Millikan High School Aquatic Center Project
Draft Environmental Impact Report

JUNE 2026

Prepared for:

LONG BEACH UNIFIED • SCHOOL • DISTRICT

Facilities Development and Planning Branch
2425 Webster Avenue Long Beach, CA 90810



State Clearinghouse No. 2025120356

terraphase engineering

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Long Beach, California

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Facilities Development and Planning
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Executive Summary

This Draft Environmental Impact Report (EIR) has been prepared pursuant to the California Environmental Quality Act (CEQA; Public Resources Code [PRC] § 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, § 15000 et seq.). Consistent with CEQA Guidelines § 15123, this Executive Summary provides: (1) a brief overview of the Millikan High School Aquatic Center Project (Proposed Project); (2) a summary of issues raised during the Notice of Preparation (NOP) scoping process and any areas of controversy identified by the lead agency; (3) identification of any significant and unavoidable environmental impacts; (4) a summary of alternatives evaluated that would reduce or avoid significant impacts; and (5) a summary of the environmental impacts analyzed in the Draft EIR and the mitigation measures proposed to avoid or reduce those impacts.

ES.1 PROJECT OVERVIEW

The Proposed Project is planned by the Long Beach Unified School District (District) and would be located on the existing Millikan High School (MHS) campus at 2800 Snowden Avenue in the City of Long Beach, Los Angeles County, California. The Proposed Project would modernize and expand on-campus aquatic facilities to support physical education (P.E.) instruction, competitive athletics, inclusive programming, and limited community use.

The Proposed Project consists of the demolition of existing Building 700/3000 and adjacent portable buildings and construction of a new aquatic center within the developed footprint of the school campus. The aquatic center would include a competition pool, associated pool deck, and supporting facilities, including locker rooms, team rooms, offices, equipment and chemical storage areas, and mechanical and electrical rooms. Spectator amenities would include bleachers with seating for approximately 500 people, shade structures, lighting, and an electronic scoreboard with integrated sound. Additional site improvements would include security features, perimeter fencing or walls, and circulation improvements.

The aquatic center would be used primarily for MHS P.E. classes, competitive swim and water polo programs, Special Olympics programming, and students with special needs. The facility would also accommodate limited community use, such as learn-to-swim programs, consistent with District policies. Construction and operation of the Proposed Project would occur on an active high school campus within an established commercial and residential area.

The Draft EIR has been prepared as a focused EIR to evaluate environmental topics identified through the Initial Study (IS) and NOP as requiring detailed analysis. Environmental issue areas not identified as potentially significant were addressed in the IS and are not analyzed further in this Draft EIR, consistent with CEQA Guidelines § 15128[1].

[1] CEQA Guidelines § 15128

ES.1.1 Project Background

The District maintains a large and diverse inventory of school facilities that support instructional, athletic, and extracurricular programs for students across the District. Many of these facilities were constructed decades ago and were designed to meet educational standards, accessibility requirements, and programmatic needs that have since evolved. As part of its ongoing facilities planning efforts, the District regularly evaluates the condition, functionality, and adequacy of existing campus infrastructure to ensure that facilities continue to support contemporary educational programs, student safety, and equitable access.

MHS serves students in grades 9 through 12 and offers a range of academic, athletic, and extracurricular programs, including P.E. and competitive aquatic sports. Existing aquatic facilities available to the school are limited in their ability to accommodate current instructional needs, competitive programming, inclusive access, and community-based activities. In particular, older facilities lack modern accessibility features, sufficient capacity for spectators, and the flexibility required to support multiple user groups, including students with special needs and Special Olympics participants.

The District has identified a need to modernize aquatic facilities at MHS to support P.E. curriculum requirements, competitive swimming and water polo programs, and inclusive recreational opportunities. Modern aquatic facilities are also necessary to ensure compliance with current building codes, accessibility standards, and safety requirements, and to provide appropriate support spaces such as locker rooms, offices, equipment storage, and mechanical systems designed for contemporary pool operations.

In addition to supporting on-campus educational programs, updated aquatic facilities would allow the District to provide limited community access, such as learn-to-swim programs, consistent with District policies and community use goals. These programs help promote water safety, physical fitness, and broader community engagement while making efficient use of public school facilities.

The Proposed Project is intended to address these identified needs by replacing outdated facilities with a modern, inclusive aquatic center located within the existing developed footprint of the campus. The Proposed Project reflects the District's broader objective of maintaining safe, functional, and equitable school facilities that support both educational outcomes and community well-being.

ES.2 ISSUES RAISED DURING SCOPING AND AREAS OF CONTROVERSY

During the NOP scoping period, the District received written comments from the Native American Heritage Commission (NAHC) and the California Department of Toxic Substances Control (DTSC) (refer to **Appendix A**). These comments informed the scope and focus of the environmental analysis presented in this EIR. No comments were received opposing the Proposed Project, and no substantial disagreement was identified regarding the overall purpose or need for the Proposed Project.

The primary issues raised during scoping relate to cultural resources and tribal cultural resources (TCRs), as reflected in the NAHC's comment letter. The NAHC emphasized the importance of compliance with applicable provisions of CEQA related to cultural resources and TCRs, including consultation

requirements pursuant to Assembly Bill 52, protection of confidential information, and implementation of appropriate procedures in the event of inadvertent discoveries during ground-disturbing activities. These issues are addressed in this EIR consistent with PRC §§ 21074[2], 21084.1[3], and 21084.3[4], and applicable CEQA Guidelines.

DTSC's comments focused on regulatory considerations applicable to school construction projects, including demolition practices and soil management procedures. The project site is an existing developed school campus, the proposed demolition and construction activities constitute standard school operations, and the site is not listed on the Cortese List pursuant to Government Code § 65962.5[5] nor identified as a site of known hazardous materials release. Accordingly, hazardous materials did not emerge as an area of controversy during scoping and are not evaluated as a separate impact topic in this EIR. DTSC's comments are addressed through acknowledgment of applicable regulatory compliance pathways rather than expanded environmental analysis.

No other issues or areas of controversy were identified during the NOP scoping period.

ES.3 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

CEQA Guidelines § 15126.2(a) requires that an EIR describe significant environmental impacts of a project on the environment. Direct and indirect significant effects shall be clearly identified and described, giving due consideration to short-term and long-term effects. This Draft EIR identifies one significant and unavoidable environmental impact associated with implementation of the Proposed Project. Specifically, demolition of existing Building 700/3000 would result in a significant and unavoidable impact to a historical resource, as defined in PRC § 21084.1[6] and CEQA Guidelines § 15064.5[7].

Although this Draft EIR identifies **Mitigation Measures CUL-1A** through **CUL-1C** which are intended to document the historical resource and reduce the severity of the impact to the extent feasible, demolition of the building would constitute a substantial adverse change in the significance of a historical resource. As a result, this impact would remain significant and unavoidable.

No other significant and unavoidable environmental impacts have been identified. All other potential environmental impacts analyzed in the Draft EIR would be reduced to less-than-significant levels through implementation of mitigation measures or would be less than significant.

[2] PRC § 21074
[3] CCR, Title 14, §15000 et seq.
[4] PRC § 21084.3
[5] Government Code § 65962.5
[6] PRC § 21084.1
[7] CEQA Guidelines § 15064.5

ES.4 ALTERNATIVES THAT WOULD REDUCE OR AVOID SIGNIFICANT IMPACTS

Pursuant to CEQA Guidelines § 15126.6[8], this Draft EIR evaluates a reasonable range of alternatives that could feasibly attain most of the basic objectives of the Proposed Project while reducing or avoiding one or more significant environmental impacts. The alternatives were selected based on their ability to address the Proposed Project's significant and unavoidable impact to a historical resource associated with demolition of Building 700/3000, while remaining feasible from an operational, educational, and site planning perspective.

This Draft EIR analyzes the following alternatives in detail. Each alternative is evaluated in **Section 5**.

ES.4.1 Alternative 1: No Project Alternative

Under the No Project Alternative, the Proposed Project would not be implemented. Building 700/3000 and adjacent portable buildings would remain in their existing condition, and no new aquatic facilities would be constructed. Existing aquatic programming would continue to rely on current facilities or off-campus arrangements, and the District would not achieve the objectives related to modernization, inclusive facilities, expanded athletic programming, and community use.

The No Project Alternative would avoid the significant and unavoidable impact associated with demolition of a historical resource. However, it would not meet most of the basic objectives of the Proposed Project and would not address the District's identified need for improved and accessible aquatic facilities.

ES.4.2 Alternative 2: Minimize Demolition

Alternative 2 would modify the Proposed Project to minimize demolition of Building 700/3000 by retaining and adaptively reusing portions of the existing historic structure, where feasible, while still constructing a new aquatic facility on the MHS campus. Under this alternative, the project design would be revised to incorporate all or a portion of the existing building into the aquatic center program, such as repurposing the structure for support functions (e.g., offices, storage, or ancillary spaces), or reducing the footprint of demolition to preserve character-defining features.

Alternative 2 would substantially reduce impacts to the historic resource compared to the Proposed Project by avoiding complete demolition. However, design constraints, functional limitations, and the need to meet modern aquatic facility standards could limit the feasibility of full preservation. While this alternative could lessen the severity of the historic resource impact, it may not fully avoid a significant impact depending on the extent of alteration required and the integrity of retained features.

[8] CEQA Guidelines § 15126.6

This alternative would partially meet the project objectives by providing new aquatic facilities, but could reduce operational efficiency, increase project costs, and constrain site planning flexibility relative to the Proposed Project.

ES.4.3 Alternative 3: Partial Historic Rehabilitation - Façade Preservation

This alternative would preserve the exterior of Building 700/3000's U-shaped façade and incorporate it into the plans for the aquatic center. Under this alternative, the project design would be revised to incorporate only the north, east, and west exterior façade walls of the existing building into the aquatic center program. New construction of locker room, ticket booth/concessions, pool machine/chemical rooms and bleachers would attach to and be located within the preserved facades. Further reducing demolition compared to Alternative 1 would preserve more of the building's character-defining features.

Alternative 3 would reduce impacts to the historic resource compared to the Proposed Project by avoiding complete demolition and leaving existing exterior façade walls. However, similar to Alternative 2, design constraints, functional limitations, and the need to meet modern aquatic facility standards would significantly reduce the feasibility of this alternative. The footprint of the existing building's exterior facades is narrower than the width required by the proposed design to accommodate all of the necessary program components. Similarly to Alternative 2, the northerly facade is set back further from the street than the Proposed Project, which may force the pool itself to be shifted south and could reduce the pool's length to no longer meet competitive pool specifications. Building the bleachers into the existing westerly façade wall may not be structurally feasible. Although the exterior facades of most of the existing building may physically remain, the changes to the façades to accommodate the proposed programming may impact character-defining features. This alternative would lessen the severity of the historic resource impact compared to the Proposed Project, but it would not fully avoid a significant impact on the historic structure.

ES.4.4 Alternative 4: Historic Rehabilitation and Alternative Location

This alternative would preserve and rehabilitate Building 700/3000 in total to continue its current use as a classroom building or adaptively re-use it for similar purposes. The new aquatic center would be constructed in an alternative location on the MHS campus. Potential alternative locations would include the North Parking Lot (corner of E. Belen Street and Palo Verde Avenue); the South Parking Lot (corner of Snowden Avenue and E. Barbanell Street); or the East Athletic Field (corner of Palo Verde Avenue and E. Barbanell Street).

Alternative 4 would eliminate impacts to the historic resource compared to the Proposed Project. However, relocating the aquatic center to another area of campus would eliminate or impact existing, necessary facilities.

The dimensions of the North Parking Lot are not sufficient to accommodate the proposed program design and would necessitate redesigning to an L-shaped footprint extending south next to Building 700/3000. The pool and bleachers would be located within the existing parking lot, along with the ticket booth/concessions building adjacent to Palo Verde Avenue; the locker room and pool machine/chemical rooms would need to be located within the base of the "L." Furthermore, the redesign would eliminate a significant amount of campus parking.

The dimensions of the South Parking Lot are also insufficient to accommodate the proposed program design. Its long rectangular shape with a severe angle at the southerly end could make a redesign of the aquatic center infeasible. Furthermore, the redesign would eliminate a significant amount of campus parking, which is also in close proximity to the school's auditorium.

The East Athletic Field is more than sufficient in size and dimensions to accommodate the aquatic center proposed design. To avoid eliminating the soccer field, it would need to be relocated to partially overlap with the baseball field at the northerly half of the field. The aquatic center would be located in the south half of the existing field. This location offers the most flexibility for relocating the aquatic center, but it may create operational constraints on the school's baseball and soccer programs. Furthermore, this location would place significant infrastructure in an area of the campus well away from existing infrastructure.

ES.4.5 Environmentally Superior Alternative

The No Project Alternative would be the environmentally superior alternative, as it would avoid all environmental impacts associated with demolition of the historic resource and construction of new facilities. However, as discussed above, the No Project Alternative would not meet the majority of the Proposed Project's objectives and would not address the District's need for improved aquatic facilities.

Among the build alternatives, Alternative 4 (Historic Rehabilitation and Alternative Location) is the environmentally superior alternative because it would avoid the significant and unavoidable impact to historical resources while meeting most of the project objectives. Alternative 4 provides the greatest overall reduction in environmental impacts compared to the Proposed Project and the other alternatives evaluated.

