore, upon completion of the Proposed Project, the water demand for irrigation is anticipated to be similar to or less than current conditions.

Additionally, it is unlikely that groundwater would be encountered during construction that would require dewatering, since groundwater was not encountered during the geotechnical investigation in boreholes drilled to a maximum depth of approximately 21 feet bgs. The historic depth of groundwater is documented at depths of approximately 40 feet bgs (Converse Consultants 2021). Therefore, construction dewatering would not be necessary and would not impact groundwater recharge.

Therefore, the Proposed Project would not interfere with groundwater recharge. Therefore, construction and operation of the Proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge during operation or construction, and impacts would be **less than significant**.

5.8.4 Mitigation Measures

No mitigation measures are required.

5.8.5 Level of Significance After Mitigation

All impacts are **less than significant**.

5.8.6 Cumulative Impacts

The area considered for cumulative hydrology, drainage, and flood hazard impacts is the Santa Monica Bay Watershed. New projects in the area, both individually and cumulatively, could increase the impervious surface areas, increase the volume of stormwater runoff, and contribute to pollutant loading in the storm drain system with discharge to creeks and ultimately to the Pacific Ocean. However, as with the Proposed Project, future projects within the City of Santa Monica and Los Angeles County would be required to comply with drainage and grading regulations and ordinances that control runoff and regulate water quality at each development site. New development and redevelopment projects would be required to demonstrate that stormwater volumes could be managed by on-site and downstream conveyance facilities and would not induce flooding. New projects also would be required to comply with local, state, and federal regulating stormwater discharge during construction (such as a Construction SWPPP for projects that disturb one acre or more) and operation (such as a water quality management plan).

The projects would be subject to review and approval by the appropriate City or the County to ensure that appropriate BMPs and treatment measures are implemented to reduce pollutants in stormwater and avoid adverse impacts to surface water quality. New development and certain redevelopment projects are required to retain and treat a specified volume of stormwater runoff on-site through incorporation of BMPs so that stormwater volumes. As described above, with the implementation of the BMPs, the Proposed Project would not substantially increase the amount of stormwater runoff and pollutants entering the storm drain system from the campus from existing baseline conditions with the implementation of required BMPs and stormwater treatment measures.

The implementation of related cumulative projects would result in an increase in water use that could result in an increase in groundwater extraction to serve the cumulative projects. In addition, impervious surfaces

associated with the cumulative projects could alter the existing infiltration of stormwater to recharge groundwater supplies. There is a possibility that the implementation of the cumulative development could significantly increase the use of groundwater supplies and could affect the existing stormwater infiltration to recharge groundwater supplies. Therefore, cumulative development could result in significant cumulative impacts to groundwater supplies.

As described above, the Proposed Project would not increase groundwater basin water demand to supply the campus; therefore, the Proposed Project would not contribute to substantial decrease in groundwater levels, and the Proposed Project would not substantially deplete groundwater supplies. The Proposed Project would not significantly increase impermeable surfaces. As a result, the Proposed Project would result in a less than cumulatively considerable impact on the use of groundwater supplies and stormwater infiltration to recharge groundwater supplies.

5.8.7 References

Converse Consultants. 2021, December 9. Geotechnical Investigation Report: Library and Classroom Renovations Project, Grant Elementary School, 2368 Pearl Street, Santa Monica, Los Angeles County, California (Appendix H).

Division of Safety of Dams (DSOD). 2023, August 21 (accessed). California Dam Breach Inundation Maps. https://fmds.water.ca.gov/maps/damim/.

Federal Emergency Management Act (FEMA). 2021, April 21. Flood Insurance Rate Map (FIRM) No. 06037C1589G.

Los Angeles County. 2021, July. Comprehensive Floodplain Management Plan. https://pw.lacounty.gov/WMD/NFIP/FMP/documents/Comprehensive%20Floodplain%20Management%20Plan.pdf.

Santa Monica, City of. 2021, June. 2020 Urban Water Management Plan.

———. 2022. Santa Monica Becomes More Drought Resilient with New Water Recycling Facility. Santa Monica City Blog. Authored by Constance Farrel. https://www.santamonica.gov/blog/santa-monica-becomes-more-drought-resilient-with-new-water-recycling-facility.

———. 2023a, May 5. Public Works Department – Water Resources. "McKinley Elementary School Campus Master Plan Project."

———. 2023b, September 22 (accessed). Public Works Standard Notes for Construction. https://www.santamonica.gov/media/Public%20Works/Engineering%20&%20Street%20Services/Land%20Development/Plan%20Check%20Guidelines/PUBLIC%20WORKS%20STANDARD%20NOTES%20FOR%20CONSTRUCTION%20Single%20Family.docx.

———. 2023c, August 17 (accessed). Storm Drain Network (GIS Open Data Portal). https://gisdata.santamonica.gov/maps/smgov::storm-drain-network-1/explore?location=34.018794%2C-118.461123%2C18.39.

5. Environmental Analysis
HYDROLOGY AND WATER QUALITY

State Water Resources Control Board (SWRCB). 2015. Tentative Approval of the City of Santa Monica's Request for LID Ordinance Equivalency. https://www.waterboards.ca.gov/rwqcb4/water_issues/programs/stormwater/municipal/la_ms4/2015/Tentative_LID_Approval.pdf.

———. 2018a. Water Quality and Watersheds: Santa Monica Bay Watershed Management Area. https://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/Water_Quality_and_Watersheds/ws_santamonica.shtml.

———. 2018b. Integrated Report Map. https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2018_integrated_report/2018IR_map.html.

———. 2022. Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. Accessed August 21, 2023. https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.html.

5.9 NOISE

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Grant Elementary School Campus Master Plan (Proposed Project) to result in noise impacts in the City of Santa Monica. This section discusses the fundamentals of sound; examines federal, state, and local noise guidelines, policies, and standards; characterizes existing noise levels in the Proposed Project's area; evaluates potential noise and vibration impacts associated with the Proposed Project; and provides mitigation to reduce noise impacts at sensitive receptor locations. Noise modeling worksheets are included in Appendix J of this DEIR.

A California Environmental Quality Act (CEQA) scoping meeting was conducted on February 7, 2023, where verbal comments were received in response to the Initial Study/Notice of Preparation (IS/NOP) regarding the potential construction noise impacts that would result from the Proposed Project. The IS/NOP described that the District would seek a permit from the City of Santa Monica to allow for early construction start time to minimize conflicts with school drop-off and pick-up times. Comments received regarding noise are considered in this section. The IS/NOP and all scoping comment letters are included as Appendices B and C of this document.

5.9.1 Environmental Setting

5.9.1.1 NOISE AND VIBRATION FUNDAMENTALS

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness." Based on these known adverse effects of noise, the federal government, the State of California, and many local governments have established criteria to protect public health and safety and to prevent disruption of certain human activities.

The following are brief definitions of terminology used in this chapter:

- **Sound.** A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Decibel (dB).** A unitless measure of sound on a logarithmic scale.
- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

- **Equivalent Continuous Noise Level (L_{eq}); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.

- **Statistical Sound Level (L_n).** The sound level that is exceeded "n" percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the "median sound level." The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the "intrusive sound level." The L_{90} is the sound level exceeded 90 percent of the time and is often considered the "effective background level" or "residual noise level."

- **Day-Night Sound Level (L_{dn} or DNL).** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.

- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added from 7:00 p.m. to 10:00 p.m. and 10 dB from 10:00 p.m. to 7:00 a.m. For general community/environmental noise, CNEL and L_{dn} values rarely differ by more than 1 dB (with the CNEL being only slightly more restrictive, that is, higher than the L_{dn} value). As a matter of practice, L_{dn} and CNEL values are interchangeable and are treated as equivalent in this assessment.

- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

- **Peak Particle Velocity (PPV)**. The peak rate of speed at which soil particles move (e.g., inches per second) due to ground vibration.

Sound Fundamentals

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in Hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the loudness of sound is the decibel (dB). Changes of 1 to 3 dBA are detectable under quiet, controlled conditions and changes of less than 1 dBA are usually indiscernible. A 3 dBA change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A change of 5 dBA is readily discernable to most people in an exterior environment whereas a 10 dBA change is perceived as a doubling (or halving) of the sound.

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all and are "felt" more as a vibration. Similarly, while people with extremely sensitive hearing can hear sounds as high as

20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz. Since the human ear is not equally sensitive to sound at all frequencies, a special frequency dependent rating scale is usually used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, the State of California, and many local governments have established criteria to protect public health and safety and to prevent disruption of certain human activities.

Sound Measurement

Sound intensity is measured through the A-weighted measure to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies.

Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale, representing points on a sharply rising curve. On a logarithmic scale, an increase of 10 dBA is 10 times more intense than 1 dBA, while 20 dBA is 100 times more intense, and 30 dBA is 1,000 times more intense. A sound as soft as human breathing is about 10 times greater than 0 dBA. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud).

Sound levels are generated from a source and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. This phenomenon is known as "spreading loss." For a single point source, sound levels decrease by approximately 6 dBA for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by on-site operations from stationary equipment or activity at a campus. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dBA for each doubling of distance in a hard site environment. Line source noise in a relatively flat environment with absorptive vegetation decreases by 4.5 dBA for each doubling of distance.

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time. Half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_2, L_8 and L_{25} values represent the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour. These "L" values are typically used to demonstrate compliance for stationary noise sources with a city's noise ordinance, as discussed below. Other values typically noted during a noise survey are the L_{min} and L_{max}. These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, an artificial dBA increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (L_{dn}). The CNEL descriptor requires that an artificial increment of 5 dBA be added to the actual noise level for the hours from 7:00 p.m. to 10:00 p.m. and 10 dBA for the hours from 10:00 p.m. to 7:00 a.m. The L_{dn} descriptor uses the same methodology except that there is no artificial increment added to the hours between 7:00 p.m. and 10:00 p.m. Both descriptors give roughly the same 24-hour level with the CNEL being only slightly more restrictive (i.e., higher).

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects our entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, and thereby affecting blood pressure, functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA could result in permanent hearing damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 190 dBA will rupture the eardrum and permanently damage the inner ear.

Vibration Fundamentals

Vibration is an oscillatory motion through a solid medium, such as the ground or a building. Vibration is normally associated with activities stemming from operations of railroads or vibration-intensive stationary sources but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers.

The way in which vibration is transmitted through the earth is called propagation. As vibration waves propagate from a source, the energy is spread over an ever-increasing area such that the energy level striking a given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

As with airborne sound, annoyance with vibrational energy is a subjective measure, depending on the level of activity and the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Persons accustomed to elevated ambient vibration levels, such as in an urban environment, may tolerate higher vibration levels. Table 5.9-1, *Human Reaction to Typical Vibration Levels*, displays the human response and the effects on buildings resulting from continuous vibration in terms of various levels of peak particle velocity (PPV).

Table 5.9-1 Human Reaction to Typical Vibration Levels

Vibration Level Peak Particle Velocity	Human Reaction	Effect on Buildings
0.006–0.019 in/sec	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08 in/sec	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10 in/sec	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e., not structural) damage to normal buildings
0.20 in/sec	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6 in/sec	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Caltrans 2013.

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5.9.1.2 REGULATORY BACKGROUND

State, and local laws, regulations, plans, or guidelines related to noise that are applicable to the Proposed Project are summarized in this section.

State

California Building Code

The State of California's noise insulation standards for nonresidential uses are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, specifically Part 11, California Green Building Standards Code (CALGreen). CALGreen noise standards are applied to new or renovation construction projects in California to control interior noise levels resulting from exterior noise sources. Projects may use either the prescriptive method (Section 5.507.4.1) or the performance method (Section 5.507.4.2) to show compliance. Under the prescriptive method, a project must demonstrate transmission loss ratings for the wall and roof-ceiling assemblies and exterior windows when located in a noise environment of 65 dBA CNEL or higher. Under the performance method, a project must demonstrate that interior noise levels do not exceed 50 dBA $L_{eq(1hr)}$.

California State Land Use Compatibility Guidelines for Noise

The State of California has adopted State General Plan Guidelines designed to ensure that proposed land uses are compatible with the predicted future noise environment. At different exterior noise levels, individual land uses are identified as "clearly acceptable," "normally acceptable," "normally unacceptable," or "clearly unacceptable." A "conditionally acceptable" designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use and needed noise insulation features are incorporated in the design. By comparison, a "normally acceptable" designation indicates that standard construction can occur with no special noise reduction requirements. The City of Santa Monica has adopted noise and land use compatibility standards in the General Plan Noise Element, which are discussed under local regulations.

Local

City of Santa Monica General Plan

The City's General Plan is primarily a policy document that sets goals concerning the community and gives direction to growth and development. In addition, it outlines the programs that were developed to accomplish the goals and policies of the General Plan.

Noise Element

The Noise Element provides guidance for comprehensive local programs to control and abate excessive noise and to protect residents from adverse noise impacts. The element provides information on the existing and projected noise environment and includes goals, objectives, policies and implementation programs to ensure an acceptable noise environment. The element also identifies criteria to be used by decision makers in evaluating the noise implications of proposed projects.

The City of Santa Monica has adopted noise and land use compatibility standards, which are summarized in Table 5.9-2, *Land Use and Noise Compatibility Matrix*.

Table 5.9-2 Land Use and Noise Compatibility Matrix

Proposed Land Use Categories		Compatible Land Use Zones CNEL						
Categories	**Uses**	**<55**	**55–60**	**60–65**	**65–70**	**70–75**	**75–80**	**>80**
Residential	Single Family, Duplex, Multiple Family	A	A	B	B	C	D	D
	Mobile Home	A	A	B	C	C	D	D
Commercial Regional, District	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
Commercial Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theatre	A	A	A	A	B	B	C
Commercial Industrial Institutional	Office Building, Research and Development, Professional Offices, City Office Building	A	A	A	B	B	C	D
Commercial Recreation Institutional Civic Center	Amphitheatre, Concert Hall Auditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial Recreation	Children's amusement Park, Miniature Golf Course, Go-Cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D
Commercial General, Special Industrial, Institutional	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Institutional General	Hospital, Church, Library, School Classroom, Day Care	A	A	B	C	C	D	D
Open Space	Parks	A	A	A	B	C	D	D
	Golf Course, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat	A	A	A	A	B	C	C
Agriculture	Agriculture	A	A	A	A	A	A	A

Source: City of Santa Monica 1992.
Zone A: **Clearly Compatible** Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
Zone B: **Compatible with Mitigation** New construction or development should be undertaken only after detailed noise analysis of the noise reduction requirements are made and noise insulation feature in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice. Note that residential uses are prohibited with Airport CNEL greater than 65.
Zone C: **Normally Incompatible** New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and noise insulation features included in the design.
Zone D: **Clearly Incompatible** New construction or development should generally not be undertaken.

The City of Santa Monica has adopted policies in support of: Goal N1, reducing noise where unacceptable to acceptable noise levels; Goal N2, protect and maintain those areas having acceptable noise environments; and Goal N3, provide sufficient information concerning the community noise levels so that noise can be objectively considered in land use planning decisions. The following policies are relevant to the Proposed Project:

- **Policy 2.** Incorporate noise considerations into land use planning decisions (as they apply to finished projects, not construction actions). These measures will be achieved through the following programs:
  - Establish acceptable limits of noise for various land uses throughout the community. Zoning changes should be consistent with the compatibility of the projected noise environment.

- Ensure acceptable noise levels near schools, hospitals, convalescent homes, and other noise sensitive area.
- Encourage acoustical mitigation design in new construction.

- **Policy 3.** Develop measures to control non-transportation noise impacts.
  - Adopt a revised Community Noise Ordinance to mitigate noise conflicts.
  - Improve enforcement of required noise mitigation measures in building design.
  - Establish and maintain coordination among the city agencies involved in noise abatement.

- **Policy 4.** The City shall develop measures to control construction noise impacts. The following shall be considered:
  - Clearly state the permitted hours of construction and expressly prohibit construction on Sunday.
  - Consider exempting the resident/builders in single family zones from the Sunday construction and maintenance ban provided such construction is limited to the hours specified in the Noise Ordinance or meets the noise limits set in the Noise Ordinance.
  - During the environmental review of all projects, determine the proximity of the site to the established residential areas. If a project will involve pile driving, nighttime truck hauling, blasting, 24-hour pumping, or any other very high noise equipment, the environmental review shall include a construction noise alternative analysis. From this analysis specific mitigation measures shall be developed to mitigate potential noise impacts. This may include but not be limited to:
    - Requirements to use quieter albeit costlier construction techniques.
    - Notification of residences (homeowner and renters) of time, duration, and location of construction
    - Relocation of residents to hotels during noisy construction period.
    - Developer reimbursement to City for 24-hour on-site inspection to verify compliance with required mitigation.
    - Limit hours of operation equipment 15 dB above the noise ordinance to the hours of 10:00 a.m. to 4:00 p.m.
  - The selection of the above measures should be determined on a project-by-project basis depending on type of equipment used and the proximity to established residential areas.

Santa Monica Municipal Code

The City of Santa Monica has established exterior noise standards to limit excessive noise from stationary sources. These standards are found in the Santa Monica Municipal Code (SMMC), Section 4.12.060, Exterior Noise Standards, and are summarized in Table 5.9-3, *Santa Monica Exterior Noise Standards*. The following noise exemptions from Section 4.12.030, Exemptions, are applicable to the Proposed Project:

- Activities conducted on public or private school grounds, including, but not limited to, school athletic and school entertainment events.

- Activities conducted on public property that is generally open to the public, including, but not limited to, streets, sidewalks, alleys, parkways, parks, and beaches.

Table 5.9-3 Santa Monica Exterior Noise Standards

Noise Zone	Days	Time Interval	Allowable Leq, dBA	
			15-minute continuous level (L_{25})	5-minute continuous level (L_8)
I	Monday through Friday	10:00 p.m. to 7:00 a.m.	50	55
		7:00 a.m. to 10:00 p.m.	60	65
	Saturday and Sunday	10:00 p.m. to 8:00 a.m.	50	55
		8:00 a.m. to 10:00 p.m.	60	65
II	All days of the week	10:00 p.m. to 7:00 a.m.	60	65
		7:00 a.m. to 10:00 p.m.	65	70
III	Any day	Anytime	70	75

Notes:
Noise Zone I: All property in a residential district established by Santa Monica Municipal Code. The Santa Monica Pier shall be excluded from this noise zone.
Noise Zone II: All property in a nonresidential district established by Santa Monica Municipal Code.
Noise Zone II: All property in the industrial conservation district as established by Santa Monica Municipal Code.

In addition, for each noise zone, the allowable exterior equivalent noise level shall be reduced by 5 dBA for impulsive or simple tone noise or for noises consisting of speech or music. If the ambient noise level exceeds the allowable exterior noise level standard, the ambient noise level shall be the standard. No person shall create any noise or allow the creation of any noise that causes the equivalent noise level to exceed the noise standards or a maximum instantaneous (L_{max}) A-weighted, slow sound pressure level to exceed the noise standard plus 20 dBA for any period of time.

Construction Noise

Section 4.12.110 of the SMMC sets restrictions on demolition, excavation, grading, spray painting, construction, maintenance, or repair of buildings. The SMMC states that no person shall engage in any construction activity:

- Before 8:00 a.m. or after 6:00 p.m. on Monday through Friday (unless a permit is obtained from the city which would allow construction to occur outside the normally allowed hours), except that construction activities conducted by employees of the City of Santa Monica or public utilities while conducting duties associated with their employment shall not occur before 7:00 a.m. or after 6:00 p.m. on Monday through Friday.

- Before 9:00 a.m. or after 5:00 p.m. on Saturday.

- All day on Sunday.

- All day on New Year' s Day, Martin Luther King' s Birthday, President' s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, as those holidays have been established by the United States of America.

The District would request an After Hours Construction Permit to allow for construction outside of the allowed hours identified in SMMC Section 4.12.110(a). The After-Hours Construction Permit would allow Proposed Project construction to begin at 7:00 a.m. The earlier arrival of construction workers would allow them to be in the work area prior to student arrival/drop-off, thereby improving pedestrian safety and reducing traffic congestion during construction activities.

Construction activity shall not exceed the noise standards in Section 4.12.060 of the SMMC, which allows for a maximum noise increase by 20 dBA L_{eq} and 40 dBA L_{max}, as summarized in Table 5.9-5. Any construction that exceeds these noise standards shall occur between the hours of 10:00 a.m. and 3:00 p.m., Monday through Friday. Prior to the issuance of a building permit, all development projects within 500 feet of any residential development or other noise-sensitive land uses must submit a list of equipment and activities required during construction. In particular, this list shall include:

- Construction equipment to be used, such as pile drivers, jackhammers, pavement breakers, or similar equipment.

- Construction activities such as 24-hour pumping, excavation, or demolition.

- A list of measures that will be implemented to minimize noise impacts on nearby residential uses.