ES.5 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table 1 presents a summary of Proposed Project impacts and proposed mitigation measures that would further avoid or minimize potential impacts. In the table, the level of significance of each environmental impact is indicated both before and after the application of the recommended mitigation measure(s). For detailed discussions of all impacts and mitigation measures, refer to the environmental analysis in **Section 3**.

Acronyms used within **Table 1** to describe levels of significance are explained below:

LTS: less than significant

N/A: not applicable

PS: potentially significant

SU: significant and unavoidable

Table 1. Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
3.2 Air Quality			
AQ-1: Conflict with or obstruct implementation of the applicable air quality plan?	LTS	N/A	
AQ-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	LTS	N/A	
AQ-3: Expose sensitive receptors to substantial pollutant concentrations?	LTS	N/A	
AQ-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	LTS	N/A	
3.3 Cultural Resources			

CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in 14 CCR § 15064.5?	PS	**CUL-1A:** **Historic American Buildings Survey-Like Documentation**. Prior to the commencement of demolition, the Long Beach Unified School District (District) shall record Building 700/3000 (Industrial Arts building) through a documentation report based on Historic American Buildings Survey (HABS) standards. The report shall be completed by an architectural historian, historian, or historic architect who meets the applicable Secretary of the Interior's Professional Qualification Standards and shall be based on the National Park Service HABS Level III standards for format and content requirements. The HABS-like report shall include a full set of available as-builts for the contributing building, photographs of exterior and interior views, and a written history and description of the building. A hard copy and digital copy of the HABS-like report shall be filed with District, and additional copies may be deposited in the collections of the Long Beach Public Library and Long Beach Heritage Museum, if requested. A digital copy shall also be deposited in the California Historical Resources Information System South Central Coastal Information Center. **CUL-1B:** **Salvage and Use of Salvaged Materials**. Prior to the commencement of demolition, the District shall coordinate with an architectural historian, historian, or historic architect who meets the applicable Secretary of the Interior's Professional Qualification Standards, the project architect, and the demolition contractor, to develop a list of materials that would be salvaged during demolition of Building 700/3000, as well as a salvage plan which may include architectural history monitoring during demolition. Materials to be salvaged should include the original exterior building signage letters, the circular communal handwashing fixture, and any interior fixtures, cabinetry and/or fittings deemed to be of historical/salvage value. Salvaged items may be reused as a part of the aquatic center project or elsewhere within the MHS campus or other District location. Salvaged items may also be incorporated into interpretive displays within the school (if displayed in an appropriate,	SU

		archival manner) or donated to museums, historical societies, or other appropriate organizations or architectural salvage company. **CUL-1C:** **Interpretive Exhibit**. The District shall coordinate with an architectural historian or historian who meets the applicable Secretary of the Interior's Professional Qualification Standards to create an exhibit about MHS's historic significance and the Industrial Arts building (Building 700/3000). The District shall ensure fabrication of the exhibit in permanent materials and shall display it near the public entrance of the new aquatic center, or in the MHS library, administration office, or other well-visited location on the school campus. The exhibit shall consist of one permanent panel, measuring at minimum 24" by 36," or equivalent size depending on the medium. The exhibit must include a representation of Building 700/3000, ideally in context with the other historic resource contributing elements, and consist of historic photos, an architectural rendering, plans, and/or artistic representation, along with information about MHS's history and significance.	
CUL-2: Cause a substantial adverse change in the significance of an archaeological resource as defined in 14 CCR § 15064.5?	PS	**CUL-2:** **Halt Work Upon Discovery of Subsurface Archaeological Features**. If any precontact or historic-era subsurface archaeological features or deposits (e.g., ceramic, shell, stone, bone, trash scatters, foundations), including locally darkened soil ("midden"), which may conceal cultural deposits, are discovered during construction, all ground-disturbing activity within 100 feet of the resources shall halt, and a qualified professional archaeologist (one who meets the Secretary of the Interior's Professional Qualification Standards for Archeology) shall be retained to assess the significance of the find. If the qualified archaeologist determines the archaeological material to be Native American in nature, the Native American community shall be included in the consultation process between the District, construction contractor, and archaeologist to develop a plan for avoidance, further evaluation, or treatment and documentation, consistent with current standards. Construction shall not resume at the location of the find until mitigation has been completed.	LTS

CUL-3: Disturb any human remains, including those interred outside of formal cemeteries?	LTS	N/A	
3.4 Greenhouse Gas Emissions			
GHG-1: Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant effect on the environment?	LTS	N/A	
GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	LTS	N/A	
3.5 Noise			
NOI-1: Generation of a substantial temporary or periodic increase in ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	LTS	N/A	
NOI-2: Generation of excessive groundborne	LTS	N/A	

vibration or groundborne noise levels?			
3.6 Tribal Cultural Resources (TCRs)			
TCR-1: Cause a substantial adverse change in the significance of a TCR, defined in PRC § 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: 1. Listed or eligible for listing in the California Register of Historic Resources or in a local register of historical resources as defined in PRC § 5020.1(k), or 2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set	PS	**TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities**. A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs	LTS

forth in subdivision (c) of PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.		will be provided to the project applicant/lead agency upon written request to the Tribe. D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs. **TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial)**. A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes. **TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects**. A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.	

		C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.	

Notes:
District = Long Beach Unified School District
GHG = greenhouse gas
HABS = Historic American Buildings Survey
TCR = traditional cultural resource

1 Introduction

This Draft Environmental Impact Report (EIR) has been prepared in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] § 21000 et seq.[9]) and the CEQA Guidelines (California Code of Regulations [CCR] Title 14 § 15000 et seq.[10]). The purpose of this Draft EIR is to evaluate the potential environmental effects associated with the Millikan High School (MHS) Aquatic Center Project (Proposed Project), proposed by the Long Beach Unified School District (District), which serves as the lead agency under CEQA.

The Proposed Project is located on the existing MHS campus at 2800 Snowden Avenue in the City of Long Beach, Los Angeles County, California (project site). The approximately 34.4-acre campus is situated within an established residential and commercial area. The District proposes to demolish existing Building 700/3000 and adjacent portable buildings and construct a new on-campus aquatic center within the developed footprint of the school site. The new facility would support physical education instruction, competitive swim and water polo programs, inclusive and adaptive programming, and limited community use.

This Draft EIR describes the Proposed Project, identifies the environmental issue areas requiring detailed analysis, evaluates a reasonable range of alternatives that could reduce or avoid significant environmental impacts, and identifies feasible mitigation measures to minimize potential adverse effects. The Draft EIR is intended to provide decision-makers, responsible agencies, and the public with the information necessary to understand the environmental consequences of the Proposed Project prior to consideration of approval.

1.1 PURPOSE OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

The purpose of this Draft EIR is to inform decision-makers, responsible agencies, and the public of the potential environmental effects associated with implementation of the Proposed Project and to support informed decision-making by the District as the lead agency under CEQA.

CEQA requires State and local agencies to consider the environmental consequences of projects over which they exercise discretionary authority and to avoid or reduce significant environmental impacts when feasible. Where significant impacts may occur, CEQA further requires evaluation of reasonable alternatives to a proposed project that could reduce or avoid such impacts.

The Proposed Project requires discretionary approval by the District and is therefore subject to environmental review in accordance with CEQA and the CEQA Guidelines. This Draft EIR has been prepared as a focused EIR and evaluates in detail only those environmental issue areas identified

[9] PRC § 21000 et seq.
[10] CCR Title 14 § 15000 et seq

through the Initial Study (IS) and Notice of Preparation (NOP) as having the potential to result in significant environmental effects, consistent with CEQA Guidelines § 15128[11].

Consistent with CEQA requirements, this Draft EIR identifies potentially significant environmental impacts, evaluates feasible mitigation measures to reduce or avoid those impacts, and considers a reasonable range of alternatives capable of meeting most of the project objectives while lessening environmental effects.

1.2 ENVIRONMENTAL REVIEW PROCESS

Environmental review for the Proposed Project has been conducted in accordance with CEQA (PRC § 21000 et seq.[12]) and the CEQA Guidelines (CCR Title 14 § 15000 et seq.[13]). This section describes the CEQA process undertaken for the Proposed Project, including identification of the lead agency, scoping of the environmental analysis, and opportunities for public review and comment.

1.2.1 Lead Agency

The District is the lead agency for the Proposed Project pursuant to CEQA. As the lead agency, the District is responsible for preparing the environmental documentation required under CEQA, coordinating with responsible and trustee agencies, and considering the environmental effects of the Proposed Project prior to taking any discretionary action. The District has principal responsibility for approving the Proposed Project and for ensuring compliance with CEQA.

1.2.2 Initial Study

In accordance with CEQA Guidelines § 15063[14], the District prepared an IS to evaluate the potential environmental effects of the Proposed Project and to determine the appropriate level of environmental review. The IS evaluated the Proposed Project across the environmental issue areas identified in Appendix G of the CEQA Guidelines[15], taking into account the project location, proposed demolition and construction activities, and anticipated operational characteristics.

Based on the IS, the District determined that preparation of an EIR is the appropriate level of environmental documentation for the Proposed Project. The IS identified the following environmental issues requiring further analysis in the EIR:

- air quality,
- cultural resources,
- greenhouse gas (GHG) emissions,

[11] CEQA Guidelines § 15128
[12] PRC § 21000 et seq.
[13] CCR Title 14 § 15000 et seq.
[14] CEQA Guidelines § 15063
[15] Appendix G of the CEQA Guidelines

- noise, and
- tribal cultural resources (TCRs).

The IS also identified environmental topics for which the Proposed Project would not result in significant impacts. These topics include:

- aesthetics,
- agriculture and forestry resources,
- biological resources,
- energy,
- geology and soils,
- hazards and hazardous materials,
- hydrology and water quality,
- land use and planning,
- mineral resources,
- population and housing,
- public services,
- recreation,
- transportation,
- utilities and services systems, and
- wildfire.

Based on the findings in the IS, these issue areas were not carried forward for detailed analysis in this Draft EIR.

Accordingly, the IS served both to evaluate the potential environmental effects of the Proposed Project and to inform the scope of the environmental analysis. Consistent with CEQA Guidelines § 15128[16], this Draft EIR has been prepared as a focused EIR and evaluates in detail those environmental resource areas identified in the IS as requiring further assessment in an EIR. The IS is included in **Appendix A** and is incorporated herein by reference.

1.2.3 Notice of Preparation and Scoping

Following completion of the IS, the District issued an NOP in accordance with CEQA Guidelines § 15082[17] to inform responsible agencies, trustee agencies, and interested parties of its intent to prepare an EIR for the Proposed Project and to solicit input regarding the scope and content of the EIR.

[16] CEQA Guidelines § 15128
[17] CEQA Guidelines § 15082

The NOP was circulated for a 30-day public review period beginning December 5, 2025, and ending January 5, 2026. The NOP described the Proposed Project, identified the project location, and summarized the environmental resource areas identified in the IS as requiring further assessment in the EIR.

During the scoping period, written comments were received from the Native American Heritage Commission (NAHC) and the California Department of Toxic Substances Control (DTSC). These comments were reviewed and considered by the District and informed the scope and focus of the environmental analysis presented in this Draft EIR. No comments were received opposing the Proposed Project or identifying additional environmental resource areas requiring evaluation beyond those identified in the IS.

The NOP, along with written comments received during the scoping period, is included in **Appendix A** and is incorporated herein by reference.

1.2.4 Draft EIR and Public Review

This Draft EIR for the Proposed Project was circulated for public review for a 45-day review period commencing on June 26, 2026 and ending on August 10, 2026. During this period, the Draft EIR was made available for review by interested parties in accordance with CEQA Guidelines §§ 15085(a)[18] and 15087[19].

In compliance with CEQA Guidelines §§ 15085(a) and 15087, the District, serving as the lead agency: (1) prepared and transmitted a Notice of Completion to the State Clearinghouse; (2) prepared and distributed a Notice of Availability (NOA) of the Draft EIR; (3) made the NOA and Draft EIR available for public review at the District's Facilities Development and Planning offices located at 2425 Webster Avenue, Long Beach, CA 90810, and at the District Board of Education offices located at 1515 Hughes Way, Long Beach, CA 90810; (4) made the NOA and Draft EIR available for public review at MHS located at 2800 Snowden Avenue, Long Beach, CA 90815; (5) posted the NOA and Draft EIR on the District's environmental review webpage at https://www.lbschoolbonds.net/environmental-reviews; (6) made the Draft EIR available for public review at the following libraries: Long Beach Main Library (101 Pacific Avenue, Long Beach, CA 90822), Signal Hill Library (1800 E. Hill Street, Signal Hill, CA 90755), Angelo M. Iacoboni Library (4990 Clark Avenue, Lakewood, CA 90712); (7) posted the NOA in a newspaper of general circulation Signal Hill Tribune on June 26, 2026; and (8) filed the NOA with the Los Angeles County Clerk on June 26, 2026.

Any public agency or members of the public desiring to comment on the Draft EIR must submit their comments prior to the end of the public review period. Please indicate a contact person for your agency or organization and send your responses and comments to the contact below. Your comments may also be sent to the contact e-mail below (Please include "Millikan Aquatic Center EIR" in the subject heading).

[18] CEQA Guidelines § 15085(a)
[19] CEQA Guidelines § 15087

Attn: Ferdows Fazeli, Senior Program Manager
Facilities Development and Planning Branch
2425 Webster Ave.
Long Beach, CA 90810
ceqa@lbschools.net

Following the close of the public review period, the District will prepare a Final EIR that includes responses to comments received on the Draft EIR, revisions to the Draft EIR as appropriate, and any additional information required under CEQA. The Final EIR will be considered by the District's decision-making body prior to taking action on the Proposed Project.

1.3 ISSUES AND CONCERNS RAISED DURING SCOPING

This section summarizes the issues and concerns raised during the NOP scoping period for the Proposed Project. As described in **Section 1.2.3**, the District circulated the NOP for a 30-day public review period and received written comments from the NAHC and the DTSC.

The NAHC's comments focused on cultural resources and traditional cultural resources (TCRs), emphasizing the importance of compliance with CEQA's requirements related to the identification and protection of cultural resources. The NAHC highlighted the need for appropriate consultation with California Native American tribes pursuant to Assembly Bill 52, protection of confidential TCR information, and implementation of procedures to address the inadvertent discovery of archaeological resources or human remains during ground-disturbing activities. These issues are addressed in this Draft EIR through evaluation of potential impacts to cultural resources and TCRs and through mitigation measures provided by Kizh Nation as part of the AB52 Tribal consultation process.

DTSC commented on regulatory requirements for school construction projects, including Education Code requirements if California Department of Education funding is used; surveys for hazardous building materials before demolition; management and disposal of asbestos-containing materials, lead-based paint, mercury-containing materials, and PCB-containing caulk; soil sampling near existing or former buildings, as appropriate; and testing and documentation of imported fill, if needed (DTSC 2025). DTSC did not identify the project site as being on the Cortese List pursuant to Government Code § 65962.5 or as having known hazardous materials releases. DTSC also did not request expanding the EIR to include a separate hazards analysis. Consistent with the Initial Study, hazards and hazardous materials are not evaluated as a separate impact topic in this Draft EIR. Instead, the Draft EIR acknowledges DTSC's comments and the project's required compliance with applicable regulations for hazardous materials, demolition, soil management, imported fill, worker safety, and stormwater.

No comments were received during the scoping period opposing the Proposed Project or identifying additional environmental resource areas requiring analysis beyond those identified in the IS. The scope of this Draft EIR reflects consideration of the issues raised during scoping and focuses on the environmental resource areas identified as requiring further assessment.

1.4 DRAFT EIR ORGANIZATION

This Draft EIR is organized into sections that are further divided into subsections (e.g., **Section 3**, "Environmental Impacts and Mitigation Measures" and **Section 3.5**, "Noise").

Executive Summary: This section introduces the Proposed Project; provides a summary of the environmental review process, effects found not to be significant, and key environmental issues; and lists significant impacts and mitigation measures proposed to reduce significant impacts to less-than-significant levels.

1. **Introduction:** This section provides a description of the lead and responsible agencies, the legal authority and purpose for the document, and the public review process.
2. **Project Description:** This section describes the location, background, goals and objectives for the Proposed Project, and describes the project elements in detail.
3. **Environmental Impacts and Mitigation Measures:** The subsections within **Section 3** evaluate the expected environmental impacts generated by the Proposed Project, arranged by subject area (e.g., air quality, cultural resources, greenhouse gas [GHG] emissions, etcetera). Within each subsection of **Section 3**, the regulatory setting, existing conditions, analysis methodology, and thresholds of significance are described. The anticipated changes to existing environmental conditions resulting from implementation of the Proposed Project are evaluated for each environmental subject area, including analysis of project-specific impacts and cumulative impacts in accordance with CEQA. For any significant or potentially significant impact that would result from Proposed Project implementation, proposed mitigation measures are presented and the level of impact significance after mitigation is identified. Environmental impacts are numbered sequentially within each section using a three-letter identifier for the resource assessed (e.g., **Impact CUL-1**, **Impact CUL-2**, etc.). Mitigation measures are numbered to correspond to the resource being addressed, such as **Mitigation Measure CUL-1**.
4. **Other CEQA Sections:** This section addresses other considerations required by CEQA, including identification of any significant and unavoidable adverse impacts; the reasons why the Proposed Project is being planned notwithstanding such impacts; irreversible environmental changes; potential growth-inducing effects; secondary environmental effects related to project mitigation measures; and environmental effects determined to be less than significant.
5. **Alternatives:** This section evaluates alternatives to the Proposed Project, including alternatives considered but eliminated from further consideration, the No Project Alternative, two alternative development scenarios, and an alternate location option. The environmentally superior alternative is identified.
6. **Report Preparers:** This section lists the persons, public agencies, and organizations that were consulted or who contributed to the preparation of this Draft EIR.
7. **References:** This section identifies the organizations and persons consulted during preparation of this Draft EIR and the documents and individuals used as sources for the analysis.

2 Project Description

2.1 INTRODUCTON

This section describes the Proposed Project, including the project location, existing site conditions, project objectives, related projects, and detailed project characteristics. This section also identifies construction and operational components of the Proposed Project and any discretionary approvals required for implementation.

The Proposed Project would involve demolition of Building 700/3000, which has been identified as a historical resource under CEQA, and construction of a new aquatic center facility within the existing developed footprint of the MHS campus. The Project Description provides the basis for the environmental analysis contained in **Section 3**.

2.2 PROJECT LOCATION AND SETTING

2.2.1 Regional Location

MHS is located at 2800 Snowden Avenue in the City of Long Beach, Los Angeles County, California (**Figure 1**). The campus is situated within an established urbanized area of the City and is surrounded by residential neighborhoods, local commercial uses, and public facilities.

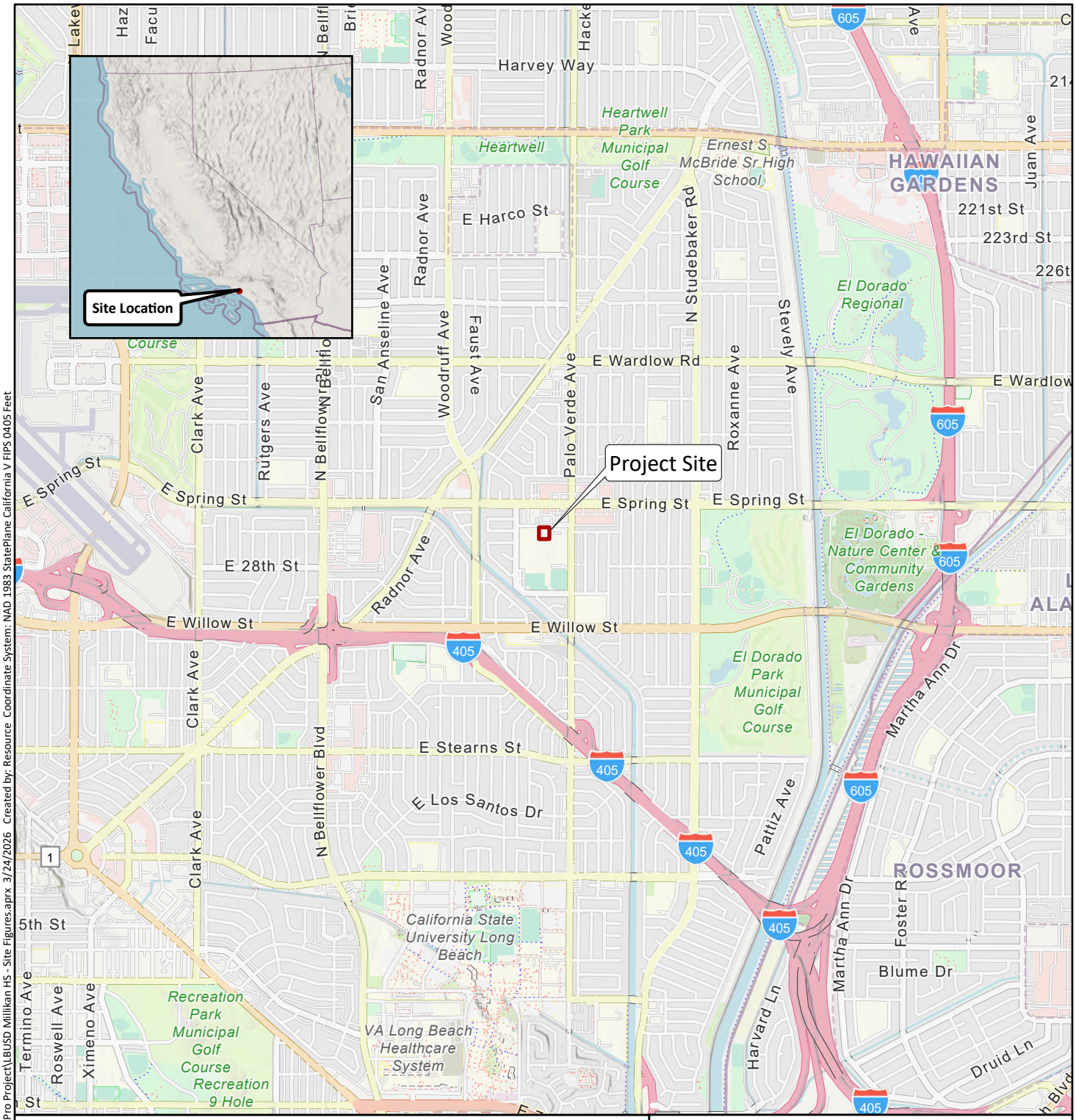
2.2.2 Campus Setting

The MHS campus encompasses approximately 34.4 acres and is developed with academic buildings, administrative facilities, athletic fields, parking areas, and support infrastructure. The campus is bordered generally by East Belen Street to the north, Palo Verde Avenue to the west, Snowden Avenue to the east, and East Barbanell Street to the south (**Figure 2)**.

For purposes of this Draft EIR, the term “project site” refers specifically to the portion of the campus where demolition and new construction associated with the Proposed Project would occur. The project site includes Building 700/3000 and adjacent portable classroom structures, along with the surrounding paved and landscaped areas necessary to accommodate construction of the proposed aquatic center and associated site improvements.

Building 700/3000, located within the project site, has been determined to be a historical resource for purposes of CEQA. The remainder of the campus would continue to operate as an active high school during construction and operation of the Proposed Project.

The campus is served by existing utilities, including water, wastewater, storm drainage, electricity, and telecommunications infrastructure, which are available to support the Proposed Project.



0 1,500 3,000 6,000 Feet

1 inch = 3,000 feet

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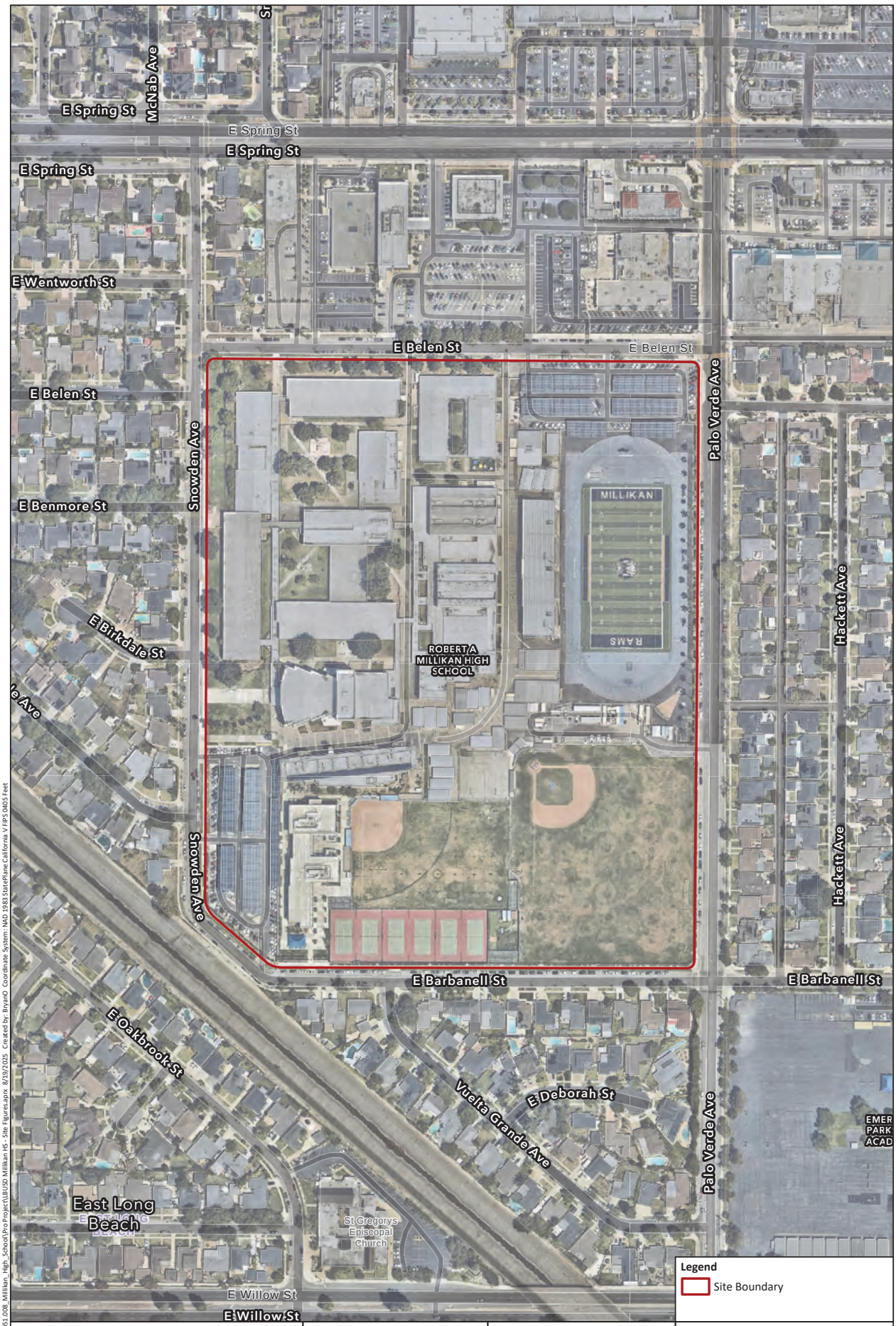
Legend