SMMC Section 4.12.120, Postage of Construction Signage, states that there shall be displayed at sites where work activities requiring a City permit are being conducted, a sign in English and Spanish reading substantially as follows: "Attention All Employees and Subcontractors. Santa Monica construction/demolition work times are: Monday through Friday, eight a.m. until six p.m.; Saturday nine a.m. until five p.m.; Sundays and holidays, no work permitted." In addition, the sign shall indicate the City telephone numbers where violations of this section can be reported, the location of the job site, and the permit number issued authorizing the work. Signs required by this section shall be continually placed prominently at the primary entrance to the worksite so that they are clearly visible to the public and to all employees, contractors, subcontractors and all other persons performing work at the site, so long as activity covered by this section is occurring. Each sign required to be displayed pursuant to this section shall be obtained from the Building and Safety Division. The Building and Safety Division shall charge for each sign a fee equal to the City's cost of printing the sign. Additionally, as required under the After-Hours Construction Permit, the District would need to provide one sign posting along the street frontage of each construction area and notifications to neighbors within a 500-foot radius of construction activities. The notifications must include a description of the activities covered under the After-Hours Construction Permit and the dates and times that these activities would take place. The notifications must also include the contact information of the permit holder (i.e., the District) and the City contact. The District would be required to follow SMMC Section 4.12.110 and any allowances made by the City under the After-Hours Construction Permit.

Section 4.12.130, Location, Screening and Noise Measurements of Mechanical Equipment, states that all development project applications must demonstrate compliance with or contain the following information:

- A list of all permanent mechanical equipment to be placed outdoors and all permanent mechanical equipment to be placed indoors which may be heard outdoors. All such equipment shall require a noise analysis to demonstrate compliance with Section 4.12.060 prior to the issuance of a building permit for a development project.

- Mechanical equipment shall not be located on the side of any building which is adjacent to a residential building on the adjoining lot unless it can be shown that the noise will comply with the requirements of Section 4.12.060. Roof locations may be used when the mechanical equipment is installed within a noise attenuating structure.

- Final approval of the location of any mechanical equipment will require a noise test to demonstrate compliance with Section 4.12.060. Equipment for the test shall be provided by the owner or contractor and the test shall be conducted by the owner or contractor. A copy of noise test results on mechanical equipment shall be submitted to the Community Noise Officer for review to ensure that noise levels do not exceed maximum allowable levels for the applicable noise zone.

Vibration

SMMC Section 4.12.070, Vibration, states that any ground vibration that is perceptible without instruments at any point on any property shall be unlawful. The perception threshold shall be presumed to be more than 0.05 inch per second root-mean-square velocity. Vibration perceptibility pertains to the human response and is also known as vibration annoyance. However, vibration caused by construction activity, moving vehicles, trains, and aircraft are exempt.

5.9.1.3 EXISTING CONDITIONS

Existing Noise Environment

The campus is in a predominantly residential area with homes directly across the site to the north, east, south, and west in the city of Santa Monica. Noise within the campus is associated with the existing school uses, including outdoor student activity, circulation-related noise (during drop-off and pick-up times), and property maintenance. The noise environment is predominantly characterized by traffic noise along Pearl Street and other local roadways. Intermittent noise from nearby residential activity and existing school uses, (such as property maintenance, recess) also contribute to the overall noise environment in the Proposed Project's vicinity.

Sensitive Receptors

Certain land uses, such as residences, schools, and hospitals, are particularly sensitive to noise and vibration. Sensitive receptors include residences, senior housing, schools, places of worship, and recreational areas. These uses are regarded as sensitive because they are where citizens most frequently engage in activities that are likely

to be disturbed by noise, such as reading, studying, sleeping, resting, or quiet or passive recreation. Commercial and industrial uses are not particularly sensitive to noise but are still evaluated in terms of vibration damage.

The campus is surrounded by single-family homes to the north, east, south, and west. The closest residences are adjacent to the west of the Proposed Project's boundary. Other single-family homes in the immediate vicinity are 70 feet to the north, 15 feet to the east, and directly adjacent to the south (as measured from the edge of the Proposed Project's boundary to the receptor property line). Other noise sensitive receptors beyond 500 feet from the campus include Clover Park to the southeast. Students would remain on campus during construction activities. Therefore, operational classrooms subject to temporary construction are considered on-site noise receptors.

Ambient Noise Monitoring

To determine baseline noise levels at different environments in the Proposed Project's area, ambient noise monitoring was conducted by PlaceWorks in May of 2022. Four short-term (15-minute) locations were selected in coordination with the City and monitoring was conducted around the campus. All measurements were conducted Thursday, May 26, 2022, during regular school hours.

The primary noise source at all measurement locations is traffic noise. Urban, school, and residential activity (such as dogs, car doors shutting, and conversations on playgrounds) also contributed to the overall noise environment. Meteorological conditions during the measurement period were favorable for outdoor sound measurements and were noted to be representative of the typical conditions for the season. Generally, conditions included clear skies with temperatures varying between 65 to 69 degrees Fahrenheit (°F) with average winds ranging between 4 and 10 miles per hour. The sound level meter was equipped with a windscreen during all measurements.

The short-term sound level meter used (Larson Davis LxT) for noise monitoring satisfies the American National Standards Institute (ANSI) standard for Type 1 instrumentation. The short-term sound level meter was set to "slow" response and "A" weighting (dBA). The meter was calibrated prior to and after the monitoring period. All measurements were at least 5 feet above the ground and away from reflective surfaces. Short-term measurement locations are described below and shown on Figure 5.9-1, *Approximate Noise Monitoring Locations,* and results are summarized in Table 5.9-4, *Short-Term Noise Measurement Summary*.

- **Short-Term Location 1 (ST-1)** was next to 2351 Pearl Street (residence). The measurement location was approximately 25 feet north of the nearest westbound travel centerline. A 15-minute noise measurement began at 2:10 p.m. on Thursday, May 26, 2022. The noise environment is characterized primarily by children playing on the Grant Elementary School playground and light traffic. Noise levels generally ranged from 50 dBA to 65 dBA.

- **Short-Term Location 2 (ST-2)** was next to 2430 25th Street (residence). The measurement location was approximately 20 feet west of the nearest southbound travel lane centerline. A 15-minute noise measurement began at 3:16 p.m. on Thursday, May 26, 2022. The noise environment is characterized primarily by traffic noise from 25th Street. Traffic noise levels generally ranged from 50 dBA to 58 dBA.

- **Short-Term Location 3 (ST-3)** was next to 2425 Pearl Place (residence), approximately 20 feet west of Grant Elementary School's property line. A 15-minute noise measurement began at 2:34 p.m. on Thursday, May 26, 2022. The noise environment is characterized primarily by children playing on the playground. Conversation noise levels generally ranged from 51 dBA to 60 dBA.

- **Short-Term Location 4 (ST-4)** was next to 2512 24th Street (residence). The measurement location was approximately 30 feet west of the nearest southbound travel lane centerline. A 15-minute noise measurement began at 2:54 p.m. on Thursday, May 26, 2022. The noise environment is characterized primarily by voices coming from Grant Elementary School. Noise levels generally ranged from 41 dBA to 53 dBA.

Table 5.9-4 Short-Term Noise Measurement Summary

Monitoring Location	Description	15-minute Noise Level, dBA						
		L_{eq}	L_{max}	L_{min}	L_2	L_8	L_{25}	L_{50}
ST-1	Next to 2351 Pearl Street (residence) 05/26/2022, 2:10 p.m.	57.5	71.0	47.1	54.6	57.9	61.8	64.6
ST-2	Next to 2430 25th Street (residence) 05/26/2022, 3:16 p.m.	55.2	68.7	43.5	50.8	54.3	59.8	64.6
ST-3	Next to 2425 Pearl Place (residence) 05/26/2022, 12:52 p.m.	55.9	70.4	46.8	53.7	56.4	59.4	63.0
ST-4	Next to 2512 24th Street (residence) 05/26/2022, 12:09 p.m.	52.1	67.6	44.5	49.9	52.1	55.6	58.9

Figure 5.9-1 - Approximate Noise Monitoring Locations

Project Boundary

ST-X Short-Term Noise Measurement Locations (4)

0 200
Scale (Feet)

Source: Nearmap, 2022

5. Environmental Analysis
NOISE

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5.9.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would result in:

N-1 Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

N-2 Generation of excessive groundborne vibration or groundborne noise levels.

N-3 For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, if the project would expose people residing or working in the project area to excessive noise levels.

The IS/NOP, included as Appendix B, substantiates that impacts associated with the following thresholds would be less than significant; therefore, these impacts will not be further addressed in the DEIR:

- Threshold N-3

This impact is addressed in Chapter 6, *Other CEQA Considerations*, and in Appendix B of this DEIR.

5.9.2.1 STATIONARY NOISE THRESHOLDS

As discussed in section 5.9.1.2, *Regulatory Background,* the City's exterior noise standards for stationary sources are established in Section 4.12.060 of the SMMC (see Table 5.9-3). These standards are used as thresholds of significance for stationary noise sources associated with the Proposed Project.

5.9.2.2 CONSTRUCTION NOISE THRESHOLDS

The City of Santa Monica has prohibited hours for construction activities and has quantified construction noise limits. The SMMC states that construction noise shall not exceed either 20 dBA L_{eq} or 40 dBA L_{max} above the daytime residential exterior noise standard of 60 dBA L_{25} (see Table 5.9-3). Table 5.9-5, Santa Monica Construction Noise Standards, shows the allowable construction noise standards from Table 5.9-3 with addition of the 20 dBA and 40 dBA penalties.

Table 5.9-5 Santa Monica Construction Noise Standards

Noise Zone	Days	Time Interval	Level in dBA	
			L_{eq}	L_{max}
I	Monday–Friday	10:00 p.m. to 7:00 a.m.	70	90
		7:00 a.m. to 10:00 p.m.	80	100
	Saturday and Sunday	10:00 p.m. to 8:00 a.m.	70	90
		8:00 a.m. to 10:00 p.m.	80	100
II	All days of the week	10:00 p.m. to 7:00 a.m.	80	100

		7:00 a.m. to 10:00 p.m.	85	105
III	Any day	Anytime	90	110

Source: City of Santa Monica 1992.
Notes:
Noise Zone I: All property in a residential district established by Santa Monica Municipal Code. The Santa Monica Pier shall be excluded from this noise zone.
Noise Zone II: All property in a nonresidential district established by Santa Monica Municipal Code.
Nosie Zone II: All property in the industrial conservation district as established by Santa Monica Municipal Code.

5.9.2.3 TRANSPORTATION NOISE THRESHOLDS

A project will normally have a significant effect on the environment related to traffic noise if it would substantially increase the ambient noise levels for adjoining areas. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions, and changes of 1 to 3 dBA are detectable under quiet, controlled conditions. Changes of less than 1 dBA are usually indiscernible. A change of 5 dBA is readily discernible to most people in an exterior environment.

Implementation of the Proposed Project would result in the addition of 38 parking spaces to accommodate existing student and staff parking needs. It is anticipated that the Proposed Project would not result in an increase in students or faculty. In addition, primary access to the school site would remain via 24th Street. Therefore, traffic noise impacts are discussed qualitatively.

5.9.2.4 VIBRATION THRESHOLDS

The City of Santa Monica does not have quantified limits for vibration damage. The Federal Transit Administration (FTA) provides acceptable ground-borne vibration criteria for various types of buildings, which are used in this analysis to determine impact significance. Structures amplify groundborne vibration and wood-frame buildings, such as typical residential structures, are more affected by ground vibration than heavier, engineered buildings. The FTA vibration criteria are summarized by building category in Table 5.9-6, *Groundborne Vibration Criteria: Architectural Damage*.

Table 5.9-6 Groundborne Vibration Criteria: Architectural Damage

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: FTA 2018.
PPV = peak particle velocity

5.9.3 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Initial Study/Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.9-1: Construction activities would result in temporary noise increases in the vicinity of the Proposed Project in excess of existing established standards. Operational activities would not result in permanent or temporary increase in ambient noise levels in excess of existing established standards [Threshold N-1]

Construction

Two types of short-term noise impacts could occur during construction: (1) mobile-source noise from transport of workers, material deliveries, and debris and soil haul and (2) stationary-source noise from use of construction equipment. Existing uses surrounding the campus would be exposed to elevated ambient noise levels from the Proposed Project-related construction activity. The Proposed Project's construction is anticipated to be approximately completed under five years over three developmental phases. The school would remain operational throughout all construction activities associated with campus renovations and modernization. As described in Chapter 3, *Project Description*, Phase 1 is anticipated to begin in the summer 2024, Phase 2 in the summer of 2025, and Phase 3 in the summer of 2028. The construction for Phase 1 would occur over approximately 12 months, and the construction for Phases 2 and 3 is anticipated to occur over approximately 24 months each.

The SMMC Section 4.12.110(a) limits the hours of construction to between 8:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. to 5:00 p.m. on Saturday, and prohibits construction on Sundays and holidays. However, the District would request an After-Hours Construction Permit to allow for construction outside of these hours. The After-Hours Construction Permit would allow the Proposed Project's construction activities to begin at 7:00 a.m. The earlier arrival of construction workers would allow them to be within the work area prior to student arrival/drop-off, thereby improving pedestrian safety and reducing traffic congestion during construction activities. As required under the After-Hours Construction Permit, the District would provide one sign posting along the street frontage of each construction area and notifications to neighbors within a 500-foot radius of construction activities. The notifications must include a description of the activities covered under the After-Hours Construction Permit and the dates and times that these activities would take place. The notifications must also include the contact information of the permit holder (i.e., the District) and the City contact. The District would be required to follow SMMC Section 4.12.110 and any allowances made by the City under the After-Hours Construction Permit.

Construction Vehicles

The transport of construction workers and materials to and from the campus would incrementally increase noise levels along site access roadways. Individual construction vehicle pass-by trips may create momentary noise levels of up to 85 dBA (L_{max}) at 50 feet from the vehicle, but these occurrences would generally be infrequent and short lived. The maximum number of worker vendor trips is estimated to be approximately

46 daily worker and vendor trips during overlapping building and asphalt demolition, debris haul, and site preparation in Phase 3. A maximum of 17 daily haul truck trips would be generated during building and asphalt debris over a 35-workday period in Phase 2. Site access would be primarily along 24th Street and Pearl Street. The existing average daily traffic on these road segments from just school-related trips is 1,135 trips (Arcadis 2023). Using daily trips generated from the existing school as a baseline, the addition of temporary daily construction and daily haul truck trips would result in a temporary noise increase of 0.3 dBA CNEL or less, which would not be substantial or permanent. Therefore, construction-vehicle noise impacts would be considered **less than significant**, and no mitigation measures are necessary.

Construction Equipment

Noise generated by onsite construction equipment is based on the type of equipment used, its location relative to sensitive receptors, and the timing and duration of noise-generating activities. Each stage of construction involves different kinds of equipment and has distinct noise characteristics. Noise levels from construction activities are typically dominated by the loudest equipment. The dominant equipment noise source is typically the engine, although work-piece noise (such as dropping of materials) can also be noticeable.

The noise produced at each construction stage is determined by combining the L_{eq} contributions from each piece of equipment used at a given time, while accounting for the ongoing time-variations of noise emissions. Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels of up to 85 dBA at 50 feet. However, overall noise emissions vary considerably, depending on the specific activity performed at any given moment. Noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase would result in different noise levels from construction activities at a given receptor. Since noise from construction equipment is intermittent and diminishes at a rate of at least 6 dBA per doubling of distance (conservatively ignoring other attenuation effects from air absorption, ground effects, and shielding effects), the average noise levels at noise-sensitive receptors could vary considerably, because mobile construction equipment would move around the site with different loads and power requirements.

Construction Noise Impacts: Off-Campus Receptors

As stated previously, the Proposed Project is assumed to be completed within three developmental phases. Each of these three developmental phases have varying activity phases (e.g., demolition, paving, building construction, etc.) and are focused on developing separate areas of the campus. Additionally, construction equipment mix per activity phase would vary for each developmental phase. Construction equipment mix used for modeling purposes is based on information provided by the District and CalEEMod equipment defaults. Average noise levels from project-related construction activities are calculated by modeling the three loudest pieces of equipment per activity phase, for each of the three developmental phases.

Construction noise levels at the nearest sensitive receptors were estimated by measuring the distance from the closest activity phase from each developmental phase to the sensitive receptor property line. Asphalt and building demolition noise is estimated from the center of where asphalt demolition would occur or from the façade of the proposed buildings demolition/portables removal (whichever activity is closest to the sensitive receptors). For equipment that is mobile, such as paving equipment and site preparation, construction

equipment is modeled from the center of area disturbed. Construction equipment for building construction and architectural coating is modeled from the edge of the proposed new buildings to the nearest sensitive receptor property line (which would occur during Phase 2 and Phase 3). Lastly, utility trenching and landscaping finishing typically occurs along the edge of projects. Therefore, it is assumed that it could occur within 50 feet from the nearest sensitive receptors to the north, east, south, and west of the campus.

The Proposed Project's expected construction equipment mix was categorized by construction activity using the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM). The associated, aggregate L_{eq} and L_{max} sound levels for Phase 1, Phase 2, and Phase 3—grouped by construction activity—are summarized in Tables 5.9-7 through 5.9-12. RCNM modeling input and output worksheets are included in Appendix J.

Phase 1

As shown in Table 5.9-7, *Proposed Project-Related Construction Noise: Phase 1, dBA L_{eq}*, construction activities would exceed the SMMC daytime construction noise limit of 80 dBA L_{eq} at the residential receptors to the east of the campus during Phase 1 construction activities.

Table 5.9-7 Proposed Project-Related Construction Noise: Phase 1, dBA L_{eq}

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-Site Receptors			
		Residences to the North	Residences to the East	Residences to the South	Residences to the West
Distance in feet	50	95	60	475	160
Asphalt Demolition	79	74	78	60	69
Distance in feet	50	85	25	470	100
Building Construction	82	77	88	62	76
Architectural Coating	74	69	80	54	68
Distance in feet	50	50	50	50	50
Utility Trenching	77	77	77	77	77
Finish and Landscaping	77	77	77	77	77
Maximum dBA L_{eq}		**77**	**88**	**77**	**77**
Exceeds 80 L_{eq} Threshold?		**No**	**Yes**	**No**	**No**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J.

Table 5.9-8, *Proposed Project Related Construction Noise: Phase 1, dBA L_{max}*, shows that project-related construction noise would not exceed the daytime SMMC L_{max} construction noise threshold of 100 dBA L_{max} at any of the nearest sensitive receptors.

Table 5.9-8 Proposed Project-Related Construction Noise: Phase 1, dBA L_{max}

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-Site Receptors			
		Residences to the North	Residences to the East	Residences to the South	Residences to the West
Distance in feet	50	95	60	475	160
Asphalt Demolition	79	74	78	60	69
Distance in feet	50	85	25	470	100
Building Construction	84	79	90	65	78
Architectural Coating	78	73	84	58	72
Distance in feet	50	50	50	50	50
Utility Trenching	79	79	79	79	79
Finish and Landscaping	79	79	79	79	79
Maximum dBA L_{max}		**79**	**90**	**79**	**79**
Exceeds 100 L_{max} Threshold?		**No**	**No**	**No**	**No**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J.

Phase 2

As shown in Table 5.9-9, *Proposed Project-Related Construction Noise: Phase 2, dBA L_{eq}*, construction activities during Phase 2 would exceed the SMMC daytime construction noise limit of 80 dBA L_{eq} for residences to the east, south, and west of the phasing area.

Table 5.9-9 Proposed Project-Related Construction Noise: Phase 2, dBA L_{eq}

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-Site Receptors			
		Residences to the North	Residences to the East	Residence to the South	Residences to the West
Distance in feet	50	345	15	25	20
Building and Asphalt Demo	80	63	90	86	88
Site Preparation	80	63	90	86	88
Distance in feet	50	350	130	360	95
Building Construction	83	66	75	66	77
Architectural Coating	78	61	69	60	72
Distance in feet	50	660	60	80	50
Paving	79	57	78	75	79
Maximum dBA L_{eq}		**66**	**90**	**86**	**88**
Exceeds 80 L_{eq} Threshold?		**No**	**Yes**	**Yes**	**Yes**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J.

L_{max} construction noise levels during Phase 2 are summarized in Table 5.9-10, *Proposed Project Related Construction Noise: Phase 2, dBA L_{max}*. The SMMC daytime L_{max} construction standard would be met during Phase 2 because noise levels would be below 100 dBA L_{max}.

Table 5.9-10 Proposed Project-Related Construction Noise: Phase 2, dBA L_{max}

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-Site Receptors			
		Residences to the North	Residences to the East	Residences to the South	Residences to the West
Distance in feet	50	345	15	25	20
Building and Asphalt Demo	79	62	90	85	87
Site Preparation	83	66	93	89	91
Distance in feet	50	350	130	360	95
Building Construction	84	67	76	67	78
Architectural Coating	81	64	72	63	75
Distance in feet	50	660	60	80	50
Paving	80	58	78	76	80
Maximum dBA L_{max}		**67**	**93**	**89**	**91**
Exceeds 100 L_{max} Threshold?		**No**	**No**	**No**	**No**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J.

Phase 3

As shown in Table 5.9-11, *Proposed Project-Related Construction Noise: Phase 3, dBA L_{eq}*, construction activities would exceed the SMMC daytime construction noise limit of 80 dBA L_{eq} at residences to the east and to the west of the proposed phasing activity.