Project Boundary

Base Map: Open Street Maps

SAFETY FIRST	CLIENT: LBUSD	**Project Location**
terraphase engineering	PROJECT: Millikan High School 2800 Snowden Ave. Long Beach, CA	
	PROJECT NUMBER: S051.008.008	**FIGURE 1**

File: N:\GIS\Prj\S051 LBUSD\S051.008_Millikan_High_School\Pro Project\LBUSD Millikan HS - Site Figures.aprx 3/24/2026 Created by: Resource Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet


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MILLIKAN
RAMS
ROBERT A MILLIKAN HIGH SCHOOL
Hackett Ave
E Birkdale St
Snowden Ave
Hackett Ave
E Barbanell St
E Barbanell St
E Oakbrook St
Vuelta Grande Ave
E Deborah St
Palo Verde Ave
EMER PARK ACAD
East Long Beach
St Gregorys Episcopal Church
E Willow St
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Legend
Site Boundary
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1 inch = 200 feet
SAFETY FIRST
terraphase engineering
CLIENT: LBUSD
PROJECT: Millikan HS
2800 Snowden Ave, Long Beach, CA
PROJECT NUMBER: S051.008.C002
Existing Campus
FIGURE 2
File: N:\GIS\Proj\S051 LBUSD\S051.008_Millikan_High_School\Pro Project\LBUSD Millikan HS - Site Figures.aprx 8/19/2025 Created by: BryanO Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet

2.2.3 Land Use Designation and Zoning

MHS is located on property designated Institutional under the City of Long Beach General Plan[20] and zoned Institutional (I) under the City's Zoning Code[21].

The campus has long been developed and operated as a public high school and contains academic buildings, athletic facilities, parking areas, and associated infrastructure consistent with institutional and educational uses.

The Proposed Project would involve demolition of an existing campus building and construction of a new aquatic center within the boundaries of the established MHS campus. The Proposed Project would not expand the campus footprint or introduce a new land use.

Public school facilities are operated by the District. While school district projects are not subject to local zoning ordinances in the same manner as private development projects, the Proposed Project is consistent with the Institutional land use designation and zoning classification applicable to the project site.

The project site is not located within an Airport Influence Area as designated by the County of Los Angeles[22]. Long Beach Airport, the nearest public airport, is located approximately 2.5 miles northwest of the project site. The campus is not within an airport land use plan boundary or runway protection zone.

2.3 EXISTING CONDITIONS ON THE PROJECT SITE

The project site is located within the interior portion of the MHS campus and is currently developed with Building 700/3000 and portable classroom structures, along with associated paved walkways, landscaping, and utility infrastructure.

2.3.1 Building 700/3000

Building 700/3000 occupies the central portion of the project site. The building was constructed in 1955 and has been determined to be a historical resource for purposes of CEQA. The structure reflects architectural characteristics associated with its period of construction and retains physical features that contribute to its historic significance.

The building is a one-story structure designed in the Post-War Modern architectural style, characterized by a U-shaped plan organized around an internal courtyard and a simple rectangular massing. The building features a flat roof and a prominent rectangular, continuous cantilevered concrete overhang supported by *pilotis* (structural pillars), which provides covered circulation along the courtyard-facing walkways. Exterior surfaces consist primarily of painted concrete, consistent with the utilitarian yet modernist design aesthetic of the period. Fenestration includes aluminum-frame, single-pane fixed and

[20] City of Long Beach General Plan
[21] Long Beach, CA Municipal Code: Chapter 21.34 - Institutional District
[22] Los Angeles County Airport Land Use Plan

awning windows; however, some windows have been painted over, representing a modification from the original design. The internal courtyard is partially landscaped and includes areas of asphalt and concrete paving and walkways. Certain original features, such as benches, have been replaced over time, reflecting additional alterations to the building's historic setting and materials.

Building 200 is located to the west of the northern half of Building 700/3000. Building 500 is located to the west/southwest of Building 700/3000, and Building 400 is located directly to the south of Building 700/3000. Paved pedestrian circulation routes connect Building 700/3000 to surrounding academic and support facilities throughout the campus. Landscaped areas are located along portions of the building perimeter, including the interior space created by the "U" shape of Building 700/3000.

2.3.2 Portable Classroom Structures and Site Improvements

Portable classroom structures are located to the southeast of Building 700/3000. These structures provide temporary instructional space and are not identified as historical resources. The portable units are connected to campus utilities and are accessed via paved walkways extending from the primary circulation paths on the campus.

The project site is generally level and previously graded. Surface conditions consist primarily of landscaped strips along portions of the site perimeter and paved areas for pedestrian circulation. No undeveloped land or native vegetation is present within the project site.

2.4 PROJECT OBJECTIVES

The primary objectives of the Proposed Project are as follows.

1. **Modernize Aquatic Facilities:** Replace outdated and functionally limited facilities with a modern aquatic center designed to meet current educational, athletic, accessibility, safety, and building code standards.
2. **Support Physical Education Curriculum:** Provide on-campus aquatic facilities capable of supporting physical education instruction consistent with District curriculum requirements.
3. **Enhance Competitive Athletic Programming:** Provide a competition-quality pool and associated support facilities to accommodate interscholastic swim and water polo programs, including spectator seating and necessary event infrastructure.
4. **Improve Accessibility and Inclusivity:** Develop aquatic facilities that comply with current Americans with Disabilities Act standards and support inclusive programming, including Special Olympics and adaptive physical education (P.E.) programs.
5. **Provide Functional Support Spaces:** Include appropriate locker rooms, team rooms, offices, storage, mechanical systems, and chemical storage facilities necessary for safe and efficient aquatic operations.
6. **Enhance Campus Safety and Security:** Improve circulation, lighting, and site design within the project site to enhance campus safety and operational efficiency.

7. **Accommodate Limited Community Use:** Provide facilities capable of supporting limited community access, including learn-to-swim and water safety programs, consistent with District policies.
8. **Implement the Project Within the Existing Campus Footprint:** Develop the aquatic center within the boundaries of the existing MHS campus and utilize existing infrastructure to the extent feasible.

2.5 RELATED PROJECTS

CEQA requires that environmental documents evaluate not only the impacts of a proposed project but also the potential cumulative effects when the proposed project is considered together with other past, present, and reasonably foreseeable future projects in the surrounding area. Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts (CEQA Guidelines § 15355[23]).

For purposes of cumulative impact analysis in this EIR, the cumulative environment consists of the existing conditions within the City of Long Beach and surrounding area combined with reasonably foreseeable projects that could contribute to environmental effects similar to those associated with the Proposed Project. These projects may include approved or proposed public and private developments within the vicinity of the MHS campus, as well as planned improvements within the District that could result in overlapping construction activities, increased operational activity, or incremental changes to environmental conditions.

Cumulative conditions considered in this EIR include ongoing and reasonably foreseeable development within the City of Long Beach and the surrounding region, including public infrastructure improvements, institutional development within the District, and other nearby development projects that may occur during the construction or operational timeframe of the proposed aquatic center. The cumulative study area for each environmental resource topic is defined within the respective environmental analysis sections of this EIR, consistent with CEQA Guidelines § 15130[24].

The cumulative project list used for analysis is based on available planning information from the City of Long Beach, District capital improvement planning documents, and other publicly available planning sources. Projects included in the cumulative analysis represent those that are approved, under construction, or reasonably foreseeable within the timeframe relevant to the environmental topic being evaluated. This approach provides a reasonable basis for assessing whether the incremental contribution of the Proposed Project would be cumulatively considerable.

Related projects identified at the MHS campus include the following.

- **Campuswide Renovation Project.** This project includes installation of a new heating, ventilation, and air conditioning (HVAC) system and other priority improvements identified in the District's

[23] CEQA Guidelines § 15355
[24] CEQA Guidelines § 15130

2022 Facilities Master Plan[25]. Improvements are ongoing at the time of the development of this Draft EIR.

- **Natatorium Conversion Project.** This project would repurpose the existing pool and locker room building into a multipurpose gymnasium with associated educational spaces and installation of a high-efficiency air-conditioning system. Construction is anticipated to begin in 2028–2029 with completion projected for 2029–2030.

There is one related project approved by the City of Long Beach located within 1.0 mile of the MHS campus.

- **Sunrise of Long Beach.** This project is located 0.6 miles north of the project site at 3340 N. Los Coyotes Diagonal east of Palo Verde Avenue. This project includes the development of an 86-unit senior assisted living and memory care facility with a project footprint of approximately 78,300 square feet. The City Planning commission approved the project in May 2022. The project is currently under construction with an anticipated opening in 2027.

The second closest City of Long Beach approved project is the 5150 Pacific Coast Highway Project (adaptive reuse project) which is located 2.04 miles southwest of the MHS campus. The nearest project under construction is the 3855 Lakewood Boulevard Project (light industrial development totaling 947,084 square feet) which is located 2.71 miles northwest of the MHS campus, adjacent to the northern expanse of runway of the Long Beach Airport.

2.6 PROJECT CHARACTERISTICS

The Proposed Project consists of demolition of Building 700/3000 and portable classroom structures located along the southeastern portion of the building, and construction of a new aquatic center within the existing developed footprint of the MHS campus (**Figure 3** and **Figure 4**).

2.6.1 Pool and Pool Deck

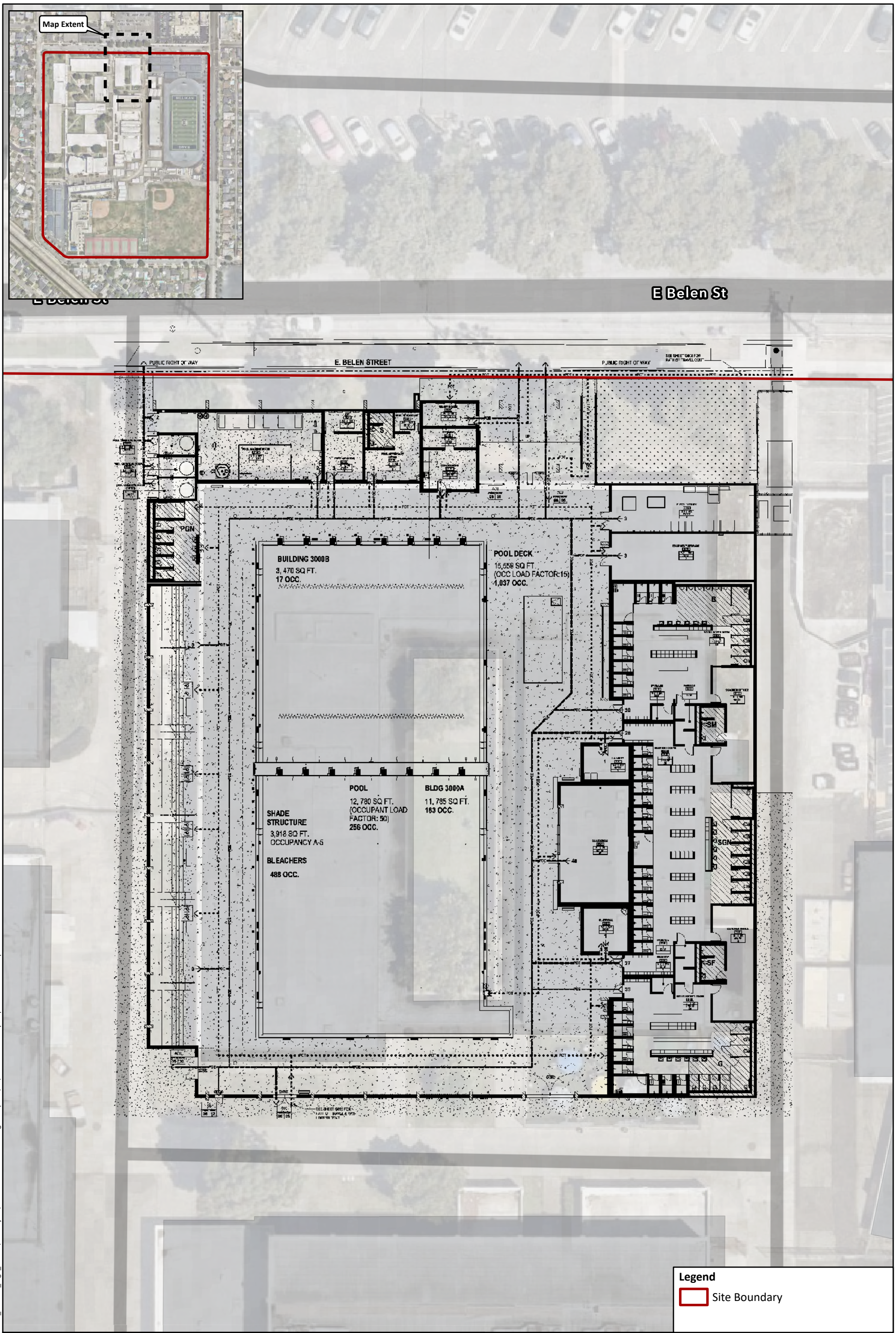
The aquatic center would include a Myrtha modular competition pool measuring approximately 169 feet in length and 75 feet in width, equipped with an approximately 5-feet-wide movable bulkhead to accommodate multiple program configurations.