Table 5.9-11 Proposed Project-Related Construction Noise: Phase 3, dBA L_{eq}

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-Site Receptors			
		Residences to the North	Residences to the East	Residences to the South	Residences to the West
Distance in feet	50	230	20	150	50
Building and Asphalt Demo	81	67	88	71	81
Site Preparation	79	66	87	69	79
Distance in feet	50	230	130	220	20
Building Construction	83	70	75	70	91
Architectural Coating	74	60	65	61	82
Distance in feet	50	570	65	185	335
Paving	79	58	77	68	63
Distance in feet	50	50	50	50	50
Utility Trenching	77	77	77	77	77
Finish and Landscaping	77	77	77	77	77
Maximum dBA L_{eq}		**77**	**88**	**77**	**91**
Exceeds 80 L_{eq} Threshold?		**No**	**Yes**	**No**	**Yes**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J

Table 5.9-12, *Proposed Project Related Construction Noise: Phase 3, dBA L_{max}*, shows project related construction noise would not exceed the SMMC L_{max} construction noise thresholds at surrounding sensitive receptors.

Table 5.9-12 Proposed Project-Related Construction Noise: Phase 3, dBA L_{max}

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-Site Receptors			
		Residences to the North	Residences to the East	Residences to the South	Residence to the West
Distance in feet	50	230	20	150	50
Building and Asphalt Demo	81	67	89	71	81
Site Preparation	80	67	88	70	80
Distance in feet	50	230	130	220	20
Building Construction	84	71	76	71	92
Architectural Coating	78	64	69	65	86
Distance in feet	50	570	65	185	335
Paving	80	59	78	69	63
Distance in feet	50	50	50	50	50
Utility Trenching	81	81	81	81	81
Finish and Landscaping	81	81	81	81	81
Maximum dBA L_{max}		**81**	**89**	**81**	**92**
Exceeds 100 L_{max} Threshold?		**No**	**No**	**No**	**No**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J.

Thus, as detailed in Tables 5.9-7 through 5.9-12, depending on the developmental phase, the City's dBA L_{eq} construction noise thresholds set in Table 5.9-5 would be exceeded, which would result in **potentially significant** construction noise impacts to off-campus receptors. Implementation of the proposed sound barriers along the campus boundary as identified in Mitigation Measure N-1, would help reduce noise levels at adjacent sensitive receptors by 6 dBA. However, sensitive receptors with a second floor would not receive any mitigation from the sound wall. Furthermore, noise levels would still be above the standards in Table 5.9-5. Mitigation Measure N-1 would further reduce construction noise impacts through preparation of a Construction Noise Control Plan. However, impacts would remain **significant and unavoidable**.

Construction Noise Impacts: On-Campus Receptors

During the Proposed Project's construction, students would remain on campus and would potentially be exposed to construction activity noise during school hours. Typical exterior to interior noise attenuation for standard building construction is 25 dBA with windows closed. As shown in Table 5.9-9, construction could generate exterior noise levels of up to 83 dBA L_{eq} at 50 feet. Construction activities would generally occur within 25 to 50 feet of operational classrooms. At 25 feet, noise levels would attenuate to 89 dBA L_{eq}. Therefore, average interior noise levels are estimated to be 64 dBA L_{eq} with windows closed. Construction could substantially increase interior noise levels, which would disturb the learning environment because the speech interference level at a distance of 12 feet with a normal to raised voice level is 55 dBA to 60 dBA (ToolBox 2005). Therefore, construction noise impacts to on-campus sensitive receptors would be **potentially significant**. However, incorporating Mitigation Measure N-1 would reduce construction noise impacts to on-campus sensitive receptors to **less than significant**.

Stationary Noise

Mechanical Equipment/HVAC

Heating, ventilation, and air conditioning (HVAC) systems would be installed at the two new proposed buildings. The nearest off-campus sensitive receptors would be approximately 25 feet to the west from the new two-story building B Classrooms built during Phase 3. Typical HVAC equipment generates noise levels up to 72 dBA at a distance of 3 feet. At 25 feet, noise levels would attenuate to 54 dBA or less and would, therefore, not exceed the City's exterior daytime noise standard for residential zones of 60 dBA. Therefore, operational stationary noise impacts would be **less than significant**.

Outdoor Recreation

The Proposed Project would result in the reconfiguration of the outdoor playfield and hardcourts but it would not result in an increase in students, and the school's hours of operation would not change. The Proposed Project does not propose any outdoor amplification such as a public address system and would not result in an increase in students. Additionally, the outdoor playfield and hardcourts would not be reconfigured in a way that would put them closer to sensitive receptors than under existing conditions. Therefore, the reconfiguration of the outdoor playfield and hardcourts would not substantially increase noise levels above existing conditions at sensitive receptors. In addition, per SSMC Section 4.12.030, Exemptions, activities conducted on public or private school grounds are exempt from the SMMC exterior noise standards. Therefore, operational outdoor noise impacts would be **less than significant**.

Traffic Noise

The Proposed Project would not result in an increase in students and staff; therefore, it would not result in a significant change in long-term traffic volumes. The project would result in a net increase of 38 parking spaces that would accommodate existing student and staff parking demand. The proposed circulation changes would be minor, and the school would continue to be accessed primarily via 24th Court and Pearl Street. There are no planned roadway upgrades associated with the Proposed Project, and the distribution of existing trips would not significantly change. Therefore, project-related traffic noise increases would be **less than significant**.

Impact 5.9-2: The project would create a noticeable increase in short-term groundborne vibration and groundborne noise. [Threshold N-2]

Potential vibration impacts associated with development projects are usually related to the use of heavy construction equipment during the demolition and grading phases of construction. Construction can generate varying degrees of ground vibration, depending on the construction procedures and equipment. The effect on buildings in the vicinity varies depending on soil type, ground strata, and receptor-building construction. The effects from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures.

Construction Vibration Impacts – Off-site Receptors

For reference, a peak particle velocity of 0.2 in/sec PPV is used as the limit for nonengineered timber and masonry buildings (which would apply to the surrounding residential structures) (FTA 2018). Table 5.9-13, *Vibration Impact Levels for Typical Construction Equipment,* shows vibration levels for typical construction equipment at a reference distance of 25 feet and at the nearest sensitive-receptor buildings. As shown in Table 5.9-13, construction vibration could exceed the threshold of 0.2 in/sec PPV within a distance of 25 feet. At distances greater than 25 feet, all vibration levels would be less than 0.2 in/sec PPV. The nearest building structure to construction activity as measured from the edge of the Proposed Project's boundary are residences to the south and east at 15 feet. At that distance vibration associated with paving and use of a vibratory roller could reach up to 0.452 in/sec PPV. Therefore, vibrational impacts to off-campus receptors would be **potentially significant**. However, implementation of Mitigation Measure N-2 would reduce vibration impacts to **less than significant**.

Table 5.9-13 Vibration Impact Levels for Typical Construction Equipment

	in/sec PPV				
Equipment	Reference levels at 25 feet	Residences 90 feet North	Residences 15 feet East	Residences 15 feet South	Residences 25 feet West
Vibratory Roller	0.21	0.031	0.452	0.452	0.210
Static Roller	0.05	0.007	0.108	0.108	0.050
Large Bulldozer	0.089	0.013	0.191	0.191	0.089
Caisson Drilling	0.089	0.013	0.191	0.191	0.089
Loaded Trucks	0.076	0.011	0.164	0.164	0.076
Jackhammer	0.035	0.005	0.075	0.075	0.035
Small Bulldozer	0.003	0.000	0.006	0.006	0.003
0.2 Threshold Exceeded?	--	No	Yes	Yes	Yes

Sources: FTA 2018; New Zealand Transport Agency 2012.
As measured from the edge of construction site to the nearest receptor building façade.

Construction Vibration Impacts: On-Campus Historical Receptors

The campus includes historical resources that would remain in place (see Figure 3-6) and are susceptible to physical vibration impacts. The FTA vibration damage criterion for historical structures is 0.12 in/sec PPV, which this analysis uses as the limit to identify impact significance. Based on the Proposed Project's phasing site plans (Figures 3-7a to 3-7c), construction equipment shown in Table 5.9-13 (except for a vibratory roller, is anticipated to be used either adjacent to or within these historical resources (for renovation) and would generate vibration levels that would exceed the reference vibration levels because the equipment would be closer than 25 feet. Therefore, vibration levels would exceed the 0.12 in/sec PPV at the historical structural facades and would be **potentially significant**. However, with implementation of Mitigation Measure N-2, these impacts would be reduced to **less than significant**.

5.9.4 Mitigation Measures

Impact 5.9-1

N-1 The SMMUSD construction contract bid shall require the chosen construction contractor(s) to prepare a Construction Noise Control Plan. The details of the Construction Noise Control Plan shall be included as part of the permit application drawing set and as part of the construction drawing set. The Construction Noise Control Plan shall include, but not be limited to the following:

- The District would need to provide one sign posting along the street frontage of each construction area and notifications to neighbors within a 500-foot radius of construction activities. The notifications must include a description of the activities while under construction and the dates and times that these activities would take place. The notifications must also include the contact information of the permit holder (i.e., the District) and the City contact. The District would be required to follow Santa Monica Municipal Code section 4.12.110 and to respond in the event of a noise or vibration complaint.
- At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours, as well as the telephone numbers of the District's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the District.
- During the entire active construction period, equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment regarding-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds).
- Require the contractor to use impact tools (e.g., jack hammers and hoe rams) that are hydraulically or electrically powered wherever such alternatives are available in the market. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools.
- During the entire active construction period, stationary noise sources shall be located as far from sensitive receptors as possible, and they shall be muffled and enclosed within temporary sheds, or insulation barriers or other measures.
- During the entire active construction period, noisy operations shall be combined so that they occur in the same time period as the total noise level produced would not be significantly greater than the level produced if the operations were performed separately (and the noise would be of shorter duration).
- Select haul routes that avoid the greatest amount of sensitive use areas.

- Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes.
- During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws.
- Incorporate sound blankets at least 8 feet tall between the line of sight of active construction areas and classrooms that are in session and are the nearest/adjacent to the construction activity, which could result in an additional reduction in noise of at least 12 dBA, reducing noise levels to on-site classrooms from 58 dBA to 46 dBA.
- During construction activities in proximity to off-site sensitive receptors, a sound wall will be provided along the campus boundary during various phases of construction to attenuate construction noise, which can provide up to 6 dBA reduction in noise levels to the off-campus receptors.

Impact 5.9-2

N-2 Vibratory compaction that is within 25 feet of any surrounding residential structure shall use a static roller in lieu of a vibratory roller. Specifically, use of a static roller is predicted to generate vibration levels of approximately 0.05 in/sec PPV at a distance of 25 feet (New Zealand Transport Agency 2012). At a distance greater than 25 feet, a vibratory roller would no longer exceed 0.20 in/sec PPV for the off-site sensitive receptors.

If demolition, grading, and building construction is necessary within 20 feet or less from historical structures on-site, construction vibration monitoring shall be conducted to document conditions at the campus prior to, during, and after vibration-generating demolition, grading, and building construction. The construction vibration monitoring shall be implemented by a historic architect meeting the Secretary of the Interior's Professional Qualification Standards to include the following tasks:

- Performance of a photo survey, elevation survey, and tile/crack monitoring survey for the historical structures within the school. Surveys shall be performed prior to and in regular intervals during of all vibration-generating activities within 20 feet or less of the historical structures on-site (the FTA Historical Structures Screening Distance to 0.12 in/sec PPV).
- Conduct a post-construction survey on the structure following the completion of vibration-generating activities and applicant to make appropriate repairs in accordance with the Secretary of the Interior's Standards where damage has occurred as a result of construction activities.

5.9.5 Level of Significance After Mitigation

Impact 5.9-1

Construction for Off-Campus Sensitive Receptors

With the implementation of Mitigation Measure N-1, noise from construction at the nearby impacted sensitive receptors would remain significant and unavoidable. Implementation of Mitigation Measure N-1 would reduce noise levels by up to 12 dBA with the use of the best available noise control techniques, specifically the use of proper engine mufflers. A study prepared for the US Department of Transportation found that in cases where a particular piece of equipment either does not have or has a very poor muffler, the application of a good muffler will reduce the overall noise by 6 to 12 dBA (Toth 1979). The construction equipment modeled is assumed to not have any mufflers or sound attenuating devices installed. Assuming the minimum attenuation of 6 dBA, construction noise levels would exceed the SMMC construction noise thresholds of:

- 80 dBA L_{eq} Monday through Saturday during daytime hours, by up to 5 dBA.

Assuming the maximum attenuation of 12 dBA, construction noise would not exceed the SMMC construction noise thresholds of 80 dBA L_{eq}. However, conservatively applying the 6 dBA attenuation, construction noise could still exceed the daytime construction noise threshold of 80 dBA L_{eq} by up to 5 dBA during daytime construction hours. Implementation of sound blankets or sound barriers would help mitigate noise levels at the nearby sensitive receptor's first floor rooms by 12 dBA (6 dBA from mufflers and 6 dBA from sound barrier/blanket). Tables 5.9-14, *Mitigated Proposed Project-Related Construction Noise: Phase 1, dBA Leq*, through 5.9-19, *Mitigated Proposed Project-Related Construction Noise: Phase 3, dBA Lmax*, present the noise levels most likely on the first floor of the nearby sensitive receptors with the implementation of Mitigation Measure N-1.

Since some residences surrounding the campus have two floors, the usage of a sound blanket or sound barrier would not reduce noise at the second floor to below the Santa Monica threshold of 80 dBA. This is because the maximum height for a temporary noise barrier set by Caltrans is 16 feet, and a typical two-story residence is anywhere from 18 to 20 feet tall. Thus, noise from construction could reach these second floor of homes without any mitigation, even with a sound barrier or blanket present. Therefore, although Mitigation Measure N-1 would reduce construction noise impacts through preparation of a Construction Noise Control Plan, impacts would remain **significant and unavoidable**.

Phase 1

Table 5.9-14 Mitigated Proposed Project-Related Construction Noise: Phase 1, dBA Leq for First Floor Only

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-Site Receptors			
		Residences to the North	Residences to the East	Residences to the South	Residences to the West
Distance in feet	50	95	60	475	160
Asphalt Demolition	79	62	66	48	57
Distance in feet	50	85	25	470	100
Building Construction	82	65	76	50	64
Architectural Coating	74	57	68	42	56
Distance in feet	50	50	50	50	50
Utility Trenching	77	65	65	65	65
Finish and Landscaping	77	65	65	65	65
Maximum dBA L_{eq}		**65**	**76**	**65**	**65**
Exceeds 80 L_{eq} Threshold?		**No**	**No**	**No**	**No**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J.
The full 12 dB reduction from the mitigation measures would only apply to the first floor of the adjacent residences. Any second floor that reaches up to the top of the sound barrier wall or blanket would reduce the efficacy or the sound barrier and would result in reduced or no sound reduction from the barrier.

Table 5.9-15 Mitigated Proposed Project-Related Construction Noise: Phase 1, dBA L_{max} for First Floor Only

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-Site Receptors			
		Residences to the North	Residences to the East	Residences to the South	Residences to the West
Distance in feet	50	95	60	475	160
Asphalt Demolition	79	62	66	48	57
Distance in feet	50	85	25	470	100
Building Construction	84	67	78	53	66
Architectural Coating	78	61	72	46	60
Distance in feet	50	50	50	50	50
Utility Trenching	79	67	67	67	67
Finish and Landscaping	79	67	67	67	67
Maximum dBA L_{max}		**67**	**78**	**67**	**67**
Exceeds 100 L_{max} Threshold?		**No**	**No**	**No**	**No**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J.
The full 12 dB reduction from the mitigation measures would only apply to the first floor of the adjacent residences. Any second floor that reaches up to the top of the sound barrier wall or blanket would reduce the efficacy or the sound barrier and would result in reduced or no sound reduction from the barrier.

Phase 2

Table 5.9-16 Mitigated Proposed Project-Related Construction Noise: Phase 2, dBA L_{eq} for First Floor Only

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-site Receptors			
		Residences to the North	Residences to the East	Residence to the South	Residences to the West
Distance in feet	50	345	15	25	20
Building and Asphalt Demo	80	51	78	74	76
Site Preparation	80	51	78	74	76
Distance in feet	50	350	130	360	95
Building Construction	83	54	63	54	65
Architectural Coating	78	49	57	48	60
Distance in feet	50	660	60	80	50
Paving	79	45	66	63	67
Maximum dBA L_{eq}		**54**	**78**	**74**	**76**
Exceeds 80 L_{eq} Threshold?		**No**	**No**	**No**	**No**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J.
The full 12 dB reduction from the mitigation measures would only apply to the first floor of the adjacent residences. Any second floor that reaches up to the top of the sound barrier wall or blanket would reduce the efficacy or the sound barrier and would result in reduced or no sound reduction from the barrier.

Table 5.9-17 Mitigated Proposed Project-Related Construction Noise: Phase 2, dBA L_{max} for First Floor Only

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-site Receptors			
		Residences to the North	Residences to the East	Residences to the South	Residences to the West
Distance in feet	50	345	15	25	20
Building and Asphalt Demo	79	50	78	73	75
Site Preparation	83	54	81	77	79
Distance in feet	50	350	130	360	95
Building Construction	84	55	64	55	66
Architectural Coating	81	52	60	51	63
Distance in feet	50	660	60	80	50
Paving	80	46	66	64	68
Maximum dBA L_{max}		**55**	**81**	**77**	**79**
Exceeds 100 L_{max} Threshold?		**No**	**No**	**No**	**No**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J.
The full 12 dB reduction from the mitigation measures would only apply to the first floor of the adjacent residences. Any second floor that reaches up to the top of the sound barrier wall or blanket would reduce the efficacy or the sound barrier and would result in reduced or no sound reduction from the barrier.

Phase 3

Table 5.9-18 Mitigated Proposed Project-Related Construction Noise: Phase 3, dBA L_{eq} for First Floor Only

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-Site Receptors			
		Residences to the North	Residences to the East	Residences to the South	Residences to the West
Distance in feet	50	230	20	150	50
Building and Asphalt Demo	81	55	76	59	69
Site Preparation	79	54	75	57	67
Distance in feet	50	230	130	220	20
Building Construction	83	58	63	58	79
Architectural Coating	74	48	53	49	79
Distance in feet	50	570	65	185	335
Paving	79	46	65	56	51
Distance in feet	50	50	50	50	50
Utility Trenching	77	65	65	65	65
Finish and Landscaping	77	65	65	65	65
Maximum dBA L_{eq}		**65**	**76**	**65**	**79**
Exceeds 80 L_{eq} Threshold?		**No**	**No**	**No**	**No**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J
The full 12 dB reduction from the mitigation measures would only apply to the first floor of the adjacent residences. Any second floor that reaches up to the top of the sound barrier wall or blanket would reduce the efficacy or the sound barrier and would result in reduced or no sound reduction from the barrier.

Table 5.9-19 Mitigated Proposed Project-Related Construction Noise: Phase 3, dBA L_{max} for First Floor Only

Construction Activity Phase	RCNM Reference Noise Level	Nearest Off-Site Receptors			
		Residences to the North	Residences to the East	Residences to the South	Residence to the West
Distance in feet	50	230	20	150	50
Building and Asphalt Demo	81	55	77	59	69
Site Preparation	80	43	64	58	68
Distance in feet	50	230	130	220	20
Building Construction	84	59	64	59	80
Architectural Coating	78	52	57	53	74
Distance in feet	50	570	65	185	335
Paving	80	47	66	57	51
Distance in feet	50	50	50	50	50
Utility Trenching	81	69	69	69	69
Finish and Landscaping	81	69	69	69	69
Maximum dBA L_{max}		**69**	**77**	**69**	**69**
Exceeds 100 L_{max} Threshold?		**No**	**No**	**No**	**No**

Notes: Calculations performed with the FHWA RCNM software are included in Appendix J.
The full 12 dB reduction from the mitigation measures would only apply to the first floor of the adjacent residences. Any second floor that reaches up to the top of the sound barrier wall or blanket would reduce the efficacy or the sound barrier and would result in reduced or no sound reduction from the barrier.

Construction for On-Campus Receptors

With implementation of Mitigation Measure N-1, on-campus classroom impacts would be reduced to a less than significant impact. With the 6 dBA reduction in noise levels from mufflers, on-campus receptors within 25 feet of the construction activity would face noise levels of 58 dBA. The implementation of an 8-foot sound blanket between the line of site of the construction area and the nearest active classroom could result in an additional reduction in noise by at least 12 dBA (Netwall 2023), which would result in the reduction of noise levels from 64 dBA to 46 dBA for classrooms, as shown in Table 5.9-20, *Mitigated Construction Noise: On-Site, dBA Leq*. Implementation of Mitigation Measure N-1 would reduce impacts to classrooms below the threshold for speech disturbance of 55 to 60 dBA, thus not disturbing the learning environment. Therefore, impacts to the on-campus classrooms would be **less than significant**.

Table 5.9-20 Mitigated Proposed Project-Related Construction Noise: On-Site, dBA L_{eq}

	Unmitigated Noise Level	Mitigated Noise Level
On-Site Active Classrooms	64 dBA L_{eq}	46 dBA L_{eq}
Exceeds Speech Disturbance Threshold 55–60 dBA L_{eq}?	**Yes**	**No**

Impact 5.9-2

With the implementation of Mitigation Measure N-2, vibration impacts from construction vibration impacts at the nearby off-campus sensitive receptors would be reduced to less than significant. Using a static roller in lieu of a vibratory roller at the edge of the campus, closest to the sensitive receptors 15 feet to the east and south, would result in vibration levels of 0.108 in/sec PPV compared to 0.452 in/sec PPV for a vibratory roller. This reduces vibration levels below the FTA criterion of 0.2 in/sec PPV for nonengineered timber and masonry buildings (which would apply to the surrounding residential structures). For the on-campus historical structures, implementation of Mitigation Measure N-2 would ensure that any inadvertent damage to the character-defining features on campus resulting from vibration would be replaced and/or repaired to the satisfaction of a qualified professional so that the historical integrity of the building remains, as shown in Table 5.9-21, *Mitigated Vibration Impact Levels for Typical Construction Equipment*.