The pool would be surrounded by a 30-foot-wide pool deck designed to accommodate circulation, team staging, and spectator access. The modular pool system includes integrated structural and filtration components consistent with competitive aquatic facility standards.

2.6.2 Aquatic Center Buildings

A new single-story support building would be constructed to serve the aquatic center. The building would include:

[25] Millikan High School Upcoming Projects



SAFETY FIRST

terraphase engineering

CLIENT:	LBUSD
PROJECT:	Millikan HS 2800 Snowden Ave, Long Beach, CA
PROJECT NUMBER:	S051.008.C002

Site Plan

FIGURE 3

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SAFETY FIRST	CLIENT: LBUSD	**Architectural Rendering**
terraphase engineering	PROJECT: Millikan HS 2800 Snowden Ave, Long Beach, CA	
	PROJECT NUMBER: S051.008	**FIGURE 4**

File: N:\GIS\Prj\S051 LBUSD\008_Millikan HS\Pro Project\S051.008_Millikan HS.aprx - F4_Architectural Rendering - 4/1/2026 Created by: boreilly

- an inclusive (gender-neutral) locker room facility with changing stalls, shower stalls, and lockers;
- separate boys' and girls' locker rooms;
- a coach/administrative office area with up to four workspaces;
- restrooms;
- a washer/dryer room;
- secure chemical storage rooms;
- a mechanical room sized to accommodate a regenerative media filtration system;
- electrical rooms;
- a pool attendant's office with restroom and shower;
- equipment storage enclosures/rooms; and
- a 500-square-foot snack bar/ticket booth.

Exterior materials for the support building would include CMU block construction with metal roofing.

2.6.3 Spectator Seating and Event Infrastructure

The aquatic center would include bleacher-style seating for approximately 500 spectators, with a shade structure above). The facility would include:

- Sports LED stadium lighting mounted on poles surrounding the pool deck (refer to **Section 2.6.4**);
- an electronic LED scoreboard with integrated sound system;
- perimeter security walls;
- surveillance cameras; and
- outdoor shower heads.

2.6.4 Lighting

A comprehensive exterior lighting system would be installed to support evening and early morning use of the aquatic center. The primary lighting system would consist of pole-mounted sports LED luminaires positioned around the pool deck and spectator seating areas. Based on the civil and lighting plans, the lighting system includes four poles approximately 60 feet in height each, equipped with multiple LED luminaires.

The stadium lighting system is designed to provide uniform illumination across the pool surface, pool deck, and spectator areas to accommodate competitive swim and water polo events, P.E. instruction, and community programming. The lighting design was prepared to meet applicable athletic facility illumination standards, including those established by the Illuminating Engineering Society.

In addition to the pole-mounted sports lighting, pedestrian-scale LED fixtures would be installed along circulation pathways, building entrances, locker room access points, and the snack bar/ticket booth to provide visibility during evening operations. The lighting system would include programmable controls

allowing dimming, zoning, and time-based scheduling consistent with 2025 California energy efficiency requirements (Title 24 Part 6)[26].

The facility would also include an electronic LED scoreboard with an integrated sound system positioned to serve the pool deck and spectator seating area.

2.6.5 Access, Circulation, and Parking

The Proposed Project would not introduce new vehicular access points to the MHS campus. Vehicular access would continue to be provided primarily from Snowden Avenue, with additional perimeter access from East Belen Street, Palo Verde Avenue, and East Barbanell Street.

The internal campus circulation system would remain in place. The Proposed Project would not modify existing campus drive aisles or primary pedestrian pathways. Access to the aquatic center would occur via existing internal walkways connecting the project site to surrounding academic and athletic facilities.

Existing parking lots located on the northeastern and southwestern portions of the campus would not be reconfigured as part of the Proposed Project. No new permanent parking spaces are proposed. The northwestern parking lot would serve as the primary parking area for spectators attending events at the aquatic center.

Bicycle and pedestrian access to the campus would continue to be provided via existing sidewalks and designated crosswalks along Snowden Avenue, East Belen Street, Palo Verde Avenue, and East Barbanell Street.

Emergency vehicle access to the campus and athletic facilities would be maintained through existing perimeter access points. As part of the proposed aquatic center improvements, the fire service/fireline entry would be relocated and re-established on E. Belen Street. The aquatic center and associated site improvements would be designed to maintain required fire and life safety access clearances.

2.6.6 Site Improvements and Utilities

The Proposed Project would include site improvements and utility infrastructure necessary to support operation of the aquatic center. Improvements would occur within the defined project site and would connect to existing campus utility systems.

2.6.6.1 Stormwater Management (Permanent Infrastructure)

Permanent stormwater management features would be incorporated into the aquatic center design consistent with the City of Long Beach Low Impact Development (LID) standards[27] and applicable

[26] 2025 Building Energy Efficiency Standards for Residential and Nonresidential Buildings: Title 24, Part 6, and Associated Administrative Regulations in Part 1
[27] City of Long Beach Low Impact Development Best Management Practices Design Manual

National Pollutant Discharge Elimination System (NPDES) requirements[28].

The site design includes a treatment train of Best Management Practices (BMPs) sized for the applicable water quality design storm. Runoff from the aquatic center building roof, pool deck, and surrounding hardscape areas would be directed to bioretention planters and landscaped swales designed to provide infiltration and filtration through engineered soil media and vegetation.

Pretreatment measures, including curb cuts, catch basin inserts (BMP-4), and a hydrodynamic separator, would be installed to capture trash, sediment, and gross pollutants prior to discharge into the bioretention areas.

Where site-specific infiltration capacity is limited, overflow flows would be conveyed to underground dry wells and storm drain connections designed to route excess flows to the municipal storm drain system. These systems would include inspection ports and cleanouts to facilitate long-term maintenance.

The aquatic center would also include pool water management systems designed to isolate chlorinated pool water from the stormwater drainage network. Dedicated discharge infrastructure would be provided to prevent unintended releases to the municipal storm drain system.

2.6.6.2 Site Preparation and Grading (Permanent Site Configuration)

The Proposed Project would require excavation and grading within the project site to accommodate construction of the competition pool, support buildings, underground utilities, and bioretention facilities. Excavated materials unsuitable for reuse would be exported from the site, and imported engineered fill would be compacted in accordance with project-specific geotechnical recommendations.

Upon completion of construction, finished grades would be configured to direct stormwater runoff toward on-site drainage infrastructure and landscaped treatment areas.

2.6.6.3 Utility Connections

The Proposed Project would extend and connect to existing campus utility systems. New underground utility connections would include sewer, storm drain, domestic water, fire service, natural gas, telecommunications, and electrical service.

Utility tie-ins would be coordinated with the City of Long Beach and appropriate service providers. All new utilities would be installed underground within the project site.

[28] 40 CFR Part 122 - National Pollutant Discharge Elimination System

2.6.7 Perimeter and Security

The Proposed Project would incorporate perimeter and security improvements as part of the design. A solid perimeter wall would be constructed around the aquatic center to provide privacy and restrict unauthorized access.

Security enhancements would include installation of surveillance cameras, controlled access points, and site lighting. Access to the aquatic center would be managed consistently with District safety protocols and campus security procedures.

These improvements are intended to maintain appropriate separation between the aquatic center and other campus uses and to enhance safety for students, staff, and visitors.

2.7 CONSTRUCTION

Implementation of the Proposed Project would require demolition of existing structures and construction of new aquatic facilities within the defined project site. Construction activities would occur on an active high school campus.

2.7.1 Demolition

Demolition would include removal of Building 700/3000, which has been determined to be a historical resource under CEQA, as well as removal of portable classroom structures located along the southeastern portion of the building.

Demolition activities would involve:

- removal of building contents and fixtures,
- disconnection of utilities,
- mechanical demolition using heavy equipment (e.g., excavators with hydraulic breakers or shears),
- concrete and foundation removal, and
- debris sorting and hauling.

Demolition debris would be transported offsite to appropriate recycling or disposal facilities. Materials suitable for recycling would be separated in accordance with applicable waste diversion requirements.

2.7.2 Construction Duration and Phasing

Construction of the Proposed Project is anticipated to occur over an approximately 18- to 24-month period, including demolition, grading, pool installation, building construction, utility installation, and site improvements.

Construction would occur in phases, and generally consist of:

- demolition and site clearing,

- excavation and grading,
- pool installation and structural work,
- construction of support buildings,
- installation of utilities and drainage infrastructure, and
- site improvements, lighting installation, and final finishes.

The exact sequencing may vary depending on contractor scheduling and site conditions.

2.7.3 Grading and Excavation

Construction would require excavation for the competition pool, underground utilities, foundations, and stormwater treatment facilities. Excavated materials unsuitable for reuse would be removed from the project site. Imported engineered fill would be placed and compacted in accordance with geotechnical recommendations.

Excavation depths associated with pool construction would extend below existing grade to accommodate the pool shell and associated structural components.

2.7.4 Construction Equipment and Work Hours

Construction would involve the use of typical heavy equipment, which may include but is not limited to:

- excavators,
- backhoes,
- loaders,
- concrete trucks,
- forklifts,
- haul trucks, and
- paving equipment.

Construction work hours would comply with applicable City of Long Beach and District regulations. Construction is anticipated to occur primarily during daytime hours on weekdays, with limited weekend work as necessary.

2.7.5 Construction Staging and Access

Construction staging areas would be located within the campus and confined to the defined project site to the extent feasible. Temporary fencing would be installed around active construction zones to restrict access and maintain separation between construction activities and occupied campus areas.

Construction vehicles would access the project site using existing campus access points from Snowden Avenue and other perimeter streets, as appropriate.

2.7.6 Construction-Phase Stormwater Management

Construction activities would comply with the State Construction General Permit (Order WQ 2022-0057-DWQ, NPDES No. CAS000002). Prior to the commencement of grading activities, the District or its contractor would prepare and implement a Stormwater Pollution Prevention Plan (SWPPP).

The SWPPP would include erosion and sediment control measures designed to prevent the discharge of sediment and pollutants from the construction site. Construction-phase BMPs would include, at a minimum:

- perimeter silt fencing and fiber rolls to control sediment transport;
- stabilized construction entrances to reduce track-out onto public streets;
- temporary inlet protection for storm drain inlets located within or immediately adjacent to the project site;
- stockpile management and covering of exposed soils;
- dust control measures, including application of water or soil stabilizers; and
- good housekeeping practices for material storage, fueling, and equipment maintenance.

These measures would be installed prior to ground disturbance and maintained throughout the construction period.

2.7.7 Construction Management Measures

Construction activities would comply with applicable City of Long Beach and regional regulatory requirements, including local construction noise restrictions and South Coast Air Quality Management District (SCAQMD) rules.

Construction work would occur primarily during permitted daytime hours consistent with the City's municipal code. Temporary fencing would be installed around active construction zones to separate construction activities from occupied campus areas and to maintain student and staff safety. Emergency vehicle access through campus perimeter gates would be maintained throughout construction.

Construction staging and contractor parking would be confined to designated areas within the campus. Construction vehicles would access the project site using existing campus access points.

To control fugitive dust during demolition and grading activities, contractors would implement dust suppression measures in accordance with SCAQMD Rule 403[29]. These measures would include regular watering of exposed surfaces, covering or maintaining freeboard on haul trucks transporting loose materials, limiting vehicle speeds on unpaved surfaces, and stabilizing disturbed areas as soon as practicable.

[29] SCAQMD Rule 403

Visible track-out onto adjacent public roadways would be removed using wet sweeping methods.

2.8 OPERATIONAL CHARACTERISTICS

The aquatic center would operate year-round in support of MHS athletic programs, P.E. curriculum, and limited community use consistent with District policies.

2.8.1 Primary Users

The aquatic center is anticipated to serve the following user groups:

- MHS boys and girls swim teams,
- MHS boys and girls water polo teams,
- P.E. classes,
- Students with special needs,
- Special Olympics programming, and
- District-approved community learn-to-swim programs and related activities.

2.8.2 Typical School-Year Operations

2.8.2.1 Physical Education (September–June)

During the academic year, P.E. classes would use the pool during school hours, generally between approximately 8:00 a.m. and 1:00 p.m., Monday through Friday. Class sizes may range from approximately 54 to 100 students, depending on scheduling.

2.8.2.2 Fall (August–November) – Boys Water Polo Season

Practices and games would generally occur between approximately 1:00 p.m. and 8:00 p.m., Monday through Friday. Occasional Saturday practices or games may occur. The team may host approximately two to three games per week during the season.

2.8.2.3 Winter (November–February) – Girls Water Polo Season

Practices and games would generally occur between approximately 1:00 p.m. and 8:00 p.m., Monday through Friday, with occasional Saturday activities. Approximately two to three games per week may occur during the season.