Table 5.9-21 Mitigated Vibration Impact Levels for Typical Construction Equipment

	in/sec PPV				
Equipment	Reference levels at 25 feet	Residences 90 feet North	Residences 15 feet East	Residences 15 feet South	Residences 25 feet West
Static Roller	0.05	0.007	0.108	0.108	0.050
Large Bulldozer	0.089	0.013	0.191	0.191	0.089
Caisson Drilling	0.089	0.013	0.191	0.191	0.089
Loaded Trucks	0.076	0.011	0.164	0.164	0.076
Jackhammer	0.035	0.005	0.075	0.075	0.035
Small Bulldozer	0.003	0.000	0.006	0.006	0.003
0.2 Threshold Exceeded?	--	No	No	No	No

Sources: FTA 2018.
New Zealand Transport Agency 2012.
As measured from the edge of construction site to the nearest receptor building façade.

Therefore, with the implementation of the mitigation measures described above, construction vibration impacts for on- and off-campus receptors would be reduced to **less-than-significant** levels.

5.9.6 Cumulative Impacts

Since construction noise would cease to occur once construction is complete, it would not contribute to cumulative noise impact when the Proposed Project is in operation. Additionally, traffic noise affects receptors along the roadway segments that have substantial increases in traffic volumes from the Proposed Project, while operational noise associated with stationary sources only affects sensitive receptors that are in close proximity. Noise levels from these different sources do not affect receptors in a way that can be combined to cause cumulative impacts.

If construction of the Proposed Project were to overlap with cumulative projects in the vicinity, construction noise could result in a significant cumulative construction noise impact at sensitive receptors that are close to more than one cumulative projects. As a rule of thumb, noise levels drop off at 6 dBA per doubling of the distance to a stationary source. Typically, if there are no planned and approved projects within 500 feet of the Proposed Project, there is no significant cumulative construction noise impact. Construction noise is greatly reduced at 500 feet or more in an urban and built-out environment.

There are no planned and approved projects within 500 feet of the Proposed Project. The closest planned and approved project is the Pico Neighborhood Plan, more than 1,000 feet from the campus. At this distance, the Pico Neighborhood Plan would not contribute significantly to cumulative construction noise or vibration levels at sensitive receptors in the Proposed Project's vicinity. Furthermore, stationary impacts would affect only receptors or buildings within the immediate vicinity of the Proposed Project (e.g., within 100 feet of the campus boundary) that have no intervening buildings or structures blocking the direct line-of-sight between the noise source and the receptor. Since the Pico Neighborhood Plan is at least 1,000 feet away from the Proposed Project, stationary impacts would remain localized. Therefore, neither of the Proposed Projects in Santa Monica would contribute significant stationary noise impacts to sensitive receptors in the vicinity of other Project.

As shown in Table 5.9-4, ambient noise levels measured in the project vicinity near off-site sensitive receptors were from 52.1 to 57.5 dBA Leq. This range of ambient noise levels indicates that the project area in general is moderately quiet. Project-related construction noise in Phase 1 ranged from 77 to 88 dBA Leq, 66 to 90 dBA Leq in Phase 2, and 77 to 91 dBA Leq in Phase 3. Stationary noise sources were discussed and concluded that they would be below a level of significance.

If there are no construction noise influence from other projects within 1,000 feet of the project boundary, the only contribution to the cumulative noise levels in conjunction with project-related construction noise (77 to 91 dBA Leq) would be the ambient noise levels (52.1 to 57.5 dBA Leq). Because the addition of noise levels is based on logarithmic rules, such as two equivalent noise levels (60 dBA plus 60 dBA) combine to be 63 dBA (instead of 120 dBA), the higher noise level of the two would be the dominant one for the combined noise level (such as 68 dBA plus 62 dBA = 68.9 dBA). Since the highest of the measured ambient noise levels was 57.5 dBA Leq, its contribution to the lowest project construction noise level of 66 dBA would be 0.6 dBA to a

combined noise level of 66.6 dBA Leq, a less than 0.1 percent and small addition to the project-generated construction noise level at the lowest projected construction noise level from the project site. With the recommended mitigation measures for project construction, construction noise levels would be reduced to less than the thresholds. Therefore, cumulative construction would **be less than significant**.

5.9.7 References

AirNav, LLC. 2023. Airport Information. Accessed January 10, 2023. http://www.airnav.com/airports.

Engineering ToolBox (2005). "SIL the Speech Interference Levels." Accessed January 24, 2023. https://www.engineeringtoolbox.com/voice-level-d_938.html.

Federal Highway Administration (FHWA). 2006, January. FHWA Roadway Construction Noise Model (RCNM) User's Guide.

———. 2017, June. FHWA Noise Barrier Design Handbook. Accessed March 15, 2023. https://www.fhwa.dot.gov/Environment/noise/noise_barriers/design_construction/design/design03.cfm.

Federal Transit Administration (FTA). 2018, September. Transit Noise and Vibration Impact Assessment.

Arcadis. 2023, October. Traffic Analysis Memorandum for Grant ES Access and Pedestrian Safety.

Mclver, I. R. 2012, May. "Ground Vibration from Road Construction May 2012." New Zealand Transport Agency. Research Report 485. Prepared by GREENBeing Consulting Engineers.

Netwall Noise Control. "Noise Reduction Blankets." Accessed March 9, 2023. https://www.controlnoise.com/products/sound-blankets/.

Santa Monica, City of. 1992, July. City of Santa Monica General Plan Noise Element.

Toth, William J. 1979, August. "Noise Abatement Techniques for Construction Equipment." Prepared for the National Highway Traffic Safety Administration. US Department of Transportation.

5. Environmental Analysis
NOISE

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5.10 TRANSPORTATION

This section of the draft environmental impact report (DEIR) evaluates the Grant Elementary School Campus Master Plan Project's (Proposed Project) potential impacts on transportation and pedestrian circulation.

The analysis in this section is based in part on the following technical report(s):

- *Grant ES Access and Pedestrian Safety Analysis Memorandum*, Arcadis IBI Group, October, 2023.
- *SMMUSD Grant Elementary School Campus Plan Features in Conformance with 2021 Safe Routes Partnership Guidelines*, Johnson Favaro, September 2023.

Complete copies of these documents are in the technical appendices to this DEIR (Appendix K).

A California Environmental Quality Act (CEQA) scoping meeting was conducted on February 7, 2023, where comments were expressed regarding vehicle and pedestrian circulation concerns during construction and operation of the Proposed Project. In addition, one comment letter from the California Department of Transportation (Caltrans) was received. Concerns expressed included the increasing number of parking spaces under the Proposed Project, vehicular drop-off and pick-up on 24th Street, pedestrian safety, and vehicular conflicts during construction activities. The IS/NOP and all scoping comment letters are included as Appendices B and C of this DEIR.

5.10.1 Environmental Setting

5.10.1.1 REGULATORY BACKGROUND

State, regional, and local laws, regulations, plans, or guidelines related to transportation that are applicable to the Proposed Project are summarized in this section.

State

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law. The legislature found that with the adoption of SB 375, the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce Vehicle Miles Traveled (VMT) and thereby contribute to the reduction of greenhouse gas (GHG) emissions, as required by Assembly Bill (AB) 32. Additionally, AB 1358, described subsequently, requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users.

SB 743 started a process that fundamentally changes transportation impact analysis as part of CEQA compliance. These changes include the elimination of auto delay, level of service (LOS), and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts in many parts of California (if not statewide). As part of the new CEQA Guidelines, the new criteria "shall promote the

reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (California Public Resources Code Section 21099[b][1]). On January 20, 2016, the Governor's Office of Planning and Research released proposed revisions to its CEQA Guidelines for the implementation of SB 743 and developed alternative metrics and thresholds based on VMT. The guidelines were certified by the Secretary of the Natural Resources Agency in December 2018, and automobile delay, as described solely by LOS or similar measures of roadway capacity or traffic congestion, shall not be considered a significant impact on the environment. As of July 1, 2020, lead agencies were required to consider VMT as the metric for determining transportation impacts. The guidance provided relative to VMT significance criteria is focused primarily on land use projects, such as residential, office, and retail uses. However, as noted in the updated CEQA Guidelines, agencies are directed to choose metrics that are appropriate for their jurisdiction to evaluate the potential impacts of a project in terms of VMT. The Santa Monica–Malibu Unified School District (SMMUSD or District) has not yet adopted a VMT threshold for use in determining significant transportation impacts under CEQA and relies on the City of Santa Monica's adopted VMT screening criteria and significance thresholds.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also known as Connect SoCal, was adopted in September 2020. The 2020 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2020 RTP/SCS charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for Southern Californians. The 2020 RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders within the SCAG counties (SCAG 2020).

As stated in Connect SoCal, SB 375 requires SCAG and other metropolitan planning organizations throughout the state to develop a Sustainable Communities Strategy to reduce per capita greenhouse gas emissions through integrated transportation, land use, housing, and environmental planning (SCAG 2020). Connect SoCal's overarching strategy includes plans for high-quality transit areas (HQTA), livable corridors, and neighborhood mobility areas as key features of a thoughtfully planned, maturing region in which people benefit from increased mobility, more active lifestyles, increased economic opportunity, and an overall higher quality of life. HQTAs are described as generally walkable transit villages or corridors that are within 0.5 mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. Local jurisdictions are encouraged to focus housing and employment growth within HQTAs, and the Grant ES campus is in an HQTA (SCAG 2020).

SCAG Active Transportation Technical Report

The SCAG Active Transportation Technical Report is a part of Connect SoCal; it outlines some of the most prominent reasons for investing in active transportation and provides a discussion of current conditions and

future developments related to active transportation. The Active Transportation Technical Report also serves as guidance for local and county agencies to outline the existing conditions and needs of the region related to active transportation. The Report discusses several projects and programs that are needed to achieve the goals of Connect SoCal. These include the following related to Safe Routes to Schools (discussed further under "Local," below):

- **Strategy 1.** Complete school-area improvements to pedestrian and bicycle networks, drop-off areas and schools sites to improve safety and reduce conflicts with vehicles.
- **Strategy 2.** Install school site improvements for storage of bicycles, skateboards and other micro-mobility devices.
- **Strategy 3.** Implement vehicle speed reductions in school zones (e.g., 15 miles per hour) per the California Vehicle Code.

Local

City of Santa Monica Municipal Code

The City's Municipal Code (SMMC) establishes regulations and standards for development in the City of Santa Monica.

Chapter 9.28, Parking, Loading, and Circulation

SMMC Chapter 9.28 ensures that on-site parking and loading areas are designed and located to protect public safety; minimize congestion and conflict points on travel aisles and public streets; and where appropriate, buffer surrounding land uses from their impact.

City of Santa Monica General Plan

The City of Santa Monica Land Use and Circulation Element was adopted July 6, 2010, and revised July 24, 2015. The element establishes the City's land use, urban design, and transportation vision. The following goals and policies related to transportation and traffic are applicable to the entire city and relevant to the Proposed Project (City of Santa Monica 2015).

Circulation Element

- **Policy T8.4.** Design buildings to prioritize pedestrian access from the street, rather than from a parking lot.

Goal T24: Provide adequate parking availability for commuters, visitors and shoppers throughout the day.

- **Policy T25.1.** Require adequate on-site loading areas for child care centers, healthcare offices and other uses with intensive passenger drop-off demands, and work with schools to encourage provision of adequate loading areas.
- **Policy T25.2.** Require that parking be accessed only from alleys, where alley access is available.

Pedestrian Action Plan

The Pedestrian Action Plan continues the City's long-standing effort to prioritize people walking in its planning and transportation decisions, promoting equity, and ensuring comfort for a wide range of users. The following goals and policies related to pedestrian safety are applicable to the entire city and relevant to the Proposed Project (City of Santa Monica 2016).

Goal 1. Vision Zero: The safety of people walking in Santa Monica is a shared responsibility.

Goal 2. A Healthy Community: Streets and sidewalks are designed to promote the healthy, active and safe Santa Monica lifestyle.

Goal 3. Community Compassion and Equity: Citywide investments foster a sense of community by supporting people of differing abilities and promoting social equity.

Goal 7. Pedestrian Awareness and Education: The community has a high awareness about safety, the benefits of walking for good health, and the viability of walking in Santa Monica.

Goal 8. Coordinated City Efforts: City departments work together to improve conditions for walking.

Safe Routes to School

Safe Routes to School (SRTS) is a sustained effort to improve the health and wellbeing of children by helping families to feel confident walking, biking, and skating to school. The SRTS has two top priorities:

- Build safety improvements on neighborhood streets connecting students' homes to their school.
- Promote a culture in school communities that prioritizes safety, physical activity, and sustainable transportation.

The City's SRTS program aims to make taking active transportation to school a customary part of everyday life and includes "Bike It Walk It" encouragement events each fall and spring, safety training for students and their parents, outreach and events, and infrastructure improvements. As part of the City's SRTS program, staff conducted walk audits in partnership with students, parents, and faculty at six schools including Grant Elementary School (Grant ES). An SRTS Walk Audit Report (2018) was released and includes preliminary recommendations that are summarized in Table 5.10-1, *Walk Audit Recommendations for Grant ES*.

Table 5.10-1 Walk Audit Recommendations for Grant ES

Reported/Observed Challenge	Recommended Improvements
Students ride scooters to school, but have nowhere to lock them	• Install skateboard and scooter racks
Pearl Street	
People drop off in bus only zone (east of crosswalk at 24th	• Paint red curb for bus only zone.

Table 5.10-1 Walk Audit Recommendations for Grant ES

Reported/Observed Challenge	Recommended Improvements
Street) even though signage is present	• Re-evaluate curb use adjacent to the school along Pearl Street to identify potential enhancements to regulations that may improve pick-up/drop-off (i.e., signs, regulations, and red/white curb). • Re-evaluate location of bus loading zone with respect to proposed curb extension.
Curb ramps along Pearl are missing yellow warning pads	• Upgrade all curb ramps with detectable warning surface.
Bike lanes along Pearl Street end at stop line and transition within the intersection to a sharrow condition.	• Re-evaluate transition of bike lane to sparrow condition and modify as appropriate.
Parents dropping off children encroach on / park in crosswalk at 24th Street	• Install curb extensions at northeast corner and south midblock of crossing at 24th Street. Consider bike lanes and transition. • Evaluate lighting levels at intersection. Upgrade/supplement if deemed appropriate.
Drivers speed in school zone on Pearl Street	• Install 15 mph signage on Pearl Street from Cloverfield to 25th Street in accordance with 2014 City Ordinance Number 2459.
No crosswalks across alleys on either side of school, hard to see if people are crossing when driving down the alley	• Reconstruct sidewalk across 24th Court so that it is more visible and provides a continuous pathway for pedestrians.
24th Court	
Alley is too narrow for safe bicyclist and pedestrian travel with vehicle traffic, and the adjacent path that is on school grounds is not accessible to students	• Consider unlocking path on east side of school property daily, to allow bicycle and pedestrian access from Pearl Street.
24th Street	
Parking lot at back of school is for staff only, but parents still drive in and use as a drop-off and pick-up location.	• Install signage at back parking lot stating that it is for staff parking only / no loading.
Crossing at 24th and Ocean Park is long and can feel unsafe	• Evaluate installing curb extensions at existing crosswalk across 24th Street at Ocean Park.
No crosswalks across alleys, hard to see if people are crossing when driving down the alley	• Install high-visibility crosswalks across Ocean Park Place.
Ocean Park Boulevard	
Curb ramps are missing yellow warning pads	• Upgrade curb ramps with detectable warning surfaces at 23rd Street, Cloverfield Boulevard, 24th Street.
Stewart Street / Virginia Avenue	
Students live in this area and walk to school via the Dorchester Tunnel, which is not safe because of poor lighting and visibility of pedestrians	• Add pedestrian lighting in tunnel. • Add RRFB at Stewart Street / Virginia Avenue.
Pico Boulevard	
Students walk from Pico Boulevard, but crossing opportunities are limited and dangerous	• Restripe crosswalks at Pico Boulevard / Cloverfield Boulevard, Pico Boulevard /26th Street, Pico Boulevard /28th Street, and Pico / 30th Street as continental crosswalks. • At Pico Boulevard / 30th Street, determine most appropriate treatments to enhance pedestrian crossing conditions.

Source: City of Santa Monica 2018.

Proposed improvements that are being undertaken by the City of Santa Monica near Grant ES campus include:

- **Pearl Street from 23rd to 25th Street.** Add enhanced markings to improve visibility of bicycle lane
- **Pearl Street and 24th Street.** Evaluate feasibility of curb extensions
- **Pearl Street and 24th Court.** Reconstruct sidewalk and apron across 24th Court.
- **24th Street and Ocean Park Place North.** Reconstruct sidewalk and apron across Ocean Park Place North.
- **Ocean Park Boulevard and 24th Street.** Evaluate feasibility of curb extensions, upgrade ramps
- **Pearl Street adjacent to school.** Evaluate drop-off and pick-up zones to reduce conflict points.

As of May 2023, the total number of improvements in the vicinity of Grant ES included 15 crosswalk renewals, the striping of 3 blocks, 5 curb extensions, and 13 Americans with Disabilities Act (ADA) curb ramps (City of Santa Monica 2023).

5.10.1.2 EXISTING CONDITIONS

Existing Transportation System

Roadway Network

Main access to the campus is provided by Pearl Street, which fronts the northwestern border of the campus; a secondary access point is provided via 24th Street, which fronts the northeastern of the campus.

Highways

The Grant ES campus is in the Sunset Park neighborhood of Santa Monica. The Santa Monica Freeway, Interstate 10 (I-10) provides east-west access across the city to Los Angeles and connects to I-405 and Pacific Coast Highway (PCH).

Street Network

The campus is bounded by Pearl Street to the north, 24th Court (alley) to the east, Pearl Place South (alley) to the west, and residences along 24th Street to the south.

- **Pearl Street** and **24th Street** are designated as neighborhood streets, which are streets that provide access to abutting uses. Autos travel slowly enough to stop for people in the street.
- **Pearl Place South** and **24th Court** are designated as alley, which provides local property access.

Existing School Operations and Circulation

Vehicular access to the campus (for staff and visitor parking) is provided via two surface parking lots. The parking lot at the northeastern portion of the campus, at the intersection of 24th Court and Pearl Street, is used for visitor and administrative parking. Additionally, the parking lot at the southeastern portion of the campus, near 24th Court and 24th Street, is used for staff parking and student drop-off and pick-up. Pedestrian access to the campus is provided via Pearl Street and 24th Street (see Figure 5.10-1, *Existing Vehicular/Pedestrian Circulation*). Deliveries occur off the 24th Court (alley) adjacent to the kitchen along with trash and recycle pick-up at a service yard level with the alley. Bicycle parking is located on-campus fronting Pearl Street.

All grades at the school begin at 8:00 a.m., with transitional kindergarten (TK) and kindergarten (K) dismissed at 1:45 p.m., preschool at 2:30 p.m., and Grades 1 through 5 between 2:40 p.m. and 3:00 p.m., except Wednesdays, when preschool and TK-K are dismissed at 1:00 p.m. and the remaining students between 1:15 p.m. and 1:30 p.m.

Student Pick-Up/Drop-Off

The current drop-off/pick-up (DOPU) operations occur primarily at two locations:

- **Pearl Street DOPU.** The south side of Pearl Street (curbside) between 24th Court and Cloverfield Boulevard. The Pearl Street DOPU area is limited to preschool and TK-K students. Vehicles queue on the south (eastbound) side of Pearl Street between Cloverfield Boulevard and 24th Court during DOPU hours.

- **24th Street DOPU.** 24th Street at the southern end of the school. The 24th Street DOPU is utilized by grades 1 through 5 students and is accessed primarily via Ocean Park Boulevard. The two-lane collector street ends at the gated entrance into the southern portion of the campus. On-street parking is allowed on either side of 24th Street. Vehicles enter the campus driveway and follow the counterclockwise vehicular pattern in the existing staff parking lot and exit back onto 24th Street.

- **Pedestrian Access.** Students who walk or bike to school enter the campus at the northern end. Marked crosswalks are on the north and east legs of the 24th Street/Pearl Street intersection. Marked crosswalks are provided on all legs of Pearl Street's intersections with Cloverfield Boulevard and 25th Street. To facilitate safe pedestrian crossings from the neighborhood to the school, crossing guards are at all three intersections in the morning and afternoon.

School Trip Generation and Distribution

The existing trip generation for Grant ES was estimated using the rate published for Land Use Code 520 (Elementary School) in the Institute for Transportation Engineers (ITE) Trip Generation Manual (11th edition) (ITE 2021). The Proposed Project would not change the school's existing programs, expand the school enrollment capacity, or change school enrollment boundaries. The most recent student population

figure for the 2022-2023 school year was 550 students—approximately 105 are preschool TK-K students, and 445 are students in grades 1 through 5.

An estimated 1,249 daily trips are generated—413 trips are in the AM peak drop-off time (223 inbound and 190 outbound), and 248 trips are in the afternoon peak (114 inbound and 134 outbound), accounting for students who walk or are walked to school. Table 5.10-2, *Proposed Project Trip Generation and Rates*, summarizes the estimated existing trip generation of the school based on a student population of 550.

Table 5.10-2 Proposed Project Trip Generation and Rates

			Trip Generation						
				AM Peak Drop-Off			PM Peak Pick-Up		
Source	Land Use	Students	Daily	In	Out	Total	In	Out	Total
Rates									
ITE Code 520	Elementary School		2.27	0.41	0.35	0.75	0.21	0.24	0.45
Estimated School Trips									
	Preschool, TK, and K	105	239	43	36	79	22	25	47
	Grades 1-5	445	1,010	180	154	334	92	108	200
	Total	550	1,249	223	190	413	114	134	248

Source: Arcadis IBI Group 2023.
[1] Preschool; TK = transitional kindergarten; K = kindergarten

The trip generation can be further broken down by grade level. Preschool, TK, and K generate approximately 239 daily trips, with 79 in the AM peak hour (43 inbound and 36 outbound) and 47 trips in the afternoon peak (22 inbound and 25 outbound). Grades 1 through 5 are estimated to generate approximately 1,010 daily trips, with 334 in the AM peak hour (180 inbound and 154 outbound) and 200 in the afternoon (92 inbound and 108 outbound). It is assumed that the vehicles associated with the preschool, TK, and K use the Pearl Street DOPU area, and vehicles associated with grades 1 through 5 use the 24th Street DOPU (Arcadis IBI Group 2023).

5.10.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

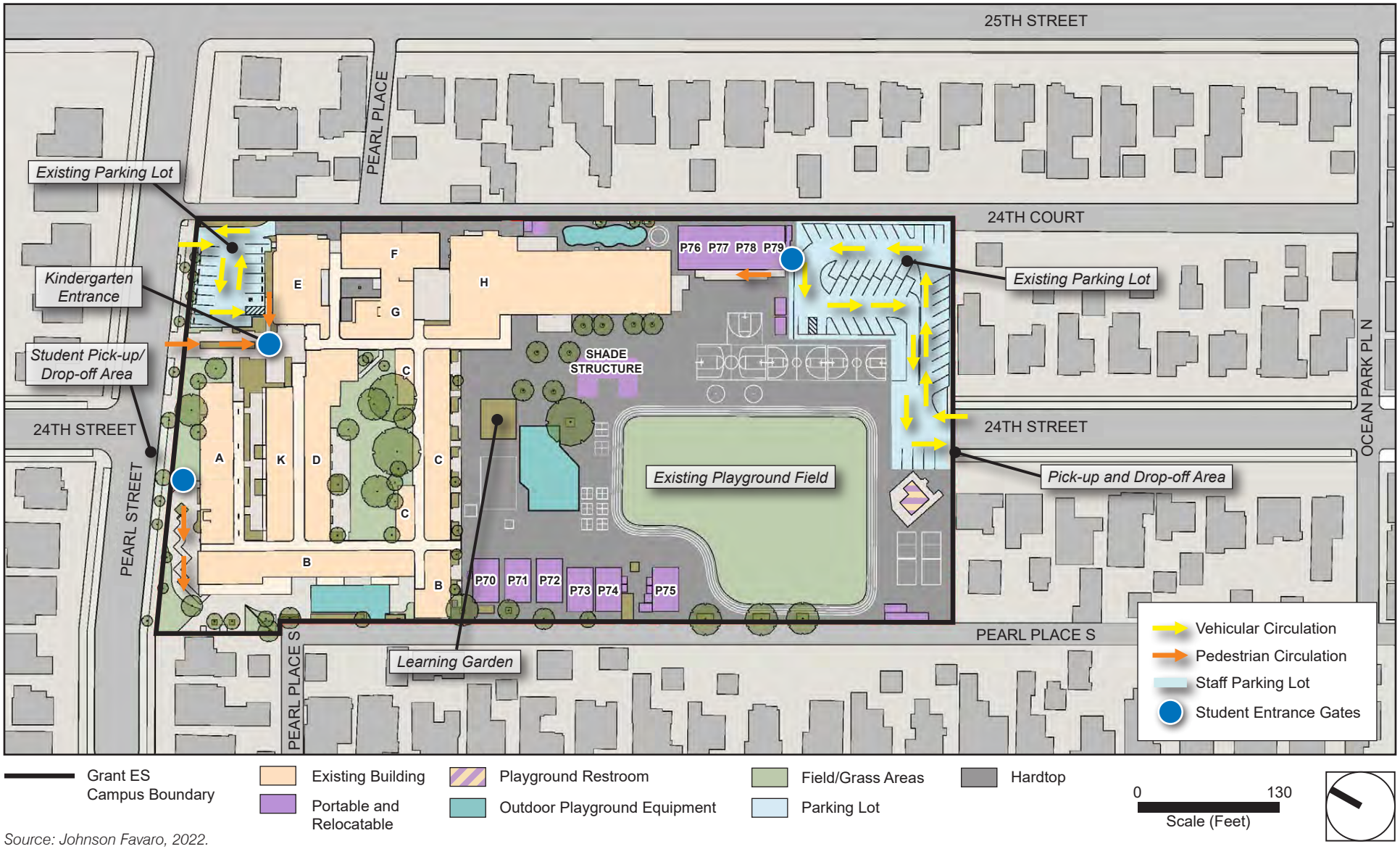
T-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

T-2 Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).

T-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

T-4 Result in inadequate emergency access.

Figure 5.10-1 - Existing Vehicular/Pedestrian Circulation



Source: Johnson Favaro, 2022.

5. Environmental Analysis
TRANSPORTATION

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5.10.3 Environmental Impacts

5.10.3.1 METHODOLOGY

The analysis of consistency with circulation plans, programs, ordinances, and policies reviews the Proposed Project and determines whether the Proposed Project would obstruct or conflict with the applicable plans, programs, ordinance, and policies listed in the Regulatory Framework.

Proposed Project Design Features

The Proposed Project would include features that would enhance pedestrian and vehicular safety:

- **PDF T-1: Arrival Court.** An arrival court that connects south parking lots to 24th Street would be provided and would accommodate vehicular circulation to parking lots at the southeast and southwest corners of campus. The arrival court would provide a safer DOPU area for students that are dropped off or picked up at the southern end of the campus, since parking for school staff would be separated from daily DOPU operations, and students who walk or bike to campus and arrive from 24th Street would have access to the campus from the south without having to cross vehicular circulation.

- **PDF T-2: Pedestrian Treatments.** Pedestrian treatments such as high-visibility striping on crosswalks would be provided at the Pearl Street sidewalk, as well as signage that promotes clear messages to drivers, pedestrians, and bicyclists entering and exiting the campus.

Vehicles Miles Traveled

Section 15064.3 of the revised CEQA Guidelines was adopted by the Office of Planning and Research on December 28, 2018, and states that VMT is the appropriate measure of transportation impacts. Section 15064.3(c) also states that the provisions of this section shall apply prospectively (i.e., only applicable to new projects after date of adoption) and must be implemented statewide by July 1, 2020. In June 2020, the City of Santa Monica adopted new VMT screening criteria and significance thresholds pursuant to Section 15064.3.

VMT is an indicator of the travel levels on the roadway system by motor vehicles. It corresponds to the number of vehicles multiplied by the distance traveled in a given period over a geographical area. In other words, VMT is a function of (1) number of daily trips and (2) the average trip length (VMT = daily trips x average trip length).

The City's adopted screening criteria is the first step in the transportation review process to "screen" out projects from VMT analysis. Projects meeting the VMT screening criteria are deemed to have a less than significant impact and no further VMT analysis is necessary. The tiered screening criteria for land use projects are described below.

- **Tier 1.** Does the project include the development of the following land uses, which are screened out from further analysis? If yes, no further analysis is required. If no, move to Tier 2.

    - Land Uses Screened from VMT Analysis:

- 200 residential dwelling units or less
- 100 percent affordable housing
- 50,000 sf or less of commercial floor area by land use type
- New construction of educational facilities/institutions (such as increased classrooms, gym/recreational space, and other supportive areas) provided that there would be no student enrollment increase or if student enrollment is increased, 75 percent of the student body comes from within 2.0 miles of the campus
- Expansions of civic/government use (such as fire and police stations) and utility facilities less than 50,000 sf or replacement of such uses/facilities (in same or another location) to serve the community, or if larger than 50,000 sf, the project would not result in more than 50 net new additional full time equivalent employees
- Local serving Parks and Recreational facilities, as determined by City Staff For a mixed-use project, the individual components of the project should be evaluated to determine if each can be screened out. For example, a mixed-use project with 150 units and 75,000 sf of office area cannot be screened out at the Tier 1 level and would be required to move to Tier 2.

- **Tier 2.** Is the project located within 0.5-mile walking distance of an Expo LRT station or 0.25 walking distance of Rapid BRT stop? If no, conduct VMT analysis. If yes, move to Tier 3.
- **Tier 3.** Would the project provide more parking than required by Code (or if located in the Downtown, exceed parking maximums)? If no, no further analysis is required. If yes, conduct VMT analysis.

Additionally, a land use project would be screened from VMT analysis and concluded to have a less than significant impact if:

- A project decreases [total] vehicle miles traveled in the project area compared to existing conditions or
- A redevelopment project replaces existing VMT generating land uses with new uses that result in a net overall decrease in VMT.

Projects that are screened out based on the criteria above are presumed to have a less than significant impact on transportation, and no VMT analysis is required.

Hazardous Design Features

The analysis evaluates whether the Proposed Project would result in hazards due to design features by determining whether it would include curved streets with inadequate view distances, unsafe separation of vehicles and pedestrians or bicyclists, and not provide adequate pedestrian crosswalks at intersections.

Emergency Access

The emergency access analysis evaluates whether the Proposed Project would comply with City emergency access requirements, including those imposed by the Santa Monica Fire Department regarding adequate turning radii on streets, response distances to buildings, etc.

Field Observations

Field observations of the Proposed Project's Site were conducted by Arcadis IBI Group staff on Tuesday, May 3, 2022, and identified existing traffic patterns, access points, DOPU operations, pedestrian/vehicular conflict areas, and pedestrian circulation.

5.10.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.10-1: The Proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. [Threshold T-1]

SCAG RTP/SCS

The Proposed Project would result in the modernization and redevelopment of the existing campus. It would not result in an increase in student capacity or staffing levels in the school and would therefore not result in an increase of vehicle trips following Proposed Project buildout. Construction and operation of the Proposed Project would not prohibit or interfere with the RTP/SCS GHG per-capita reduction targets of 8 percent by 2020 and 19 percent by 2035, or the associated reduction in VMT per capita for year 2045 by 4.1 percent compared to baseline conditions for the year. While the Proposed Project would result in a net increase in parking supply, this additional parking would alleviate existing issues related to on-street parking on Pearl Street and 24th Street and would not induce vehicle travel to the campus. Additionally, since the Proposed Project would operate in the same capacity as existing conditions, it would not conflict with the 2020-2045 RTP/SCS "core vision" regarding maintaining and better managing the transportation network for moving people and goods while expanding mobility choices by locating housing, jobs, and transit closer together and increasing investments in transit and complete streets. Therefore, the Proposed Project would be consistent with the SCAG RTP/SCS.

Santa Monica General Plan

The Proposed Project would not require the implementation or alteration of any public roadways in the areas surrounding the campus. As shown in Table 5.10-3 *Consistency with Goals and Policies Addressing the Circulation System*, the Proposed Project would be consisted with all applicable goals and policies from the City of Santa Monica's General Plan.

Table 5.10-3 Consistency with Goals and Policies Addressing the Circulation System

Circulation Element	
Policy T8.4. Design buildings to prioritize pedestrian access from the street, rather than from a parking lot.	**Consistent.** The Proposed Project would maintain the existing early education drop-off/pick-up area along Pearl Street, and implement a new arrival court at the southern end of the campus from 24th Street, which would also be accessible to pedestrians. This would improve accessibility for pedestrians access the campus when compared to the existing configuration of the campus.
Goal T24. Provide adequate parking availability for commuters, visitors and shoppers throughout the day.	**Consistent.** The Proposed Project would feature two new parking lots at the southeast and southwest corners of the campus which would replace the existing L-shaped parking lot in the southeast portion of campus. This would increase the total number of parking spaces on the project site from 62 to 94 stalls, which would serve existing demand and alleviate parking on surrounding local streets.
Policy T25.1. Require adequate on-site loading areas for child care centers, healthcare offices and other uses with intensive passenger drop-off demands, and work with schools to encourage provision of adequate loading areas.	**Consistent.** The Proposed Project would construct an arrival court that connects the two new parking lots on the southern portion of the campus to accommodate DOPU for Grades 1 through 5 and eliminate queuing and parking on 24th Street. The two new proposed parking lots would also provide approximately 40 stalls each, which, in addition to the 14 stalls from the north parking lot, would increase onsite parking from 62 to 94 stalls.
Policy T25.2. Require that parking be accessed only from alleys, where alley access is available.	**Consistent.** Upon completion of the Proposed Project, permanent faculty/visitor parking would not change from existing conditions.

The Proposed Project would not adversely affect any existing or planned transit, bicycle, or pedestrian facilities. Additionally, because the Proposed Project would not increase enrollment or capacity, there would not be an increase in demand for these facilities. The Proposed Project would not alter the current travel patterns or pedestrian activity already experienced and planned for under existing conditions.

Santa Monica Municipal Code

The Proposed Project would comply with the standards and requirements in the SMMC. Specifically, the Proposed Project would comply with Chapter 9.28, Parking, Loading, and Circulation, with reconfiguration and implementation of new parking lots on the Grant ES campus. Phase 2 of the Proposed Project would include the removal the existing parking lot and construction of two new parking lots, which would provide approximately 40 parking spaces each. The total number of parking stalls on the campus would increase from 62 to 94 stalls, reducing the need for visitors and staff to use on-street parking. These parking lots would also provide after-hours/weekend community parking for joint-use purposes (i.e., soccer games). Arrivals and departures from these lots onto 24th Street would occur outside of the peak traffic hours.

An arrival court that connects the two proposed parking lots on the southern portion of campus to 24th Street would be provided to improve DOPU operations for grades 1 through 5. The arrival court would provide a safer DOPU area for students that are dropped off or picked up at the southern end of the

campus, since parking for school staff would be separated from daily DOPU operations, and students who walk or bike to campus and arrive from 24th Street would have access to the campus from the south without having to cross vehicular circulation.. Therefore, the Proposed Project would not conflict with the SMMC such that a significant adverse impact to transportation would occur.

Pedestrian Action Plan

The Proposed Project would maintain the existing the early education DOPU area along Pearl Street, and would construct arrival court that connects the new south parking lots to 24th Street, which would also be accessible to pedestrians. As described below, the Proposed Project would not conflict with the Pedestrian Action Plan.

- **Goal 1: Vision Zero.** The safety of people walking in Santa Monica is a shared responsibility. The City's SRTS program would provide pedestrian safety near the Grant ES Campus.

  When the City proceeds with modifications under the SRTS program around the Grant ES campus, the District will coordinate with the City for SRTS project implementation.

- **Goal 2: A Healthy Community.** Streets and sidewalks are designed to promote the healthy, active and safe Santa Monica lifestyle.

  The Proposed Project would be confined to the Grant ES campus and would not construct or modify the surrounding circulation network, including roads and pedestrian facilities.

- **Goal 4: Sustainability and Stewardship.** More people walk in Santa Monica than ever before, which promotes environmental sustainability and stewardship of our natural resources.

  The Proposed Project would modernize the existing Grant ES campus that currently serves the surrounding community. The Proposed Project would continue to serve the local community residents and would not construct or modify the surrounding circulation network, including roads and pedestrian facilities. The Proposed Project would not alter attendance boundaries resulting in increased walking distances.

- **Goal 5: Walking as the First Choice**. Santa Monica makes transportation, land use and building design decisions that make walking a logical first choice transportation option for those who are able.

  The Proposed Project would be consistent with Goal 5 (see consistency analysis in Goal 4 above).

- **Goal 6: A Barrier-Free Network.** Santa Monica has a pedestrian network that connects transit, bicycling and shared parking options.

  The Proposed Project would be consistent with this goal. See Goals 1 through 5 above.

- **Goal 7: Pedestrian Awareness and Education.** The community has a high awareness about safety, the benefits of walking for good health, and the viability of walking in Santa Monica.

The Proposed Project would be consistent with Goal 7. The Proposed Project would improve pedestrian circulation and safety on campus. The District will coordinate with the City when the City implements the SRTS program near the Grant ES campus.

- **Goal 8: Coordinated City Efforts.** City departments work together to improve conditions for walking.

  The District will continue to coordinate with the City during the City's implementation of SRTS.

Safe Routes to School

Safe Routes to School (SRTS) is a sustained effort to improve the health and wellbeing of children by helping families to feel confident walking, biking, and skating to school. The City's SRTS program aims to make taking active transportation to school a customary part of everyday life and includes the "Bike It! Walk It! Bus It!" events that take place twice a year to encourage safety training for students and their parents. In October 2022 the event had 3,315 total participants, including 481 from student, parents, and staff from Grant ES; in May 2023, the event had 2,607 total participants, including 468 from Grant ES. Additionally, during the 2022-2023 school year, Grant ES students had 48 enrollees in the Metro GoPass TAP card program for public transit; a total of 2,175 total boardings were recorded for 2022-2023.

The Proposed Project would not conflict with the goals and objectives the City's SRTS program. Implementation of the Proposed Project includes numerous improvements to vehicular and pedestrian safety access points that meet the intent of the three SRTS strategies identified in SCAG's Active Transportation Technical Report:

- Two new parking lots that would each include 40 stalls constructed at the southeast and southwest corners of the campus.
- An arrival court connecting the two new parking lots to 24th Street that would be accessible to pedestrians.
- New bike racks that would accommodate at least 10 percent of regular building occupants with a goal to reach 20 percent capacity by 2030, consistent with the Districtwide Plan for Sustainability (SMMUSD 2019).
- High-visibility striping on crosswalks would be provided at the Pearl Street sidewalk as it crosses the existing Pearl Street driveway entrance.
- Signage that promotes clear messages to drivers, pedestrians, and bicyclists entering and exiting the campus would be provided for any new pedestrian paths that would cross along Pearl Street.

These proposed improvements would serve to further reduce conflicts, improve safety, and enhance micro-mobility use, and are consistent with the best practices identified in the "Street Design/Engineering Strategies" section of the 2021 Safe Routes Partnership Guidelines (SRTS Partnership 2021).The City is developing local transportation funds to implement the proposed improvements based on the SRTS walking audits conducted in 2018 as described above (City of Santa Monica 2023). The proposed improvements

anticipated within the vicinity of Grant ES are listed in Section 5.10.1.1 under "Safe Routes to School." Once funding is secured, the City will coordinate with the District to implement these improvements.

In summary, the Proposed Project would be confined to the existing campus and would not construct or modify the surrounding circulation network, including roads and pedestrian facilities. Therefore, the Proposed Project would not conflict with any regulations set forth by the City of Santa Monica's General Plan and/or municipal code or any program, plan, ordinance, or policy regarding public transit, roadway, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Impacts would be **less than significant**.

Impact 5.10-2: The Proposed Project would not conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b). [Threshold T-2]

Construction

Construction of the Proposed Project would require the mobilization of workers, vendors, equipment, and haul trucks to and from the campus, which would generate a temporary increase in traffic. The maximum estimated number of construction-related trips occurring during any phase is 52 trips (Phase 2 Building and Asphalt Demolition and Debris Haul, Site Preparation). However, the VMT of construction workers is not newly generated; instead, it is redistributed throughout the regional roadway network based on the different work sites that workers travel to each day. Therefore, construction workers are not generating new trips each day, only redistributing them. These trips and others associated with other construction activities, including hauling, would be temporary and intermittent, occurring in three phases between the summer 2024 and 2030, and would not result in long-term increases in vehicular trips. Therefore, construction activities are not expected to significantly increase VMT in the region, and the VMT impact related to construction would be **less than significant**.

Operation

The Proposed Project would modernize the Grant ES campus and would not change the land use of the school, increase the capacity of the school, or change the attendance boundaries of the school. As described above, the City has adopted screening criteria that can be used to "screen" out projects from VMT analysis. The Proposed Project was reviewed against the City's VMT screening criteria system to determine if a VMT analysis would be required. Under Tier 1 of the City's VMT screening criteria, projects that required development of specific land uses are screened out from further analysis, including new construction of educational facilities/institutions (such as increased classrooms, gym/recreational space, and other supportive areas) provided that there would be no student enrollment increase or if student enrollment is increased, 75 percent of the student body comes from within two miles of the school.

The Proposed Project would fall under Tier 1 of the City's screening criteria and is screened out from further VMT analysis (see also Appendix K). The Proposed Project would not increase the student or employment population at Grant ES, and the attendance boundaries of the school would not change; the Proposed Project would not result in more vehicle trips to and from the school during operation of the Proposed Project when compared to existing conditions. In addition, the Proposed Project would not modify primary

site access locations and traffic patterns—which could potentially result in an increase in the average trip lengths. Therefore, impacts related to VMT associated with full buildout of the Proposed Project would be **less than significant**.