2.8.2.4 Spring (February–May) – Boys and Girls Swim Season

Practices and swim meets would generally occur between approximately 1:00 p.m. and 8:00 p.m., Monday through Friday, with occasional Saturday meets. Approximately one to two meets per week may occur during the season.

2.8.3 Summer Operations

During summer months (June–August), the aquatic center may host swim and water polo conditioning programs, summer camps, community learn-to-swim programs, and special needs programming. Summer programming may occur during daytime and early evening hours.

2.8.4 Event Characteristics

Interscholastic competitions may include use of stadium lighting, the public address/sound system integrated with the LED scoreboard, and spectator seating for up to 500 people. Evening events may occur on weekdays and occasionally on Saturdays during athletic seasons. The facility would not operate overnight.

2.8.5 Maintenance and Support Activities

Routine operations would include pool filtration and chemical treatment, locker room cleaning and maintenance, mechanical system operation, and landscape maintenance. Pool water management systems would operate in accordance with applicable public health requirements.

2.9 POTENTIAL PERMITS AND APPROVALS REQUIRED

Implementation of the Proposed Project would require the following approvals and regulatory authorizations.

- District
    - Certification of the Final EIR in accordance with CEQA
    - Approval of the Proposed Project
- DSA
    - Review and approval of project plans and specifications for compliance with applicable building, accessibility, fire, and structural safety standards governing public school facilities
- State Water Resources Control Board
    - Coverage under the State Construction General Permit (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) for construction activities involving 1 acre or more of soil disturbance
- City of Long Beach (if applicable)
    - Encroachment permits for utility connections or other improvements within the public right-of-way, if required
- Utility Providers
    - Service connection approvals for water, sewer, electrical, natural gas, and telecommunications systems, as applicable.

3 Environmental Impacts and Mitigation Measures

Section 3 evaluates the potential environmental impacts associated with implementation of the Proposed Project. The analysis assesses whether the Proposed Project would result in significant environmental effects and identifies feasible mitigation measures to avoid or reduce significant impacts where applicable.

An IS was prepared to evaluate the potential environmental effects of the Proposed Project. Based on the IS, the District determined that further evaluation in this EIR is required for the following resource areas: air quality, cultural resources, GHG emissions, noise, and TCRs.

For other environmental issue areas evaluated in the IS, it was determined that implementation of the Proposed Project would not result in significant impacts or that potential impacts would be less than significant. These topics include, but are not limited to, aesthetics (excluding lighting), agricultural and forestry resources, biological resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, transportation and circulation, utilities and service systems, and wildfire. Consistent with CEQA Guidelines § 15128[30], environmental topics discussed in the IS that were determined would not result in significant impacts are not addressed in detail in this section. A summary of the basis for these determinations is provided in **Section 4.6**.

Baseline environmental conditions are generally defined as the physical environmental conditions existing at the time the NOP was circulated. The impact analysis compares anticipated changes resulting from implementation of the Proposed Project against these baseline conditions.

Environmental topics evaluated in the IS and determined not to result in significant impacts are not addressed further in this section.

[30] CEQA Guidelines § 15128

3.1 ENVIRONMENTAL ANALYSIS FRAMEWORK

Each environmental resource section in this subsection evaluates the potential impacts of the Proposed Project using a consistent analytical framework. For each issue area identified for further assessment in the IS, the analysis includes the following components:

Regulatory Setting. This subsection summarizes applicable federal, State, regional, and local laws, regulations, plans, and policies relevant to the environmental resource topic.

Environmental Setting. This subsection describes the relevant physical environmental conditions within and in the vicinity of the project site that serve as the baseline for impact analysis.

Thresholds of Significance. This subsection identifies the criteria used to determine whether an impact would be considered significant. Thresholds are based on CEQA Guidelines Appendix G[31], applicable regulatory standards, and professional judgment, as appropriate.

Methodology. This subsection describes the analytical approach and technical methods used to evaluate potential impacts.

Project Impacts. This subsection evaluates the direct and indirect effects of the Proposed Project on the environmental resource.

Cumulative Impacts. This subsection evaluates the incremental effects of the Proposed Project when considered together with other past, present, and reasonably foreseeable probable future projects, consistent with CEQA Guidelines § 15130[32].

Mitigation Measures. Where potentially significant impacts are identified, this subsection describes feasible mitigation measures to avoid or reduce potentially significant impacts.

Level of Significance After Mitigation. This subsection identifies the significance of each impact following implementation of feasible mitigation measures.

3.1.1 Impact Terminology and Mitigation

In evaluating the environmental effects of the Proposed Project, impacts are assessed against established thresholds of significance identified for each resource area. A threshold of significance is a criterion used by the lead agency to determine whether a project impact would result in a substantial adverse change in the physical environment. Thresholds are based on Appendix G of the CEQA Guidelines, applicable regulatory standards, and professional judgment.

[31] Appendix G of the CEQA Guidelines

[32] CEQA Guidelines § 15130

The following terms are used in this Draft EIR:

Less-Than-Significant Impact. An impact that would not result in a substantial adverse change in the physical environment. No mitigation measures would be required.

Potentially Significant Impact. A substantial, or potentially substantial, adverse change in the physical environment. Feasible mitigation measures are identified to avoid or reduce the impact where possible.

Significant and Unavoidable Impact. A substantial adverse effect that cannot be reduced to a less-than-significant level through implementation of all feasible mitigation measures. In such cases, the District may approve the Proposed Project only upon adoption of a Statement of Overriding Considerations in accordance with CEQA Guidelines § 15093[33].

Mitigation Measures. Measures that are identified to avoid, minimize, rectify, reduce, or compensate for significant environmental impacts. Mitigation measures would be adopted into a Mitigation Monitoring and Reporting Program to ensure implementation.

[33] CEQA Guidelines § 15093

3.2 AIR QUALITY

This section evaluates the potential impacts of the Proposed Project on air quality. The analysis addresses short-term construction emissions and long-term operational emissions associated with implementation of the aquatic center. The section includes a discussion of the applicable regulatory framework governing air quality in the South Coast Air Basin (SCAB), a description of existing air quality conditions in the vicinity of the project site, the methodology used to evaluate emissions and potential health effects, applicable thresholds of significance, an evaluation of project-related and cumulative impacts, and identification of feasible mitigation measures where necessary.

3.2.1 Regulatory Setting

Air quality in the Proposed Project area is regulated at the federal, State, and regional levels through a coordinated framework of laws, regulations, and air quality management programs. The U.S. Environmental Protection Agency (USEPA) establishes national ambient air quality standards pursuant to the federal Clean Air Act (CAA) and oversees implementation of federal air quality requirements. At the State level, the California Air Resources Board (CARB) establishes Statewide ambient air quality standards and implements air pollution control programs under the California Clean Air Act (CCAA).

Regionally, the project site is located within the SCAB, where air quality is regulated by the SCAQMD. SCAQMD is responsible for adopting and enforcing rules governing stationary and area sources of air emissions and for implementing regional air quality management plans applicable to the basin.

3.2.1.1 Federal

Clean Air Act and National Ambient Air Quality Standards

The federal CAA (42 U.S.C. § 7401 et seq.[34]) establishes the primary regulatory framework for the protection and improvement of air quality in the United States. Under the CAA, the USEPA is responsible for establishing National Ambient Air Quality Standards (NAAQS) for pollutants that endanger public health and welfare. These pollutants, known as "criteria pollutants," include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (less than 10 microns in size [PM_{10}] and less than 2.5 microns in size [$PM_{2.5}$]), and lead (Pb).

The NAAQS consist of primary standards, which protect public health including sensitive populations such as children and the elderly, and secondary standards, which protect public welfare, including visibility, vegetation, and property. Areas that meet the NAAQS are classified as "attainment," while areas that do not meet the standards are classified as "nonattainment." Nonattainment areas are further categorized based on the severity of the air quality problem.

The CAA requires each state to prepare and implement a State Implementation Plan (SIP) that describes how the state will attain and maintain compliance with the NAAQS. The USEPA reviews and approves SIPs and may require additional control measures if a SIP is found to be inadequate. If a state fails to

[34] 42 U.S. Code § 7401 et seq.

submit or implement an approvable SIP, federal sanctions or a federal implementation plan may be imposed.

Federal Permitting and Emission Standards

The CAA also establishes permitting programs for major stationary sources of air pollution, including the New Source Review (NSR) program and the Title V operating permit program. These programs regulate large industrial sources of emissions. The Proposed Project would not constitute a major stationary source subject to federal NSR or Title V permitting; however, these programs form part of the broader federal regulatory structure governing air emissions.

In addition, the CAA authorizes the USEPA to establish emission standards for mobile and nonroad sources, including on-road vehicles and construction equipment. Federal standards for engines and fuels have progressively reduced emissions of criteria pollutants and toxic air contaminants (TACs) from these sources. These federal requirements apply nationwide and complement state and regional air quality programs.

Hazardous Air Pollutants

In addition to criteria pollutants, the CAA regulates hazardous air pollutants (HAPs), which are pollutants known or suspected to cause cancer or other serious health effects. Section 112 of the CAA identifies specific HAPs and requires the USEPA to establish emission standards for major sources of these pollutants based on Maximum Achievable Control Technology.

Hazardous air pollutants are typically evaluated in terms of potential health risk rather than ambient concentration standards. Many HAPs are also regulated in California as TACs. The federal framework for HAP regulation provides the foundation for state and regional programs that address toxic air emissions and associated health risks.

3.2.1.2 State

California Clean Air Act and State Ambient Air Quality Standards

The CCAA, adopted in 1988, establishes a comprehensive air quality management program for the State. The CCAA requires air districts to achieve and maintain the California Ambient Air Quality Standards (CAAQS), which are established by CARB. In several cases, the CAAQS are more stringent than the NAAQS.

Similar to the federal framework, areas within California are designated as attainment or nonattainment for each pollutant based on monitored air quality data. Local air districts are responsible for preparing and implementing air quality management plans to achieve compliance with both state and federal standards.

California Air Resources Board

CARB is the State agency responsible for coordinating air pollution control efforts in California. CARB establishes Statewide ambient air quality standards, regulates mobile sources of air pollution (including

on-road vehicles and many off-road engines), sets fuel specifications, and oversees local air district programs.

CARB also prepares statewide emissions inventories and develops revisions to the SIP required under the federal CAA. CARB works in coordination with local air districts to implement emission control measures and achieve air quality standards.

Toxic Air Contaminants

California has established a regulatory program for TACs. Under California law, a TAC is an air pollutant that may cause or contribute to increased mortality or serious illness, or that may pose a hazard to human health. The identification and control of TACs are addressed through State law and implemented in coordination with local air districts.

CARB has identified numerous substances as toxic air contaminants, including diesel particulate matter (DPM). DPM is commonly evaluated in CEQA analyses of construction-related emissions due to its potential health effects. Health risk from TAC exposure is typically assessed based on incremental cancer risk and non-cancer hazard indices.

Ambient Air Quality Standards

Ambient air quality standards establish maximum allowable concentrations of criteria pollutants in outdoor air. Federal standards (NAAQS) form the basis for determining attainment or nonattainment status under the CAA, while California standards (CAAQS) establish additional State-level concentration limits that are, in several cases, more stringent than the corresponding federal standards. These standards are expressed in terms of concentration limits over specified averaging periods (e.g., 1-hour, 8-hour, 24-hour, or annual averages).

The applicable federal and California ambient air quality standards for criteria pollutants are summarized in **Table 2**.

Table 2. Ambient Air Quality Standards

Pollutant	Averaging Period	Federal Standard	California Standard
Ozone (O_3)	1-hour		0.09 ppm
	8-hour	0.070 ppm	0.070 ppm
Respirable Particulate Matter (PM_{10})	24-hour	150 µg/m^3	50 µg/m^3
	Annual		20 µg/m^3
Fine Particulate Matter ($PM_{2.5}$)	24-hour	35 µg/m^3	
	Annual	9.0 µg/m^3	12 µg/m^3
Carbon Monoxide (CO)	1-hour	35 ppm	20 ppm
	8-hour	9 ppm	9.0 ppm
Nitrogen Dioxide (NO_2)	1-hour	100 ppb	0.18 ppb

Pollutant	Averaging Period	Federal Standard	California Standard
	Annual	[1]53 ppb	0.030 ppb
Sulfur Dioxide (SO_2)	1-hour	75 ppb	
	3-hour	0.5 ppm	
	24-hour	0.14 ppm	0.04 ppm
	Annual	0.03 ppm	
Lead (Pb)	30-day average		
	Rolling 3-month Average	0.15 µg/m^3	0.15 µg/m^3
Sulfates	24-hour		25 µg/m^3
Hydrogen Sulfide	1-hour		0.03 ppm
Vinyl Chloride	24-hour		0.01 ppm

Notes: µg/m3 = microgram per cubic meter; ppb = parts per billion; ppm= parts per million
[1] The level of the annual nitrogen dioxide standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.
Sources: https://www.epa.gov/criteria-air-pollutants/naaqs-table; https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards

Hazardous Air Pollutants and Toxic Air Contaminants

TACs, referred to at the federal level as HAPs, are air pollutants that may cause cancer or other serious health effects. Unlike criteria pollutants, TACs are not regulated through ambient concentration standards. Instead, potential impacts are evaluated using risk-based metrics, including incremental cancer risk and non-cancer hazard indices.