Impact 5.10-3: The Proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). [Threshold T-3]

Construction

Construction of the Proposed Project would occur over three phases beginning in the summer 2024 and ending in the summer 2030. Construction activities would involve demolition, grading and excavation, trenching for site utilities and irrigation, building construction, architectural coatings, driveway and walkway construction, landscaping, and parking lot improvements. All construction staging would be within the boundaries of the existing campus. Construction of the Proposed Project would temporarily generate additional traffic on the area roadway network. These vehicle trips would include construction workers traveling to the campus as well as delivery trips associated with construction equipment and materials. Delivery of construction materials to the campus would require several oversized vehicles that may travel at slower speeds than existing traffic. Construction traffic would be scheduled in concert with the operations of the school, ensuring that trucks are not moving in or out during drop-off or pick-up times.

Construction activities would require the hauling of heavy equipment (e.g., bulldozers, excavators) and operation of large trucks on the surrounding roadway network. Some of the roadways surrounding the campus (i.e., Pearl Street, Pearl Place, 24th Street, and 24th Court) have limited lane width and sharp curves at intersections. Haul trips and equipment deliveries often use large trucks, which may temporarily cause hazards, such as sudden stops and queuing, on these roadways during delivery and removal. Additionally, construction may require temporary closures of the public right-of-way adjacent to the campus or increase safety hazards due to construction vehicles entering and exiting the campus (e.g., for delivery of building materials). Therefore, this impact would be **potentially significant**.

During construction of the Proposed Project, implementation of **Mitigation Measure T-1** would require the construction contractor to prepare and implement a Construction Management Plan to address safety hazards, including but not limited to avoidance of construction staging and delivery during off-peak pick-up/drop-off times, which would reduce the temporary impact. The District would request an After Hours Work permit to allow for construction outside of the allowed hours identified in the SMMC (from 8:00 am to 6:00 pm on weekdays) to allow Proposed Project construction to begin at 7:00 a.m. The earlier arrival of construction workers would allow them to be in the work area prior to student arrival/drop-off, thereby improving pedestrian safety and reducing traffic congestion during construction activities. Additionally, construction traffic impacts would be localized and temporary and would not introduce a permanent hazardous condition to the local roadways. Therefore, with the implementation of **Mitigation Measure T-1**, the Proposed Project would not substantially increase hazards due to a design feature or incompatible use. Impacts during construction would be reduced to **less than significant**.

Operation

The Proposed Project involves a school modernization and is a compatible use with the existing school uses. The Proposed Project would maintain the DOPU area along Pearl Street in front of the campus. The existing parking lot in the northeastern portion of the campus, with a total of 14 parking spaces, would remain and would continue to be used for visitor and administrative parking. The existing egress driveway at 24th Street would remain for grades 1 through 5 DOPU, and the parking lots at the southeastern portion of the campus would be reconfigured to include two separated parking lots adjacent to Pearl Place and 24th Court, respectively. Provision of the arrival court and the two proposed lots at the southern end of the Campus would improve circulation for vehicles on 24th Street by providing additional space for vehicles to enter the new parking lots on either side of the campus and exit back onto 24th Street. All vehicles entering via 24th Street for DOPU can be accommodated on-site within the arrival court, eliminating queuing and/or on-street parking on 24th Street. The construction of these parking lots would occur during Phase 2 of the Proposed Project (see Figure 5.10-2, *Proposed Vehicular/Pedestrian Circulation*).

Phase 3 of the Proposed Project would include removal of four portable buildings on the eastern boundary of the campus, which would allow for the expansion of the new southeastern parking lot. Overall, the Proposed Project would increase parking on the existing campus from 62 to 94 parking spaces and reduce the need for on-street parking.

Department of the State Architect (DSA) oversees the design of K-12 schools; thus, the Proposed Project would be required to meet the design and safety standards of DSA, including the provisions in the California Building Standards Codes. The Proposed Project would be required to meet California Building Code requirements as established in "DSA Interpretation of Regulations 11B-10 pertaining to Scoping and Path of Travel Upgrade Requirements for Facility Alteration, Addition and Structural Repair Projects." DSA reviews plans for public K–12 schools, community colleges, and certain other State-funded building projects to ensure that plans, specifications, and construction comply with California's building codes. Thus, the Proposed Project would be subject to plan review, ensuring the design and internal circulation would meet all applicable regulations related to design and operations. Additionally, at the start of each school year, all families are educated about the proper DOPU at the school, and DOPU areas are overseen by school staff. Crossing guards are also provided at the appropriate designated locations to ensure avoidance of hazards.

Implementation of the Proposed Project would not require the construction, redesign, or alteration of any public roadways, and the types of vehicles accessing the campus during operation would be consistent with existing conditions (i.e., passenger vehicles and buses). The Proposed Project would be consistent with all City design and safety standards, including those in the SMMC. SMMC Article 7 pertains to public works. Specifically, Chapter 7.04 establishes the standards required for street improvements, and Section 7.04.180 addresses driveways from public streets into private property. Additionally, the Proposed Project would comply with SMMC Chapter 9.28, which details the standards for parking, loading, and circulation, including access and dimension requirements. Pedestrian and bicyclist safety and circulation is also addressed in this section of the Municipal Code to ensure sight distances, sidewalk width requirements, and other access standards are met. Therefore, impacts related to hazards are considered **less than significant**.

Impact 5.10-4: The Proposed Project would not result in inadequate emergency access. [Threshold T-4]

Construction

As discussed above, the campus is accessible via Pearl Street and 24th Street for vehicles, pedestrians, and bicyclists. Emergency vehicle access would be provided on all four sides of campus, including Pearl Street, 24th Court, 24th Street, and Pearl Place, consistent with the current operations on the campus. Additionally, access for emergency vehicles would be provided from the arrival court and around the field and playground areas at the south side of campus.

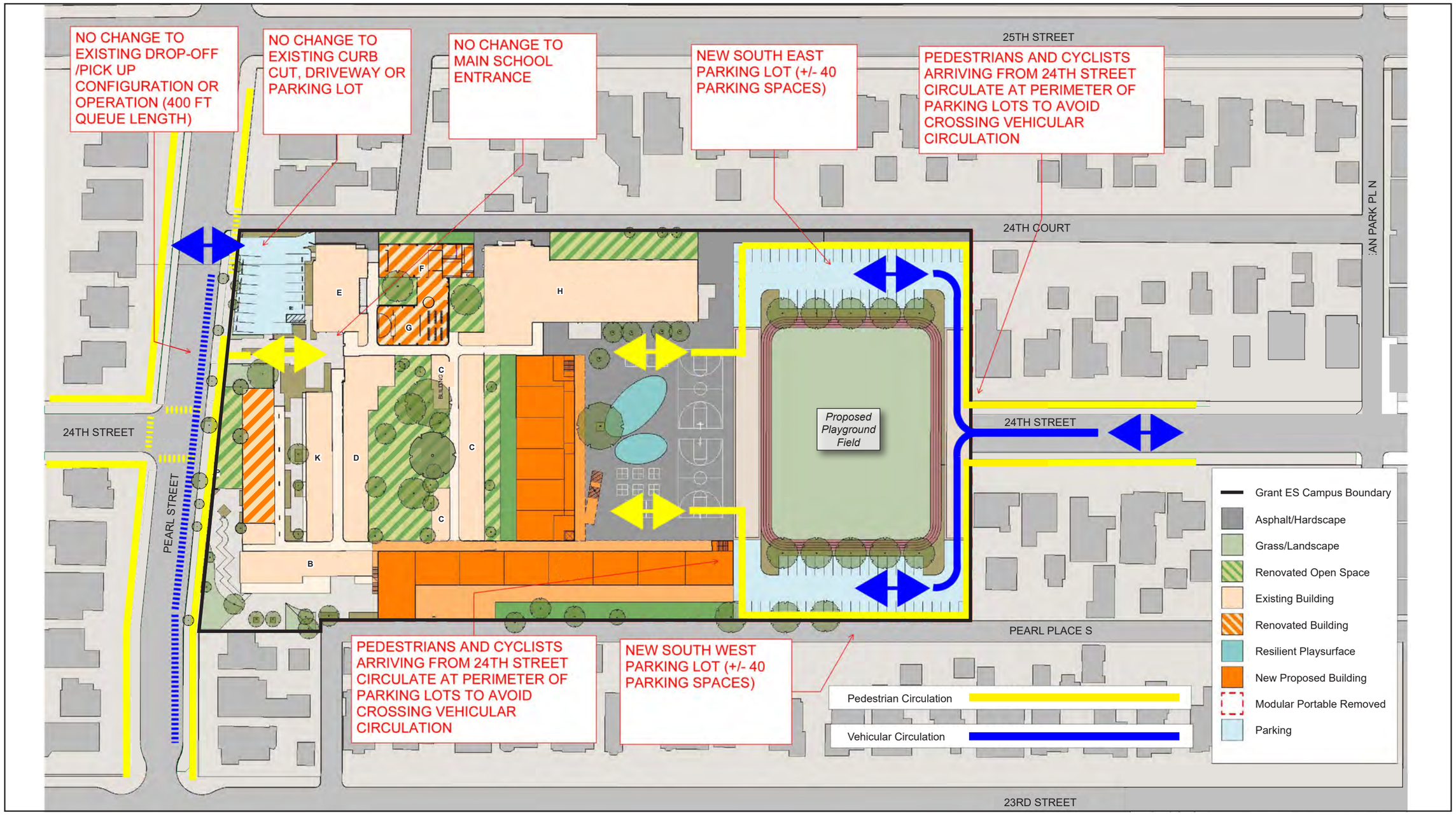
The campus would continue to be accessible to emergency responders, such as Santa Monica Fire Department, via these streets during construction and operation of the Proposed Project. Construction activities would involve demolition, grading and excavation, trenching for utilities and irrigation, building construction, architectural coatings, driveway and walkway construction, landscaping, and parking lot improvements. All construction staging would be within the boundaries of the existing campus. Construction of the Proposed Project would temporarily generate additional traffic on the existing area roadway network. These vehicle trips would include construction workers traveling to the campus as well as delivery trips associated with construction equipment and materials. Delivery of construction materials to the campus would require several oversized vehicles that may travel at slower speeds than existing traffic. Construction traffic would be scheduled in concert with the operations of the school, ensuring that trucks are not moving in or out during drop-off or pick-up times.

Construction activities would require the hauling of heavy equipment (e.g., bulldozers, excavators, etc.) and operation of large trucks on the surrounding roadway network. Some of the roadways surrounding the campus (e.g., Pearl Street, Pearl Place, 24th Street, and 24th Court) have limited lane width. Haul trips and equipment deliveries often use large trucks, which may temporarily cause hazards, such as sudden stops and queuing, on these roadways during delivery and removal. Additionally, construction may require temporary closures of the public right-of-way adjacent to the campus or increase safety hazards due to construction vehicles entering and exiting the campus (e.g., for delivery of building materials). Construction contractors would be required to comply with all City standard conditions pertaining to construction, including work hours, haul route, and access. Therefore, this impact would be **potentially significant**. Implementation of **Mitigation Measure T-1** would be required to ensure adequate emergency access during construction.

Operation

The Proposed Project would comply with all applicable local requirements related to emergency vehicle access and circulation. Project-related increases in traffic in the area of the Proposed Project's would not be sufficient to affect emergency response in the area. To address fire and emergency access needs, the Proposed Project would be required to incorporate all applicable design and safety requirements from the most current adopted fire codes, building codes, and nationally recognized fire and life safety standards of the City and fire department. The Proposed Project would also be subject to review by DSA, who oversees design and construction for K–12 schools, and required to comply with all design standards established by DSA, including Policy 07-03, "Fire Department and Emergency Access Roadways and School Drop-Off Areas."

Figure 5.10-2 - Proposed Vehicular/Pedestrian Circulation



Source: Johnson Favaro, 2022.

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The purpose of this policy is to establish requirements based on State Fire Marshal Regulations in the Public Safety, Building Standards, and Vehicle Codes for fire and emergency access roadways on public school or community college campuses, including fire and emergency access roadways combined with student drop-off and pick-up areas. DSA would review project plans to ensure that plans, specifications, and construction comply with California's building codes. DSA plan review would ensure that the proposed design and internal circulation would meet all applicable regulations prior to issuance of building permits. Therefore, impacts associated with operational emergency access would be **less than significant**.

5.10.4 Mitigation Measures

Impacts 5.12-2 and 5.12-4

T-1 Before the start of construction of each phase, the SMMUSD shall work with the City of Santa Monica Public Works Department to develop and implement a Construction Management Plan that is specific to the needs of each phase. The Construction Management Plan shall include a Temporary Traffic Control Plan (TTCP) to address anticipated impacts to or closures of public rights-of-way. The Construction Management Plan (including the TTCP) shall be submitted to the City Public Works Department for approval prior to construction of each phase of the Proposed Project. The TTCP shall demonstrate appropriate traffic handling during construction activities for all work that could impact the traveling public (e.g., the transport of equipment and materials to the campus area). The TTCP shall minimize hazards through industry-accepted traffic control practices. At a minimum, the TTCP shall require the contractor to do the following:

- Obtain transportation permits necessary for oversize and overweight load haul routes and follow regulations of the applicable jurisdiction for transportation of oversized and overweight loads.
- Provide adequate signage and traffic flagger personnel, if needed, to control and direct traffic for deliveries, if they could preclude free flow of traffic in both directions or cause a temporary traffic hazard; prohibit deliveries of heavy equipment and construction materials during periods of heavy traffic flow (i.e., 30 minutes before or after school start and end times).
- Develop a Traffic Education Program to assist in educating parents, students, and staff on drop-off/pick-up procedures specific to each phase of construction that includes informational materials regarding student drop-off and pick-up procedures via regular parent/school communication methods and posted on the school website.
- Utilize portable message signs and information signs at construction sites as needed.
- Coordinate with the responsible agency departments, including the City of Santa Monica Public Works and Planning Departments, and the City of Santa Monica Fire Department no less than 10 days prior to the start of the work for each phase, including

specifying whether any temporary vehicle, pedestrian, or bicycle construction detours are needed; if construction work would encroach into the public right-of-way; or if temporary use of public streets surrounding the campus is needed.

- Review all existing emergency access and evacuation plans and identify procedures for construction area evacuation in the case of an emergency declared by local authorities.

Additionally, the District shall ensure that the construction contractor follows all applicable requirements and regulations established in the City of Santa Monica Procedures and Requirements for Temporary Traffic Control Plans to ensure the TTCP is prepared to City standards and approved as necessary.

5.10.5 Level of Significance Before Mitigation

Mitigation Measure T-1 would reduce potential impacts associated with construction-related circulation, hazards, and safety issues to a level that is **less than significant**.

5.10.6 Cumulative Impacts

The temporary and short-term construction-related traffic impact associated with the Proposed Project would be related to truck routes and construction area access routes used by Proposed Project workers and material haulers, and potential increased traffic safety hazards. In conjunction with other projects in the area, significant cumulative impacts could occur if construction activities (i.e., truck and worker trip-generating activities) for those other projects were to overlap (in time and place) with the Proposed Project. The Proposed Project would require the implementation of **Mitigation Measure T-1** requiring a TTCP for review prior to construction. The plan shall show the location of any haul routes, hours of operation, protective devices, warning signs, and access to abutting properties. The District would encourage its contractor to limit construction-related trucks to off-peak commute periods, avoiding cumulative impacts by having vehicle trips scheduled for times when other vehicles would not be on the road. Therefore, the Proposed Project's contribution to any transportation and traffic-related cumulative impacts during construction would not be cumulatively considerable, and the associated cumulative impacts would be less than significant.

5.10.7 References

Arcadis IBI Group. 2023, October 5. *Grant ES Access and Pedestrian Safety Analysis Memorandum* (Appendix K).

Safe Routes to School National Partnership (SRTS Partnership). 2021. Keep Calm and Carry On to School: Improving Arrival and Dismissal for Walking and Biking. https://www.saferoutespartnership.org/sites/default/files/resource_files/keep_calm_and_carry_on_to_school_-_improving_arrival_and_dismissal_for_walking_and_biking.pdf.

Santa Monica, City of. 2015, July 24. Santa Monica Land Use and Circulation Element. https://learn.sharedusemobilitycenter.org/wp-content/uploads/policy-documents-4/Santa%20Monica_Revised%20LUCE%207.24.15_web.pdf

———. 2016, February 23. City of Santa Monica Pedestrian Action Plan. Accessed August 15, 2023. https://www.smgov.net/uploadedFiles/Departments/PCD/Plans/Pedestrian-Action-Plan/PAP%20Final%208-10-16%20optimized.pdf

———. 2018, October. Santa Monica Safe Routes to School: McKinley, Edison, Santa Monica Alternative School House, Muir, Franklin, Grant Elementary Schools. Received via email from Jack Moreau (senior transportation planner), May 10, 2023.

———. 2023, August 15 (accessed). "Project Improvements, Safe Routes to School, Grant Elementary School." https://www.santamonica.gov/mobility-projects/grant-elementary.

Santa Monica–Malibu Unified School District (SMMUSD). 2019, February. Districtwide Plan for Sustainability. http://fip.smmusd.org/Sustainability032119.pdf.

Southern California Association of Governments (SCAG). 2020, September 3. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments (Connect SoCal). Accessed August 15, 2023. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.

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6. Other CEQA Considerations

This section of the Draft Environmental Impact Report (DEIR) evaluates other California Environmental Quality Act (CEQA) considerations for the Grant Elementary School Campus Master Plan (Proposed Project), including significant unavoidable adverse impacts, impacts found not to be significant, significant irreversible changes, and growth-inducing impacts.

6.1 SIGNIFICANT UNAVIDABLE ADVERSE IMPACTS

At the end of Chapter 1, *Executive Summary*, is a table that summarizes the impacts, mitigation measures, and levels of significance before and after mitigation. Mitigation measures would reduce the level of impact, but the following impact would remain significant, unavoidable, and adverse after mitigation measures are applied:

- **Impact 5.9-1** Construction-related activities would result in temporary noise increases in the vicinity of the Proposed Project in excess of established standards. [Threshold N-1]

6.2 IMPACTS FOUND NOT TO BE SIGNIFICANT

California Public Resources Code (PRC) Section 21003 (f) states:

> …it is the policy of the state that…[a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment.

This policy is reflected in the State CEQA Guidelines Section 15126.2(a), which states that "[a]n EIR shall identify and focus on the significant environmental impacts of the proposed project," and Section 15143, which states that "[t]he EIR shall focus on the significant effects on the environment." The Guidelines allow use of an Initial Study to document project effects that are less than significant (Guidelines Section 15063[a]). Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in this DEIR.

6.2.1 Assessment in the Initial Study

The Initial Study/Notice of Preparation (IS/NOP) prepared for the Proposed Project in January 2023 determined that impacts listed below would result in either no impact or less than significant impacts. Consequently, they have not been further analyzed in this DEIR. The IS/NOP is included as Appendix B of

6. Other CEQA Considerations

this DEIR. Please refer to Appendix B for explanation of the basis of these conclusions. Impact categories and questions are summarized in Table 6-1, *Impacts Found Not to Be Significant*, and are directly from the CEQA Environmental Checklist as contained in the IS/NOP.

Table 6-1 Impacts Found Not to Be Significant

Environmental Issues	Initial Study Determination
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:	
a) Have a substantial adverse effect on a scenic vista?	Less Than Significant Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact
IV. BIOLOGICAL RESOURCES. Would the project:	
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	No Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less Than Significant Impact

Table 6-1 Impacts Found Not to Be Significant

Environmental Issues	Initial Study Determination
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact
V. CULTURAL RESOURCES. Would the project:	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant Impact
VII. GEOLOGY AND SOILS. Would the project:	
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	No Impact
ii) Strong seismic ground shaking?	Less Than Significant Impact
iii) Seismic-related ground failure, including liquefaction?	Less Than Significant Impact
iv) Landslides?	Less Than Significant Impact
b) Result in substantial soil erosion or the loss of topsoil?	Less Than Significant Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less Than Significant Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less Than Significant Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	Less Than Significant Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less than Significant Impact
X. HYDROLOGY AND WATER QUALITY. Would the project:	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	
i) result in a substantial erosion or siltation on- or off-site;	Less Than Significant Impact
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	Less Than Significant Impact
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	Less Than Significant Impact
iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less Than Significant Impact

6. Other CEQA Considerations

Table 6-1 Impacts Found Not to Be Significant

Environmental Issues	Initial Study Determination
XI. LAND USE AND PLANNING. Would the project:	
a) Physically divide an established community?	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact
XII. MINERAL RESOURCES. Would the project:	
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	No Impact
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact
XIII. NOISE. Would the project result in:	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact
XIV. POPULATION AND HOUSING. Would the project:	
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact
XV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	
a) Fire protection?	Less Than Significant Impact
b) Police protection?	Less Than Significant Impact
c) Schools?	No Impact
d) Parks?	Less Than Significant Impact
e) Other public facilities?	No Impact
XVI. RECREATION.	
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact
XVIII. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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:	

Table 6-1 Impacts Found Not to Be Significant

Environmental Issues	Initial Study Determination
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	In accordance with Assembly Bill (AB) 52 and PRC section 21080.3.1, the District sent formal notification letters of the Proposed Project, dated January 12, 2023, to two Native American tribes that have requested notification from the District: the Gabrieleño Band of Mission Indians – Kizh Nation and the Torres Martinez Desert Cahuilla Indians. No responses were received from the Native American tribes. Therefore, consultation did not take place. No known resources within the campus area were identified as tribal cultural resources as defined in PRC section 21074. Therefore, impacts are less than significant.
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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	No known resources within the campus area were identified as tribal cultural resources as defined in PRC section 21074. As such, it is not anticipated that tribal cultural resources would be encountered during construction-related ground disturbing activities. Therefore, impacts are less than significant.
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:	
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects?	Less Than Significant Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less Than Significant Impact
c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less Than Significant Impact
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less Than Significant Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less Than Significant Impact
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Less Than Significant Impact

6.3 SIGNIFICANT IRREVERSIBLE CHANGES DUE TO THE PROPOSED PROJECT

The CEQA Guidelines requires that a DEIR describe any significant irreversible environmental changes that would be caused by the Proposed Project should it be implemented. Specifically, Section 15126.2(d) of the CEQA Guidelines states:

> Use of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highways improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The following are the significant irreversible changes that would be caused by implementation of the Proposed Project:

- Implementation of the Proposed Project would include construction activities that would require the commitment of nonrenewable and/or slowly renewable resources, including gasoline, diesel fuel, and electricity; human resources; and natural resources such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, and water.