In California, diesel particulate matter (DPM) has been identified as a TAC and is commonly evaluated in CEQA analyses of construction activities due to emissions from diesel-powered equipment.

Within the SCAB, SCAQMD provides guidance for evaluating health risk associated with TAC emissions, including construction-related diesel exhaust. Health risk is typically expressed as the probability of excess cancer cases per one million exposed individuals over a lifetime.

This regulatory framework informs the evaluation of construction-related health risk in this EIR.

3.2.1.3 Local

The project site is located within the SCAB, which is under the jurisdiction of SCAQMD. SCAQMD is responsible for regulating stationary and area sources of air pollution and for implementing regional air quality programs pursuant to both the CAA and CCAA.

SCAQMD adopts and enforces rules that limit emissions from construction activities, stationary equipment, architectural coatings, fuel combustion sources, and other emission-generating activities. Applicable rules relevant to the Proposed Project include, but are not limited to, the following.

- **Rule 403[35] (Fugitive Dust):** Requires implementation of best available control measures to minimize dust emissions from earth-moving and construction activities.
- **Rule 402[36] (Nuisance):** Prohibits the discharge of air contaminants that cause injury, detriment, nuisance, or annoyance to the public.
- **Rule 1113[37] (Architectural Coatings):** Limits volatile organic compound content in paints and coatings.
- **Rule 1403[38] (Asbestos Emissions from Demolition/Renovation Activities):** Establishes requirements for asbestos survey, notification, and removal procedures during demolition.

SCAQMD also establishes CEQA significance thresholds for evaluating construction and operational emissions of criteria pollutants and provides guidance for assessing localized air quality impacts and health risk from TACs. These thresholds and guidance documents are used in CEQA analyses conducted within the SCAB.

In addition, SCAQMD prepares and periodically updates the Air Quality Management Plan (AQMP), which outlines strategies for attaining and maintaining compliance with State and federal ambient air quality standards within the basin.

3.2.2 Environmental Setting

3.2.2.1 Regional Climate and Meteorology

Regional meteorological conditions play an important role in the formation, transport, dispersion, and accumulation of air pollutants in coastal southern California. The region's air quality is influenced by a combination of coastal influences, prevailing wind patterns, topographic constraints, and atmospheric stability conditions that can promote pollutant buildup and the formation of secondary pollutants such as ozone and fine particulate matter (SCAQMD 2022).

Weather patterns in the region are influenced by the Pacific Ocean and adjacent mountain ranges. Daytime onshore flow commonly develops as part of a sea-breeze circulation pattern, transporting marine air inland. This circulation pattern can also contribute to the inland transport of air pollutants emitted from coastal urban areas. Surrounding terrain can restrict regional airflow and, during certain conditions, contribute to limited dispersion and the accumulation of pollutants (SCAQMD 2022).

[35] SCAQMD Rule 403
[36] SCAQMD Rule 402
[37] SCAQMD Rule 1113
[38] SCAQMD Rule 1403

Atmospheric stability also affects dispersion. Temperature inversions occur when warmer air overlies cooler air near the ground surface, reducing vertical mixing and trapping pollutants closer to the surface. Inversions and periods of limited atmospheric mixing can contribute to higher pollutant concentrations, particularly during warmer months when solar radiation promotes photochemical reactions that form ozone (SCAQMD 2022).

Seasonal precipitation patterns can temporarily influence air quality. Storm events can enhance atmospheric mixing and reduce pollutant concentrations through wet deposition, while extended dry periods can contribute to conditions favorable for pollutant accumulation (SCAQMD 2022).

3.2.2.2 Project Area Climate and Meteorology

The project site is located within the City of Long Beach in coastal Los Angeles County. The campus is situated approximately 3.7 miles inland from the Pacific Ocean, and therefore experiences climatic conditions influenced by both coastal marine air and urban development within the Los Angeles metropolitan area.

Climate conditions in the vicinity of the project site are characterized as Mediterranean, with warm, dry summers and mild winters with moderate precipitation. Climate data recorded at the Long Beach weather monitoring station (Station No. 045082) indicate that temperatures in the area remain relatively mild throughout the year. Average maximum temperatures range from approximately 67 degrees Fahrenheit (°F) during winter months to approximately 84°F during summer months, while average minimum temperatures range from approximately 45°F to 65°F. Average annual precipitation is approximately 12 inches, with most rainfall occurring between November and April, and minimal precipitation occurring during the summer months (Western Regional Climate Center [WRCC] 2026a).

Wind conditions in the vicinity of the project site are influenced by coastal sea-breeze circulation patterns associated with the nearby Pacific Ocean. Wind monitoring data collected at the Long Beach Airport meteorological station indicate that winds occur most frequently from west and west-northwest directions, with these directions accounting for a substantial portion of observed wind frequencies. Average wind speeds are generally moderate, with an overall mean wind speed of approximately 4.8 miles per hour recorded at the station. These wind patterns are typical of coastal southern California locations, where afternoon sea breezes transport marine air inland (WRCC 2026b).

The presence of these onshore wind patterns can promote dispersion of locally generated air pollutants but may also transport pollutants generated in coastal urban areas toward inland portions of the SCAB. Conversely, periods of atmospheric stability or temperature inversions may limit vertical mixing and allow pollutants to accumulate near the ground surface.

The project site is located within a highly urbanized portion of Long Beach developed primarily with institutional, residential, and commercial land uses. According to the City of Long Beach General Plan Land Use Element[39], the surrounding area is characterized by established urban development patterns including residential neighborhoods, educational facilities, and supporting commercial uses. These

[39] City of Long Beach General Plan Land Use Element

urban land uses contribute to localized emissions sources such as vehicle traffic, commercial activity, and institutional operations that influence ambient air quality conditions in the project vicinity.

3.2.2.3 Regional Emission Sources

The project site is located within the SCAB, an urbanized region characterized by a combination of mobile, stationary, and area emission sources. Regional air pollutant emissions are primarily generated by mobile sources, including passenger vehicles, trucks, buses, and other on-road transportation operating on local streets and regional highways such as Interstate 405 and other major transportation corridors in the Long Beach area. Additional regional emissions originate from stationary sources, including industrial and commercial facilities, petroleum refining operations, manufacturing activities, and energy production facilities located throughout Los Angeles County. Area sources, such as residential fuel combustion, landscaping equipment, consumer products, and construction activities, also contribute to the overall emissions inventory within the SCAB. The combined effect of these emission sources contributes to the region's air quality conditions and the SCAB's ongoing challenges in attaining certain ambient air quality standards, particularly for O_3, PM_{10}, and $PM_{2.5}$.

3.2.2.4 Project Area Emission Sources

Emission sources in the immediate vicinity of the MHS campus primarily consist of vehicular traffic and typical urban land uses associated with residential neighborhoods, commercial services, and institutional facilities. Localized emissions are generated by passenger vehicles traveling along nearby roadways such as Snowden Avenue, Spring Street, and Palo Verde Avenue, as well as by school-related traffic associated with student drop-off, pick-up, and staff commuting. Additional minor emission sources include landscaping equipment, residential fuel combustion, and routine maintenance activities occurring within surrounding residential and commercial properties. Existing activities at MHS, including campus operations and athletic programs, also generate limited emissions from vehicle trips and maintenance equipment. These sources are typical of a developed urban school environment and represent the primary contributors to localized air pollutant emissions in the project area.

Air Monitoring

Ambient air quality conditions in the project vicinity are characterized using data from the Long Beach–Signal Hill Air Monitoring Station, located at 1710 East 20th Street in Signal Hill, CA (AQS No. 060374009; CARB Station No. 70033). This station is the closest active monitoring station to the project site and is operated by the SCAQMD as part of the Statewide ambient air monitoring network. Data from this station are considered representative of regional air quality conditions affecting the project area within the SCAB. **Table 3** presents ambient monitoring data collected at this station for the 2022 through 2024 period for criteria pollutants including O_3, NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and Pb. The table summarizes maximum recorded concentrations and identifies the number of exceedances of applicable CAAQS and NAAQS during the monitoring period. These data provide a representative baseline of existing regional air quality conditions in the project area and are used to contextualize potential project-related air quality impacts.

Table 3. Ambient Air Quality Monitoring Data

Pollutant/Standard	2022	2023	2024
O_3 (1-hour) Maximum Concentration (ppm)	0.108	0.089	0.103
Days > CAAQS (0.09 ppm)	1	0	1
O_3 (8-hour) Maximum Concentration (ppm)	0.077	0.065	0.071
4th High 8-hour Concentration (ppm)	0.058	0.063	0.06
Days > CAAQS (0.070 ppm)	1	0	1
Days > NAAQS (0.075 ppm)	1	0	0
NO_2 (1-hour) Maximum Concentration (ppm)	0.058	0.056	0.055
98th Percentile Concentration (ppm)	0.048	0.047	0.047
NO_2 (Annual) Annual Arithmetic Mean (ppm)	0.013	0.011	0.001
CO (1-hour) Maximum Concentration (ppm)	1.7	1.4	1.8
CO (8-hour) Maximum Concentration (ppm)	1.5	1.2	1.6
SO_2 (1-hour) Maximum Concentration (ppm)	0.006	0.023	0.008
99th Percentile Concentration (ppm)	0.004	0.008	0.008
SO_2 (24-hour) Maximum Concentration (ppm)	-	-	-
PM_{10} (24-hour) Maximum Concentration (µg/m³)	57	80	82
Samples > CAAQS (50 µg/m³)	2	3	9
Samples > NAAQS (150 µg/m³)	0	0	0
PM_{10} (Annual Average) Annual Arithmetic Mean (µg/m³)	24.7	21.2	23.1
$PM_{2.5}$ (24-hour) Maximum Concentration (µg/m³)	28.8	30	35
98th Percentile Concentration (µg/m³)	25.8	26.5	43.8
Samples > NAAQS (35 µg/m³)	0	0	1
$PM_{2.5}$ (Annual) Annual Arithmetic Mean (µg/m³)	10.8	10.12	9.13
Lead Maximum 30-Day Average (µg/m³)	0.008	0.007	0.008

Notes:
µg/m3 = microgram per cubic meter; CAAQS = California Ambient Air Quality Standards; CO = carbon monoxide; NAAQS = National Ambient Air Quality Standards; NO_2 = nitrogen dioxide; O_3 = ozone; $PM_{2.5}$ = particulate matter 2.5 microns in size or smaller; PM_{10} = particulate matter 10 microns in size or smaller; ppm= parts per million; SO_2 = sulfur dioxide

The monitoring station most representative of the project site is the South Coastal LA County Monitoring Station (AQS ID# 060374009) and criteria pollutants monitored at this station include ozone, NO_2, SO_2, and PM_{10}. However, this station does not have complete data for all years. Data from the Central Los Angeles monitoring station (AQS No. 060371103) were used when necessary. The most recent data available from SCAQMD for this monitoring station are from years 2022 to 2024.

CAAQS are based on a not-to-exceed standard. NAAQS are based on a 3-year average of the annual 4th highest daily maximum 8-hour concentration for ozone; the 98th percentile of 1-hour daily maximum concentrations averaged over 3 years for NO_2; and not to be exceeded more than once per year on average over 3 years for 24-hour PM.

Source: SCAQMD, Historical Data by Year, https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year. Accessed March 2026.

As shown in **Table 3**, ambient monitoring data from the Long Beach – Signal Hill station indicates that regional air quality reflects conditions typical of the SCAB, where O_3 and particulate matter remain the pollutants of greatest concern. Maximum O_3 concentrations between 2022 and 2024 ranged from approximately 0.089 to 0.108 parts per million (ppm) for the 1-hour standard and 0.065 to 0.077 ppm for the 8-hour standard, with limited exceedances of the CAAQS and one exceedance of the NAAQS during the period. Measured NO_2 concentrations were substantially below applicable State and federal standards, with 1-hour maximum concentrations ranging from approximately 0.055 to 0.058 ppm and low annual mean values. CO concentrations were also well below applicable standards, with maximum 1-hour concentrations between 1.4 and 1.8 ppm and 8-hour concentrations between 1.2 and 1.6 ppm. Recorded SO_2 concentrations were minimal and did not approach applicable ambient air quality standards. With respect to particulate matter, PM_{10} monitoring recorded several exceedances of the CAAQS 24-hour standard, although no exceedances of the federal NAAQS occurred during the reporting period. $PM_{2.5}$ concentrations generally remained below applicable standards, although the monitoring record indicates a single exceedance of the federal 24-hour standard in 2024. Measured Pb concentrations remained extremely low and well below applicable State and federal standards. Overall, the monitoring data indicate that while most criteria pollutants remain within applicable ambient air quality standards, O_3 and particulate matter continue to represent the primary regional air quality challenges within the SCAB.

3.2.2.5 Sensitive Receptors

Sensitive receptors are populations that may experience greater health effects from exposure to air pollutants, including children, the elderly, and individuals with pre-existing respiratory or cardiovascular conditions. Locations where these populations are present for extended periods include residences, schools, daycare centers, hospitals, and parks. The Proposed Project would occur on the existing MHS campus in a developed area of Long Beach. Sensitive receptors in the project vicinity include students, faculty, and staff on the MHS campus and residents in surrounding neighborhoods adjacent to the campus. Because these receptors are located in proximity to the project site, construction and operational emissions associated with the Proposed Project are evaluated to determine whether pollutant concentrations could expose nearby populations to substantial pollutant levels.