- Operation of the Proposed Project would require continued use of natural gas and electricity, petroleum-based fuels, fossil fuels, and water, similar to existing school operations.

- Operation of the Proposed Project would require a continued commitment of social services and public maintenance services (e.g., police, fire, and sewer and water services), similar to that existing for the school's current operations.

The commitment of resources required for the proposed renovations and modernization of the campus and continued operation of the existing elementary school would limit the availability of resources for future generations or for other uses during the life of the Proposed Project.

6.4 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the Proposed Project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also required is an assessment of other projects that would foster other activities that could affect the environment, individually or cumulatively. To address this issue, potential growth-inducing effects will be examined through analysis of the following questions:

- Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the Project area, or through changes in existing regulations pertaining to land development?
- Would this Project result in the need to expand one or more public services to maintain desired levels of service?
- Would this Project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
- Would approval of this Project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which the Proposed Project could contribute to significant changes in the environment beyond the direct consequences of developing the Project examined in the environmental analysis of this DEIR.

Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

The Proposed Project would renovate and modernize the facilities on the existing Grant Elementary School (ES) campus. The Proposed Project includes improvements to educational facilities that would accommodate current and future continued use of the existing elementary school that serves the surrounding community. The campus is in an urban area served by existing infrastructure, including water mains, sewer mains, electricity, and natural gas services. The Proposed Project would not change the designated land use of the campus and would not change the existing regulations pertaining to land development. The Proposed Project would not remove obstacles to growth or affect population growth.

Would this project result in the need to expand one or more public services to maintain desired levels of service?

The Proposed Project would renovate and modernize the Grant ES campus to serve the existing student population and would not increase school capacity. Therefore, the Proposed Project would not require expansion of facilities and personnel for fire protection or police services to maintain desired levels of service. The Proposed Project would not result in growth-inducing impacts related to public services.

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

The Proposed Project's construction workers would be drawn from the regional labor force and would not attract new workers to the region. Operation of the Proposed Project would not result in an increase of staff at Grant ES because it would accommodate the existing school operations and programs. The Proposed

6. Other CEQA Considerations

Project would not change the uses on the campus. The Proposed Project would not encourage or facilitate economic effects that would result in other activities.

Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

The Proposed Project would renovate and modernize facilities at the existing Grant ES campus to align with the Santa Monica–Malibu Unified School District's Districtwide Educational Specifications for developing future learning environments. District approval would not set a precedent that could encourage and facilitate local and regional activities and government actions that could significantly affect the environment. School enhancement and rebuild projects and programs are common statewide and nationwide.

7. Alternatives to the Proposed Project

7.1 INTRODUCTION

7.1.1 Purpose and Scope

This chapter presents the alternatives analysis for the Grant Elementary School Campus Master Plan Project (Proposed Project), as required by the California Environmental Quality Act (CEQA). The discussion includes an explanation of the methodology used to select alternatives to the Proposed Project, with the intent of identifying potentially feasible alternatives that could avoid or substantially lessen the significant impacts identified for the Proposed Project while still meeting most of the basic Project objectives. This chapter identifies a reasonable range of alternatives that meet these criteria, and these alternatives are evaluated with respect to minimizing adverse environmental effects as compared to the Proposed Project. It describes other alternatives and alternative concepts that were considered but eliminated from detailed consideration and reasons for their elimination. For the alternatives selected for analysis, this chapter evaluates the impacts of the alternatives against baseline environmental conditions and compares the potential impacts of the alternatives with those of the Proposed Project. Finally, as required under CEQA Guidelines Section 15126.6(e), based on this analysis, this chapter then discusses the Environmentally Superior Alternative.

CEQA requires that an environmental impact report (EIR) include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant effects of the project and evaluate the comparative merits of the alternatives" (CEQA Guidelines, Section 15126.6[a]). As required by CEQA, this chapter identifies and evaluates potential alternatives to the Proposed Project.

Section 15126.6 of the CEQA Guidelines explains the foundation and legal requirements for the alternatives analysis in an EIR. Key provisions are:

- "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." (Section 15126.6[b])

- "The specific alternative of 'no project' shall also be evaluated along with its impact." (Section 15126.6[e][1])

- "The no project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced,

as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." (Section 15126.6[e][2])

- "The 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 shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project." (Section 15126.6[f])

- "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 (or the site is already owned by the proponent)." (Section 15126.6[f][1])

- "Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." (Section 15126.6[f][2][A])

- "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative." (Section 15126.6[f][3])

For each development alternative, this analysis:

- Describes the alternative.
- Analyzes the impact of the alternative as compared to the Proposed Project.
- Identifies the impacts of the project that would be avoided or lessened by the alternative.
- Assesses whether the alternative would meet most of the basic project objectives.
- Evaluates the comparative merits of the alternative and the Proposed Project.

According to Section 15126.6(d) of the CEQA Guidelines, "If an alternative would cause…significant effects in addition those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed."

7.2 FACTORS CONSIDERED WHEN DEVELOPING ALTERNATIVES

This section describes the basis for determining the range of CEQA alternatives and identifies the specific alternatives that are analyzed in this Draft EIR (DEIR). The primary factors considered when determining feasible alternatives to the Proposed Project are the identified project objectives and the impacts that have been identified for the Proposed Project. These two considerations are summarized below.

7.2.1 Project Objectives

As described in Section 3.3, *Project Objectives*, the following objectives have been established for the Proposed Project and will aid decision makers in their review of the Proposed Project, the Proposed Project alternatives, and associated environmental impacts.

1. Provide properly sized learning environments to accommodate students and a variety of 21st century learning activities at the Grant ES campus.

2. Advance educational facilities to support 21st century learning and properly support the enrollment at the Grant ES campus.

3. Improve learning at Grant ES by replacing undersized and inflexible facilities with larger, flexible spaces that accommodate modern, diverse learning styles and allow for variable uses, such as rotational learning in the classroom and project-based learning that allows simultaneous individualized, small group, and large group instruction.

4. Provide enhanced, modern support spaces—such as libraries, cafeteria, labs, maker spaces, and other student services—that promote "whole child" development.

5. Organize the campus to provide safe student circulation.

6. Reorganize open space and foster intracampus circulation.

7. Provide safe and secure schools.

8. Maintain the campus's existing student capacity.

7.3 SUMMARY OF SIGNIFICANT EFFECTS OF THE PROPOSED PROJECT

The Proposed Project, which involves implementation of a Campus Master Plan, would be constructed in three phases and would occur over approximately 5.41 acres of the 6.01-acre District-owned campus. Redevelopment and modernization of Grant ES includes the demolition and removal of some existing structures, renovation of three structures that would remain, construction of two new buildings, new and reconfigured playfields and playgrounds, and two new and reconfigured parking lots. Ten existing modular and relocatable classroom buildings (P70 through P79), a modular building (playground restrooms), shade structures, and a portion of a permanent classroom building (Building B) would be selectively demolished and removed as part of the Proposed Project, for a total of 76,415 square feet of demolition. The rest of Building B would remain as is.

The Proposed Project would include renovation and expansion of the existing library (Building F), which would be combined with Building G to create a new Library and Maker space; interior renovation of the transitional kindergarten and kindergarten classrooms (Building A); and improvements to the Central Garden. The Proposed Project would include the construction of two new classroom buildings to replace the 10

portable classrooms. Improvements to outdoor recreational areas and relocation and reconfiguration of the parking lot would also be implemented. The following impacts have been identified for the Proposed Project, as discussed in Chapter 5, *Environmental Analysis*, of this DEIR.

7.3.1 Significant and Unavoidable Impacts

- **Impact 5.9-1** Construction activities would result in temporary noise increases in the vicinity of the Proposed Project in excess of existing established standards. [Threshold N-1]

7.3.2 Significant Impacts That Can Be Mitigated to Less Than Significant

- **Impact 5.3-2** The Proposed Project would not cause a substantial adverse change in the significance of an archaeological resources pursuant to Section 15064.5. [Threshold C-2]

- **Impact 5.5-1** Buildout of the Proposed Project would not directly or indirectly destroy a unique paleontological resource. [Threshold G-6]

- **Impact 5.7-2** The Proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. [Threshold H-2]

- **Impact 5.7-3** The Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school. [Threshold H-3]

- **Impact 5.9-2** The project would create a noticeable increase in short-term groundborne vibration and groundborne noise. [Threshold N-2].

- **Impact 5.10-2** The Proposed Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). [Threshold T-2]

- **Impact 5.10-4** The Proposed Project would not result in inadequate emergency access. [Threshold T-4]

7.4 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

The following is a discussion of the alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this EIR.

7.4.1 Alternative Development Areas

CEQA requires a discussion of alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR. (CEQA Guidelines, Section 15126.6[f][2][A].)

The Proposed Project by design is intended for the Grant ES campus. Consequently, an alternative off-campus location is not a feasible alternative and would not meet the project objectives. Certain impacts that are identified as being potentially significant under the Proposed Project are due primarily to construction-related activities, such as inadvertent discovery of significant archaeological resources during excavation and construction noise impacts. These impacts could occur regardless of the Proposed Project's location. For these reasons, an alternative that is in another location in the District is not addressed in this chapter. Because the Grant ES campus is already developed as a school, constructing a new school on a different site would likely increase environmental impacts. For these reasons, an off-campus alternative was not considered further.

7.4.2 Maximum School Buildout

As shown in Figure 7-1, *Alternative Design of the Proposed Project*, an increased buildout scenario was considered for the Proposed Project. This alternative would result in the demolition of the transitional kindergarten and kindergarten building (Building A), which would be replaced by a new pedestrian walkway along Pearl Street, and the demolition and relocation of the existing Auditorium to the northwestern portion of the campus. It would also include demolition of Building H (a 13,965-square-foot building that is a contributing element of the identified historic district) and construction of a new, approximately 5,000-square-foot classroom building and multipurpose room on the eastern boundary of the campus along 24th Court.

This option was ultimately rejected because it would result in greater construction impacts on the campus, and would result in additional impacts to the identified historic district with the removal of Building H. For these reasons, this alternative was not considered further.

7.5 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

The following three alternatives have been determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the Proposed Project and may avoid or substantially lessen any of the significant effects of the Proposed Project or ameliorate community concerns. The following alternatives are analyzed in detail in the following sections.

- **Alternative 1**: No-Project Alternative
- **Alternative 2**: One-Story Building Along Pearl Place
- **Alternative 3**: Alternate Location on Pearl Street

7.6 NO PROJECT ALTERNATIVE

7.6.1 Description

The CEQA Guidelines require the analysis of a No Project Alternative. Under CEQA, the No Project Alternative must consider the effects of not approving the Proposed Project. The No Project Alternative describes the environmental conditions that exist at the time that the environmental analysis commences, as well as what would reasonably be expected to occur in the foreseeable future if the Proposed Project were not approved. (CEQA Guidelines, Section 15126.6(e)(2).)

Under the No Project Alternative, the District would not approve any portion of the Proposed Project on the Grant ES campus, and none of the mitigation measures identified in this DEIR would be necessary. No demolition would occur under the No Project Alternative because the existing structures on the campus would be retained. Under the No Project Alternative, it is assumed that the reasonably foreseeable future at the campus would be the continued occupation of the existing buildings and use of the playgrounds on the Grant ES campus as in current conditions. Grant ES would not be redeveloped and modernized, and existing buildings would be used by students as needed (portable buildings and Buildings A, B, F, and G) or remain unoccupied. The school would continue to operate under its current conditions, and no changes would take place other than routine maintenance and repairs.

7.6.2 Relationship to Project Objectives

Under the No Project Alternative, none of the District's objectives for the Proposed Project would be met.

7.6.3 Comparison Analysis of Environmental Effects

7.6.3.1 AESTHETICS

Under this alternative, no structural or any other visual changes to the existing Grant ES campus facilities would occur. There would be no changes to the physical environment as it relates to aesthetic resources, including light and glare, and no impacts would occur. Overall, the No Project Alternative would avoid the less-than-significant aesthetic impacts related to scenic quality and light and glare of the Proposed Project. Therefore, impacts under this alternative would be less than those of the Proposed Project.

7.6.3.2 AIR QUALITY

No construction would occur under this alternative; therefore, no construction-related air quality impacts would occur. Construction-related impacts would be less than the less-than-significant impacts of the Proposed Project.

Operation (i.e., student enrollment, staffing, and general operational characteristics) under this alternative would remain similar to existing conditions. As discussed in Chapter 3, *Project Description*, the Proposed Project would not change enrollment capacity and staffing of Grant ES. Therefore, operational-related air quality impacts under this alternative would be similar to the less-than-significant impacts of the Proposed Project.

Figure 7-1 - Alternative Design of the Proposed Project

Source: Johnson Favaro, 2023.

7. Alternatives to the Proposed Project

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7.6.3.3 CULTURAL RESOURCES

The No Project Alternative would not demolish any buildings and would not develop new buildings on campus adjacent to or within the historic district. The No Project Alternative impacts to historic resources would be less than the Proposed Project's less-than-significant impacts. The No Project Alternative would avoid any ground-disturbing activities. Thus, potential construction-related impacts to subsurface unknown archaeological resources would be avoided, and impacts would be less than the Proposed Project. Overall, the No Project Alternative would avoid the less-than-significant (after mitigation) cultural resources impacts of the Proposed Project. Therefore, impacts under this alternative would be less than those of the Proposed Project.

7.6.3.4 ENERGY

Under this alternative, construction of new buildings would not occur. Therefore, no construction-related energy consumption would occur, and construction-related impacts to energy would be less than the Proposed Project. Under the No Project Alternative, Grant ES would continue to operate in its existing condition as an elementary school. Therefore, energy demand for electricity and fuel consumption would remain as is and would not affect local or state renewable energy plans.

Potential operational-related impacts to energy would be less than the Proposed Project and would also result in a less-than-significant impact, because neither this alternative nor the Proposed Project would increase student enrollment capacity nor staffing on the Grant ES campus.

7.6.3.5 GEOLOGY AND SOILS

No new construction activities, including grading, would occur under the No Project Alternative. Thus, potential construction-related impacts to unknown subsurface paleontological resources under the Proposed Project would be avoided. Overall, the No Project Alternative would avoid the less-than-significant (after mitigation) geology and soil impacts of the Proposed Project. Therefore, impacts to geology and soils under this alternative would be less than those of the Proposed Project.

7.6.3.6 GREENHOUSE GAS EMISSIONS

Under this alternative, no demolition would occur, and no new construction and modernization would occur. Therefore, no construction-related greenhouse gas (GHG) emissions would occur, and this alternative's GHG emissions would be less than the Proposed Project's less-than-significant impact. The campus would continue to operate as an elementary school, and GHG emissions would remain unchanged from existing conditions. As with the Proposed Project, the No Project Alternative would not conflict with any applicable plans or policies. Overall, the No Project Alternative would avoid the less-than-significant GHG emissions impacts of the Proposed Project, and impacts under this alternative would be less than those of the Proposed Project.

7.6.3.7 HAZARDS AND HAZARDOUS MATERIALS

Because no development would occur under the No Project Alternative, the less-than-significant impact (after mitigation) of the Proposed Project would be reduced under the No Project Alternative; thus, construction impacts related to hazards or hazardous materials would be less than the Proposed Project.

The alternative would continue to use, transport, and handle small quantities of hazardous materials typical of a school during operation (such as cleaning supplies, science laboratory chemicals, pesticides and landscaping hazardous materials). Therefore, impacts from hazardous materials during operation would be less than significant, similar to the Proposed Project.

7.6.3.8 HYDROLOGY AND WATER QUALITY

Water quality conditions, groundwater supplies, drainage patterns, and surface water runoff would remain the same under the No Project Alternative because no construction or new development would occur. This alternative would not introduce new sources of water pollutants from the construction phase, and the impacts would be less than the Proposed Project during construction. This alternative would continue to operate as an elementary school with the same student enrollment capacity and staffing as existing conditions and the Proposed Project. Therefore, the impacts for the operational phase would be slightly reduced compared to the less-than-significant impacts of the Proposed Project.

7.6.3.9 NOISE

No construction noise impacts would occur under this alternative; therefore, the construction noise impacts would be less than the Proposed Project. Specifically, this alternative would avoid the construction noise impacts to on-campus school receptors and would avoid construction vibration impacts. Additionally, the No Project Alternative would avoid the potentially significant construction impacts on the western boundary of the campus along Pearl Place.

Under this alternative, the campus would continue to operate as an elementary school, and operational noise would not increase at the residences adjacent to the campus. The No Project Alternative and the Proposed Project would have similar less-than-significant operational noise impacts. Overall, the No Project Alternative would result in less noise impacts than the Proposed Project, and the significant and unavoidable construction noise and vibration impacts would be avoided.

7.6.3.10 TRANSPORTATION

There would be no construction under this alternative; thus, this alternative would not result in any construction-related traffic impacts to the campus or local streets surrounding Grant ES. The less-than-significant impact (after mitigation) of the Proposed Project would be reduced under the No Project Alternative.

The No Project Alternative would not reconfigure the existing parking lots on the campus. Less-than-significant impacts related to vehicle miles traveled (VMT) would be the same as the Proposed Project

because the number of staff and students would not change. Therefore, overall operational impacts related to traffic would be less than the Proposed Project.

7.6.4 Conclusion

The No Project Alternative would not result in any temporary construction impacts identified for the Proposed Project. This alternative would lessen environmental impacts for construction and would avoid the Proposed Project's significant construction noise impact to off-site receptors along Pearl Place because no construction would occur under this alternative.

The Proposed Project would not change operational conditions of the campus, including student enrollment and staffing, so the No Project Alternative would result in similar operational impacts in the areas of air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, and noise. Additionally, the No Project Alternative would result in less operational impacts to aesthetics, cultural resources, energy, noise, and transportation when compared to the Proposed Project.

The No Project Alternative does not meet any of the Proposed Project's objectives. Additionally, this alternative would not realize any of the environmentally beneficial outcomes of the Proposed Project. Overall, the No Project Alternative results in reduced impacts throughout all environmental topics and avoidance of the significant and unavoidable impact.

7.7 ALTERNATIVE 2: ONE-STORY BUILDING ALONG PEARL PLACE

7.7.1 Description

Under Alternative 2, *One-Story Building Along Pearl Place,* a one-story building would be constructed along Pearl Place instead of the proposed two-story classroom building that would be constructed during Phase 3 of the Proposed Project. However, to provide the same number of classrooms, the proposed building would be extended in length up to Pearl Street, requiring the demolition of Building B, which is a contributor to the Grant ES historic district. This alternative would still include the removal of 10 portable classrooms; construction of the new 10,626-square-foot, one-story classroom building with six classrooms south of Building C; and reconfiguration of the playfield and parking lots (see Figure 7-2, *One-Story Building Along Pearl Place*).

The additional demolition of the northern portion of Building B would result in approximately 3,285 square feet of additional demolition on the campus compared to the Proposed Project. Because of the extended length of the proposed building under Alternative 2, the total developed square footage of this alternative would be similar to the Proposed Project. Total construction efforts and timeline in Phase 3 would increase under this alternative due to the additional required demolition; however, development of the proposed new building would be similar to the Proposed Project. Additionally, with the implementation of the same number of classrooms in the proposed one-story building, operational improvements of this alternative would be similar to the Proposed Project.

7.7.2 Relationship to Project Objectives

Despite the changes to the proposed building along Pearl Place, which would be reduced to one story under Alternative 2, the proposed building would provide the same number of classrooms on the campus as the Proposed Project due to its extended length up to Pearl Street. Therefore, Alternative 2 would still meet the Project objectives.

7.7.3 Comparison Analysis of Environmental Effects

7.7.3.1 AESTHETICS

Alternative 2 would result in the same developed total square footage as the Proposed Project. This alternative would remove the northern portion of Building B, which is visible from Pearl Street (as shown in Figure 5.1-2b, *Existing Public View Point 2*); however, the proposed one-story building would be similar in height to the existing Building B and the surrounding Buildings A, K, and C, which have a maximum height of 18 feet, 6 inches (Building K).

Although Alternative 2 would largely result in the same buildout as the Proposed Project due to the extended length of the one-story building, views from the surrounding areas, including the predominant views from Pearl Place and 24th Street, would be altered due to the reduced bulk and scale on-site compared to the Proposed Project. Thus, this alternative would have less impact than the Proposed Project related to scenic quality and community character. Similar to the Proposed Project, this alternative would comply with Santa Monica Municipal Code Section 9.21.120, which prohibits the use of highly reflective materials. Since exterior lighting on the proposed one-story building would be placed at a lower height and all glass doors and windows would be limited to the first floor of the building, lighting and glare impacts under this alternative would be less than the Proposed Project. Overall, aesthetic impacts under this alternative would be less than the Proposed Project's less-than-significant impacts.

7.7.3.2 AIR QUALITY

As described above, total construction efforts and the timeline in Phase 3 would increase under this alternative due to the additional required demolition of Building B. Alternative 2 would result in some similar development activities as the Proposed Project, including the use of construction equipment and vehicles on the campus, earth-moving activities, construction vehicle trips, and material consumption. However, due to the increase in demolition, this alternative would result in greater emissions of criteria pollutants during the construction phases compared to the Proposed Project. Additionally, construction of Alternative 2 would result in an increase in diesel exhaust emissions and pollutant concentrations at nearby receptors.

Figure 7-2 - One-Story Building along Pearl Place

Source: Johnson Favaro, 2023.

7. Alternatives to the Proposed Project

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To provide the same number of classrooms as the Proposed Project, the proposed one-story building under Alternative 2 would be extended in length up to Pearl Street; thus, this alternative results in the same buildout capacity as the Proposed Project. This alternative would have the same enrollment capacity and staffing as the Proposed Project, and operational air quality from vehicles trips would remain less than significant, as with the Proposed Project. Air quality impacts during operation of this alternative would remain the same compared to the Proposed Project.

Therefore, Alternative 2 would increase the impacts to air quality during construction due to the additional demolition on the campus, compared to the Proposed Project; and air quality impacts associated operation of this alternative would be similar to those of the Proposed Project.

7.7.3.3 CULTURAL RESOURCES

This alternative would require additional demolition of the northern portion of Building B. However, as described in Section 5.3, *Cultural Resources*, of this DEIR, the northern addition of Building B was constructed in 1954 and is not a contributor to the Grant ES historic district. As under the Proposed Project, Alternative 2 would also require the demolition of the southern portion of Building B, which is a contributor to the historic district, and construct a new classroom building within the historic district on the campus. However, the additional portion of the building that would be demolished would still be within the existing historic district; thus, this alternative would result in greater impacts related to historical resources compared to the Proposed Project since it would remove an entire contributor building from the Grant ES historic district.

Alternative 2 would result in greater overall construction activities, including excavation, grading, and other earthwork. Therefore, the potential to encounter subsurface archaeological resources would be greater than for the Proposed Project. Similar to the Proposed Project, **Mitigation Measure CUL-1** would be required to reduce impacts to less than significant.

Therefore, this alternative would have a greater impact on cultural resources compared to the Proposed Project, specifically to historic resources with the demolition of a contributor building from the Grant ES historic district.

7.7.3.4 ENERGY

Under Alternative 2, energy consumption during construction would be greater than the Proposed Project due to the required additional demolition of Building B. During operation, this alternative would not affect transportation energy and fuel consumption, and electricity demand under this alternative would be similar to the Proposed Project since the proposed one-story classroom building would provide the same number of classrooms as the Proposed Project. Therefore, electricity demand and fuel consumption during operation would be similar compared to the Proposed Project. Overall, energy impacts would be greater during construction of Alternative 2 and would result in similar operational impacts compared to the Proposed Project's less-than-significant impact.

7.7.3.5 GEOLOGY AND SOILS

Alternative 2 would occur on the same campus as the Proposed Project. Construction activities and earthwork would be increased under this alternative compared to the Proposed Project, since the length of the proposed one-story building would extend to Pearl Street, which would require additional excavation on the campus; thus, the potential to uncover unknown subsurface paleontological resources would be greater than for the Proposed Project. Therefore, this alternative also requires the implementation of **Mitigation Measure GEO-1** to reduce impacts to a less-than-significant level. Similar to the proposed project, impacts would be less than significant with mitigation.

7.7.3.6 GREENHOUSE GAS EMISSIONS

Under Alternative 2, construction activities on the campus would increase compared to the Proposed Project due to the additional demolition of the Building B; thus, energy consumption and GHG emissions during construction would be greater compared to the Proposed Project.

During operation, this alternative would result in similar GHG emissions as the Proposed Project. Therefore, the impacts associated with GHG emissions would be greater during construction of Alternative 2 and similar during operation, compared to the Proposed Project's less-than-significant impact.

7.7.3.7 HAZARDS AND HAZARDOUS MATERIALS

Construction activities under Alternative 2 would require additional demolition and grading on the campus compared to the Proposed Project. Potential hazards would occur from the accidental release of hazardous materials from the potential exposure to impacted soils and hazardous building materials. However, impacts from hazards and hazardous materials during construction of Alternative 2 would be less than significant with the implementation of **Mitigation Measures HAZ-1** and **HAZ-2**, similar to the Proposed Project.

As with the Proposed Project, operation of Alternative 2 would require the transport, use, and storage of hazardous materials, which would be mitigated by comprehensive regulations. The overall hazards impacts associated with this alternative would be less than significant with implementation of **Mitigation Measures HAZ-1** and **HAZ-2**, and therefore similar to the Proposed Project.

7.7.3.8 HYDROLOGY AND WATER QUALITY

Similar to the Proposed Project, construction and operation of Alternative 2 could generate pollutants that impact water quality. However, similar to the Proposed Project, a Construction General Permit would ensure water quality impacts are minimized to less than significant levels. Since no phase of Alternative 2 would disturb one acre of land or more, implementation of a stormwater pollution prevention plan would not be required. Alternative 2 would comply with all City requirements regarding runoff and conform to all State Water Resources Control Board requirements for projects under one acre. Adherence to existing regulations, and final design specifications would ensure construction impacts to hydrology and water quality are less than significant.

Similar to the Proposed Project, Alternative 2 would not change current enrollment or staffing, and therefore overall water demand is not expected to increase. Water use for landscaping purposes is expected to be similar to the Proposed Project. Therefore, construction and operation impacts of Alternative 2 would be similar to the Proposed Project.

7.7.3.9 NOISE

Development under Alternative 2 would still require construction and associated site improvements that would generate temporary noise in close proximity to sensitive receptors. Alternative 2 would construct a one-story classroom building on the western boundary of the campus that would extend to Pearl Street, which would still be located near sensitive receptors along Pearl Place. The construction of a one-story building would have similar impacts to the surrounding residences as the Proposed Project and the majority of construction noise would be caused by heavy-duty equipment when construction occurs on the ground surface. It is anticipated that construction noise and vibration impacts would be reduced with the implementation of **Mitigation Measures N-1** and **N-2**; however, noise impacts to adjacent properties along Pearl Place would still be significant and unavoidable, similar to the Proposed Project. Like the Proposed Project, operational impacts would be less than significant. Overall, Alternative 2 would result in similar significant noise impacts during construction and similar less-than-significant operational impacts as the Proposed Project.

7.7.3.10 TRANSPORTATION

As with the Proposed Project, Alternative 2 would require the mobilization of workers, vendors, equipment, and haul trucks to and from the campus during construction. Similar to the Proposed Project, construction of Alternative 2 would result in traffic hazard impacts and would require **Mitigation Measure T-1** to reduce impacts. Overall, Alternative 2 would result in similar transportation impacts during construction compared to the Proposed Project.

Site circulation would be similar as described for the Proposed Project. Overall, Alternative 2 would result in similar operational circulation and pedestrian safety hazards as the Proposed Project.

7.7.4 Conclusion

Alternative 2 would have similar impacts as the Proposed Project for aesthetics, hydrology and water quality, noise, and transportation. However, due to the additional removal from Building B under Alternative 2, which would result in approximately 3,285 additional square feet of demolition, this alternative would result in increased impacts to air quality, cultural resources, energy, greenhouse gas emissions, geology and soils, and hazardous materials when compared to the Proposed Project.

Alternative 2 would provide the same number of classrooms on the campus as the Proposed Project due to its extended length up to Pearl Street and would still meet the Project objectives based on the SMMUSD Districtwide Educational Specifications for the design of future learning environments at Grant ES.

7.8 ALTERNATIVE 3: ALTERNATE LOCATION ON PEARL STREET

7.8.1 Description

Under Alternative 3, *Alternate Location on Pearl Street*, the proposed two-story classroom building that would be constructed along Pearl Place during Phase 3 of the Proposed Project would be instead constructed on the northern boundary of the campus on Pearl Street (see Figure 7-3, *Alternate Location on Pearl Street*). The proposed building on Pearl Street would be similar in size and would contain the same number of classrooms as the Proposed Project. However, this alternative would require the demolition of Building A and approximately 1,000 square feet from the northern portion of Building B. As described in Section 5.3, *Cultural Resources*, the northern addition to Building B was constructed in 1954 and is not a contributor to the Grant ES historic district. Building A is also not considered a contributor to the historic district. The demolition of Building A and the northern portion of Building B would result in approximately 1,870 square feet of additional demolition on the campus compared to the Proposed Project.

This alternative would still include the removal of 10 portable classrooms, construction of the new 10,626-square-foot, one-story classroom building with six classrooms south of Building C, and reconfiguration of the playfield and parking lots. This alternative would also result in an additional recreation space along the western boundary of the campus (see Figure 7-3, *Alternate Location on Pearl Street*). Total construction efforts and timeline in Phase 3 would increase under this alternative due to the additional required demolition; however, development of the proposed new building would be similar to the Proposed Project, and operational improvements of this alternative would be similar to the Proposed Project.

7.8.2 Relationship to Project Objectives

Alternative 3, *Alternative Location on Pearl Street*, would meet all project objectives except for Objective 5—organize the campus to provide safe student circulation—because the implementation of the new two-story building on Pearl Street would encompass the entire northern boundary of the campus and alter the existing main entrance to the campus, which has been reconfigured to make the arrival and perimeter safer, as described in Chapter 3, *Project Description*.

Figure 7-3 - Alternate Location on Pearl Street

Source: Johnson Favaro, 2023.

7. Alternatives to the Proposed Project

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7.8.3 Comparison Analysis of Environmental Effects

7.8.3.1 AESTHETICS

Alternative 3 would construct a new two-story classroom building in front of the existing campus along Pearl Street. The new classroom building would remove Building A and a portion of Building B and would alter the existing views of the Grant ES campus, including views of Buildings D and E, which are currently visible from Pearl Street, as shown in Figure 5.1-2a, *Existing Public View Point 1*. It would also alter the existing setback of the campus along Pearl Street. Thus, this alternative would have greater impacts related to scenic quality and community character, since it would obstruct views of the front of the existing campus, which includes contributor buildings from the Grant ES historic district. This alternative would include similar exterior lighting sources as the Proposed Project, which would be consistent with the existing conditions and the District's lighting standards. Thus, compared to the Proposed Project, this alternative would have similar impacts related to light and glare as the Proposed Project. Additionally, similar to the Proposed Project, this alternative would comply with Santa Monica Municipal Code Section 9.21.120, which prohibits the use of highly reflective materials.

Overall, under Alternative 3, aesthetic impacts would be greater than the Proposed Project's less-than-significant impacts.

7.8.3.2 AIR QUALITY

As described above, total construction efforts and the timeline in Phase 3 would increase under this alternative due to the demolition of Building A and a portion of Building B. Alternative 3 would result in some similar construction activities as the Proposed Project, including the use of construction equipment and vehicles, earth-moving activities, construction vehicle trips, material consumption. However, due to the increase in demolition, this alternative would result in greater emissions of criteria pollutants during the construction phases compared to the Proposed Project. Additionally, construction of Alternative 3 would result in an increase in diesel exhaust emissions and elevated pollutant concentrations at nearby receptors.

This alternative results in the same buildout as the Proposed Project except for the location of the proposed two-story building. This alternative would have the same enrollment capacity and staffing as the Proposed Project, and air quality from vehicles trips would remain less than significant. Air quality impacts during operation of this alternative would remain the same compared to the Proposed Project.

Therefore, Alternative 2 would increase the impacts to air quality during construction due to the additional demolition on the campus, compared to the Proposed Project; and air quality impacts associated with operation of this alternative would be similar to that of the Proposed Project.

7.8.3.3 CULTURAL RESOURCES

This alternative would require the demolition of Building A and the northern portion of Building B. However, as described in Section 5.3, *Cultural Resources*, of this DEIR, Building A and the northern addition of Building B were constructed in 1954 and are not contributors to the Grant ES historic district. The

demolition of Building A and portion of Building B are not within the existing historic district; thus, this alternative would result in less construction impacts related to historical resources compared to the Proposed Project, since it would avoid the removal of the contributor building (southern portion of Building B) from the Grant ES historic district.

Alternative 3 would construct new two-story classroom buildings along Pearl Street, directly north of the existing paved forecourt and flagpole at the north end of the campus, which is a contributing feature of the Grant ES historic district. The new classroom building would alter the existing views of the Grant ES Buildings D and E and the paved forecourt and flagpole at the north end of the campus. Because the visual characteristics that convey the importance of the historic district would be entirely behind the new construction, it is likely that the alternative would result in potential impacts to the integrity of the historic district.

This alternative would result in greater overall construction activities, including excavation, grading, and other earthwork. Therefore, the potential to encounter subsurface archaeological resources would be greater than the Proposed Project. Similar to the Proposed Project, **Mitigation Measure CUL-1** would be required to reduce impacts to less than significant.

This alternative would have greater impacts to cultural resources, specifically to historical resources, compared to the Proposed Project, specifically to historic resources with the alteration of contributing features to the Grant ES historic district.

7.8.3.4 ENERGY

Under Alternative 3, energy consumption during construction would be greater than the Proposed Project due to the demolition of Building A and a portion of Building B. During operation, this alternative would not affect transportation energy and fuel consumption, and electricity demand under this alternative would be similar to the Proposed Project because the two-story building under Alternative 3 would be similar in size and have the same number of classrooms as the Proposed Project. Therefore, electricity demand and fuel consumption during operation would be similar to the Proposed Project. Overall, energy impacts would be greater during construction of Alternative 3, and it would result in similar operational impacts as the Proposed Project's less-than-significant impact.

7.8.3.5 GEOLOGY AND SOILS

Alternative 3 would occur on the same campus as the Proposed Project. Construction activities and earthwork would be increased under this alternative compared to the Proposed Project, since Building A and a portion of Building B would be demolished; thus, the potential to uncover unknown subsurface paleontological resources would be greater than for the Proposed Project. Therefore, this alternative also requires the implementation of **Mitigation Measure GEO-1** to reduce impacts to a less-than-significant level. Overall, the impact of Alternative 3 related to geology and soils would be similar to the Proposed Project.

7.8.3.6 GREENHOUSE GAS EMISSIONS

Under Alternative 3, construction activities on the campus would increase compared to the Proposed Project due to the additional demolition of the Building A and portion of Building B; thus, energy consumption and GHG emissions would increase compared to the Proposed Project.

During operation, this alternative would result in similar GHG emissions as with the Proposed Project since neither Alternative 3 nor the Proposed Project would result in increased student or staff population on the campus. Alternative 3's VMT would be the same as for the Proposed Project.

Therefore, the impacts associated with GHG emissions would be greater during construction of Alternative 3 and similar during operation, compared to the Proposed Project's less-than-significant impact.

7.8.3.7 HAZARDS AND HAZARDOUS MATERIALS

Construction activities under Alternative 3 would require additional demolition and grading on the campus compared to the Proposed Project. Potential hazards would occur from the accidental release of hazardous materials due to potential exposure to impacted soils and hazardous building materials. However, impacts from hazards and hazardous materials during construction of Alternative 3 would be less than significant with the implementation of **Mitigation Measures HAZ-1** and **HAZ-2**, similar to the Proposed Project.

As with the Proposed Project, operation of Alternative 3 would require the transport, use, and storage of hazardous materials, which would be mitigated by comprehensive regulations. The overall hazards impacts associated with this alternative would be less than significant with implementation of **Mitigation Measures HAZ-1** and **HAZ-2**, and therefore similar to the Proposed Project.

7.8.3.8 HYDROLOGY AND WATER QUALITY

Similar to the Proposed Project, construction and operation of Alternative 3 could generate pollutants that impact water quality. However, similar to the Proposed Project, a Construction General Permit would ensure that water quality impacts are minimized to less than significant levels. Since no phase of Alternative 3 would disturb one acre of land, implementation of a stormwater pollution prevention plan would not be required. Alternative 3 would comply with all City requirements regarding runoff and conform to all State Water Resources Control Board requirements for projects under one acre. Adherence to existing regulations and final design specifications would ensure construction impacts to hydrology and water quality are less than significant.

Similar to the Proposed Project, Alternative 2 would not change current enrollment or staffing, so overall water demand is not expected to increase. Therefore, construction and operation impacts of Alternative 3 would be similar to the Proposed Project.

7.8.3.9 NOISE

Development under Alternative 3 would still require construction and associated site improvements that would generate temporary noise. Alternative 3 would construct a two-story classroom building along Pearl

Street that would encompass the entire northern boundary of the Grant ES campus. With the construction of this new building, construction noise impacts to the homes on the northwestern and northeastern corners of the campus would remain significant and unavoidable, since they would be exposed directly to the construction activities on the campus. As with the Proposed Project, it is anticipated that construction noise and vibration impacts would be reduced with the implementation of **Mitigation Measures N-1** and **N-2**; however, noise impacts to the second level of adjacent properties would still be significant and unavoidable, similar to the Proposed Project. Like the Proposed Project, operational impacts would be less than significant. Overall, Alternative 3 would result in similar significant noise impacts during construction, and less-than-significant operational impacts compared to the Proposed Project.

7.8.3.10 TRANSPORTATION

As with the Proposed Project, Alternative 3 would require the mobilization of workers, vendors, equipment, and haul trucks to and from the campus during construction. Similar to the Proposed Project, construction of Alternative 3 would result in traffic hazard impacts and would require **Mitigation Measure T-1** to reduce impacts. Overall, Alternative 3 would result in similar transportation impacts during construction compared to the Proposed Project.

Alternative 3 would require permanent closure of the existing parking lot on the northeastern corner of the campus, which would impact vehicular access to the campus. Since the new structure would be on Pearl Street, implementation of Alternative 3 would obstruct the existing pick-up and drop-off areas on Pearl Street along the front of the campus. This could result in increased traffic and pedestrian safety issues during drop-off/pick-up along Pearl Street. Overall, Alternative 3 would result in greater operational circulation and pedestrian safety hazards compared to the Proposed Project.

7.8.4 Conclusion

Alternative 3 would have similar impacts as the Proposed Project for hydrology/water quality and noise. However, due to the removal of Building A and a portion of Building B under Alternative 3, which would result in approximately 1,870 additional square feet of demolition, this alternative would result in increased impacts to aesthetics, air quality, cultural resources, energy, greenhouse gas emissions, geology and soils, hazardous materials, and transportation when compared to the Proposed Project.

Alternative 3 would meet Objectives 1 through 4 and 6 through 8. This alternative would not result in the full benefits of reconfiguring the campus to provide safe student circulation (Objective 5) because the implementation of the new two-story building would encompass the entire northern boundary of the campus and alter the existing main entrance to the campus..

7.9 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

"Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts" (CEQA Guidelines, Section 15126.6[c]).

An EIR must identify an "environmentally superior" alternative, and where the No Project Alternative is identified as environmentally superior, the EIR must identify an environmentally superior alternative from the others evaluated. Each alternative's environmental impacts are compared to the Proposed Project and determined to result in either reduced impacts compared to the Proposed Project, the same or similar impacts as the Proposed Project, or a more severe impact than the Proposed Project. Alternative 3, Alternate Location on Pearl Street, was identified as "environmentally superior" to the Proposed Project.

Alternative 3 has the least impact on the environment because it would avoid the demolition of the southern portion of Building B, which is a contributing feature to the Grant ES historic district. However, this alternative would not generate the full environmental enhancements under the Proposed Project. The additional demolition that would be required under Alternative 3 would result in greater construction impacts to air quality with the increase in diesel exhaust emissions; energy and greenhouse gas emissions with the increased use of construction vehicles and equipment; geology and soils with the additional earth-moving activities; hazards and hazardous materials with the potential exposure to impacted soils and hazardous building materials; and transportation with the obstructed access to the existing pick-up and drop-off areas and permanent closure of the existing parking lot on Pearl Street.

Alternative 3 would reduce the number of residences that would be affected by the constructions noise along Pearl Place since the new two-story building would be constructed on the northern boundary of the campus; however, construction noise would still be potentially significant to the residences near the northwestern and northeastern corners of the campus. The implementation of Alternative 3 would not reduce the Proposed Project's significant and unavoidable impact.

Additionally, operation impacts of the Alternative 3 would include obstructed views of the existing Grant ES historic district features, including Buildings D and E and the paved forecourt and flagpole at the north end of the campus. Because the visual characteristics that convey the historic district's importance would be entirely behind the new construction, it is likely that Alternative 3 would result in potential impacts to the integrity of the historic district.

Since the implementation of a new two-story building on Pearl Street would encompass the entire northern boundary of the campus and alter the existing main entrance under Alternative 3, this alternative would not meet Objective 5 of the Project Objectives to organize the campus to provide safe student circulation.

These factors will be considered by the SMMUSD decision makers in determining whether to approve the Proposed Project or one of the alternatives identified.

7. Alternatives to the Proposed Project

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