3.2.3 Environmental Impacts and Mitigation Measures

The following impact analysis evaluates the Proposed Project's impacts compared to the thresholds of significance for which the IS disclosed as potentially significant.

3.2.3.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines[40], a project would normally result in a significant impact on the environment if the project would:

- **AQ-1:** Conflict with or obstruct implementation of the applicable air quality plan;

[40] Appendix G of the CEQA Guidelines

- **AQ-2:** Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard;
- **AQ-3:** Expose sensitive receptors to substantial pollutant concentrations; or
- **AQ-4:** Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

In accordance with CEQA Guidelines § 15064.7[41], a lead agency may rely on significance thresholds developed by the applicable air quality management or air pollution control district when evaluating environmental impacts. For this analysis, the District has elected to use the most current thresholds established by the SCAQMD, as presented in its CEQA Air Quality Handbook, Air Quality Analysis Guidance Handbook[42], and subsequent guidance documents. Although the SCAQMD handbook includes thresholds for Pb emissions, the Proposed Project would not generate Pb emissions during construction or operation. The widespread use of unleaded fuels and paints has effectively eliminated Pb emissions from projects of this type. Therefore, impacts related to Pb are not evaluated further in this Draft EIR.

3.2.3.2 Methodology

Emissions Modeling Methodology

Construction and operational emissions associated with the Proposed Project were estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1, a Statewide land use emissions model developed by the California Air Pollution Control Officers Association (CAPCOA) in collaboration with CARB and regional air districts. CalEEMod quantifies emissions from construction activities and operational sources based on project-specific inputs, including land use characteristics, construction schedule, equipment usage, and regulatory emission factors. The model incorporates emission factors from the CARB OFFROAD and EMFAC models, along with default assumptions regarding construction equipment, vehicle trips, and area sources that are representative of projects in Los Angeles County.

For the Proposed Project, CalEEMod inputs were developed based on the construction schedule, building characteristics, and equipment assumptions provided by the design team. For the purposes of modeling emissions, construction of the aquatic center was anticipated to begin in June 2026, with phased construction activities occurring through 2028, including demolition, site preparation, grading, foundation and pool construction, vertical construction, interior buildout, architectural coatings, and site improvements. The model assumes a 6.28-acre project site with approximately 28,035 square feet of building area and associated pool deck and landscape areas. Construction emissions were estimated for each phase using default equipment types and activity durations adjusted to reflect project-specific assumptions, and emissions were calculated for criteria pollutants including reactive organic gases (ROG), NOx, CO, PM_{10}, and $PM_{2.5}$. The CalEEMod output tables are included as **Appendix B**.

[41] CEQA Guidelines § 15064.7

[42] SCAQMD Air Quality Analysis Handbook

Construction Emissions and Comparison to Thresholds

Construction activities associated with the Proposed Project would generate emissions from heavy-duty construction equipment, worker and vendor vehicle trips, material hauling, and fugitive dust from earthmoving activities. The CalEEMod analysis estimated maximum daily emissions for each pollutant during the construction period. The highest construction emissions are anticipated during early site preparation and grading activities occurring in 2026, when the greatest amount of earthmoving equipment would be operating onsite.

As shown in **Table 4** (Construction Emissions Compared to SCAQMD Thresholds), the maximum estimated daily emissions during the peak construction period would be approximately 8.79 pounds per day of ROG, 4.23 pounds per day of NOx, 1.82 pounds per day of PM_{10}, and 0.84 pounds per day of $PM_{2.5}$. These emissions are substantially below the SCAQMD regional significance thresholds of 75 pounds per day for ROG, 100 pounds per day for NOx, 150 pounds per day for PM_{10}, and 55 pounds per day for $PM_{2.5}$. Accordingly, construction emissions associated with the Proposed Project would not exceed applicable regional thresholds and would not result in a cumulatively considerable net increase in criteria pollutants for which the SCAB is in nonattainment.

The modeling also incorporated standard construction control measures consistent with SCAQMD guidance, including limiting heavy-duty diesel vehicle idling and watering exposed soil surfaces to reduce fugitive dust emissions. These measures further reduce particulate emissions generated during construction activities. Based on the CalEEMod analysis, construction emissions associated with the Proposed Project would be less than significant.

Table 4. Construction Emissions Compared to SCAQMD Thresholds

Pollutant	Maximum Daily Emissions (lbs/day)	SCAQMD Threshold (lbs/day)	Exceeds Threshold?
Reactive Organic Gas (ROG)/Volatile Organic Compound (VOC)	8.79	75	No
Nitrogen Oxide (NOx)	4.23	100	No
Carbon Monoxide (CO)	25.36	550	No
Sulfur Dioxide (SO_2)	0.03	150	No
Respirable Particulate Matter (PM_{10})	1.82	150	No
Fine Particulate Matter ($PM_{2.5}$)	0.84	55	No

Note: lbs/day = pounds per day
Source: Appendix B

Operational Emissions and Comparison to Thresholds

Operation of the aquatic center would generate limited emissions from energy consumption, architectural coatings, maintenance activities, and minor equipment usage associated with facility operations. Because the Proposed Project would occur within the existing MHS campus and would

primarily replace existing facilities, it would not substantially increase vehicle trips or introduce new stationary emission sources.

As shown in **Table 5**, CalEEMod modeling indicates that maximum daily operational emissions would be approximately 0.19 pounds per day of ROG, 1.88 pounds per day of NOx, 0.26 pounds per day of PM10, and 0.26 pounds per day of PM2.5. These emissions are well below SCAQMD regional operational thresholds, which are 55 pounds per day for ROG and NOx, 150 pounds per day for PM10, and 55 pounds per day for PM2.5. Therefore, operation of the Proposed Project would not generate a cumulatively considerable increase in criteria pollutant emissions within the SCAB.

Based on the CalEEMod modeling results and comparison with applicable SCAQMD thresholds, operational air quality impacts associated with the Proposed Project would be less than significant.

Table 5. Operational Emissions Compared to SCAQMD Thresholds

Pollutant	Maximum Daily Emissions (lbs/day)	SCAQMD Threshold (lbs/day)	Exceeds Threshold?
Reactive Organic Gas (ROG)/Volatile Organic Compound (VOC)	0.19	55	No
Nitrogen Oxide (NOx)	1.88	55	No
Carbon Monoxide (CO)	3.12	550	No
Sulfur Dioxide (SO_2)	0.02	150	No
Respirable Particulate Matter (PM_{10})	0.26	150	No
Fine Particulate Matter ($PM_{2.5}$)	0.26	55	No

Note: lbs/day = pounds per day
Source: Appendix B

3.2.3.3 Analysis of Project Impacts

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

Impact: Less than Significant

The SCAB is currently designated nonattainment for ozone and particulate matter under State and federal standards. SCAQMD addresses these conditions through the AQMP, which establishes regional strategies for reducing emissions from stationary, mobile, and area sources. Projects that are consistent with the assumptions used in the AQMP growth forecasts and that do not generate substantial emissions that would hinder attainment of air quality standards are considered consistent with the AQMP.

The Proposed Project involves demolition of existing facilities and construction of a new aquatic center within the existing MHS campus and would not result in substantial changes to land use or growth projections assumed in regional planning documents. Emissions associated with construction and operation of the Proposed Project were estimated using CalEEMod and compared with SCAQMD

regional significance thresholds. The modeling results indicate that maximum daily construction and operational emissions of criteria pollutants would remain well below SCAQMD thresholds of significance and therefore would not represent a cumulatively considerable contribution to regional pollutant concentrations.

Because the Proposed Project would occur within an existing developed campus, would not induce population growth beyond that already anticipated in regional forecasts, and would generate emissions below SCAQMD significance thresholds, the Proposed Project would not conflict with or obstruct implementation of the applicable AQMP. Accordingly, impacts related to AQMP consistency would be less than significant.

Mitigation Measures

No mitigation measures would be required. Because the Proposed Project would not conflict with or obstruct implementation of the applicable AQMP and emissions would remain below applicable SCAQMD thresholds, impacts would be less than significant, and mitigation would not be warranted.

Impact AQ-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard

Impact: Less than Significant

The SCAB is designated nonattainment for O_3 and particulate matter under State and federal ambient air quality standards. A project would have a significant impact if emissions exceed the SCAQMD regional significance thresholds for criteria pollutants. Construction and operational emissions associated with the Proposed Project were estimated using CalEEMod and compared to SCAQMD regional thresholds for ROG, NOx, CO, PM_{10}, and $PM_{2.5}$.

As shown in **Table 4**, the maximum daily construction emissions generated by the Proposed Project would be substantially below applicable SCAQMD thresholds. Similarly, as shown in **Table 5**, maximum daily operational emissions would also remain well below the corresponding regional thresholds. Because the estimated emissions during both construction and operation would not exceed SCAQMD regional significance thresholds, the Proposed Project would not result in a cumulatively considerable net increase in criteria pollutants within the SCAB. Therefore, the impact would be less than significant.

Because emissions would not exceed SCAQMD regional thresholds of significance, the Proposed Project would not represent a cumulatively considerable contribution to regional air pollutant emissions, and the impact would be less than significant.

Mitigation Measures

No mitigation measures would be required. The Proposed Project would be required to comply with applicable SCAQMD rules and regulations, including Rule 403[43] (Fugitive Dust) and other standard construction requirements, which would further minimize emissions. Because emissions would remain

[43] SCAQMD Rule 403

below SCAQMD regional thresholds and would not result in a cumulatively considerable net increase in criteria pollutants, impacts would be less than significant, and mitigation is not warranted.

Impact AQ-3: Expose sensitive receptors to substantial pollutant concentrations

Impact: Less than Significant

Sensitive receptors include locations where individuals may be more susceptible to air pollution exposure, such as residences, schools, daycare centers, hospitals, and parks. Construction activities associated with the Proposed Project would temporarily generate emissions from diesel-powered construction equipment and fugitive dust from earthmoving activities that could affect nearby receptors. However, construction emissions would be short-term and intermittent, occurring only during the construction period, and would comply with SCAQMD Rule 403 requirements for fugitive dust control. These measures include watering exposed surfaces, covering haul trucks, and maintaining stabilized construction access points to minimize dust generation. In addition, diesel emissions associated with construction equipment would be temporary and would disperse with distance from the construction area.

Operational activities associated with the aquatic center would not introduce substantial new sources of air pollutant emissions that could expose nearby receptors to elevated pollutant concentrations. The facility would primarily consist of recreational and educational uses typical of an existing high school campus and would not include stationary sources of air toxics or substantial emission-generating equipment. As a result, operation of the Proposed Project would not substantially increase localized pollutant concentrations at nearby receptors. Therefore, impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Mitigation Measures

No mitigation measures are required. Compliance with applicable SCAQMD rules and regulations, including Rule 403[44] for fugitive dust control, would minimize temporary construction emissions, and operational activities would not generate substantial pollutant concentrations. Therefore, impacts related to exposure of sensitive receptors would be less than significant, and mitigation is not warranted.

Impact AQ-4: Result in other emissions (such as odors) adversely affecting a substantial number of people

Impact: Less than Significant

Odors are typically associated with land uses such as wastewater treatment facilities, landfills, heavy industrial uses, and certain manufacturing operations. The Proposed Project involves construction and operation of an aquatic center within an existing high school campus and would not include land uses or operational activities commonly associated with odor generation. Temporary odors associated with

[44] SCAQMD Rule 403

construction activities (e.g., diesel exhaust or asphalt paving) could occur intermittently during the construction period but would be short-term and localized in nature.

During operation, the aquatic center would function as an educational and recreational facility and would not generate objectionable odors that could affect nearby receptors. Routine maintenance activities and pool operations would be consistent with typical school facility operations and would not produce odors at levels that would affect surrounding areas. Therefore, the Proposed Project would not result in odor emissions that would adversely affect a substantial number of people, and impacts related to odors would be less than significant.

Mitigation Measures

No mitigation measures are required. Because the Proposed Project would not generate substantial odor emissions during construction or operation that would adversely affect a substantial number of people, impacts would be less than significant, and mitigation is not warranted.

3.2.3.4 Cumulative Impacts

Impact: Less than Significant

Cumulative air quality impacts occur when emissions from the Proposed Project combine with emissions from other past, present, and reasonably foreseeable future projects to result in a cumulatively considerable net increase in criteria pollutants within the SCAB. Pursuant to CEQA Guidelines § 15064(h)(1), a project's incremental contribution to a cumulative impact is considered cumulatively considerable if the project's emissions are significant when viewed in connection with the effects of past, current, and probable future projects.

The SCAB is designated as nonattainment for ozone and particulate matter; therefore, regional air quality conditions are already cumulatively significant. The South Coast Air Quality Management District (SCAQMD) has developed regional mass emission thresholds to evaluate whether a project's incremental contribution to these existing cumulative conditions would be cumulatively considerable (SCAQMD 2003). Consistent with SCAQMD guidance, if a project's emissions exceed these thresholds, the project is considered to have a cumulatively considerable contribution to regional air quality impacts.

Construction and operational emissions associated with the Proposed Project were quantified using CalEEMod and compared to applicable SCAQMD regional thresholds. As shown in the construction and operational emissions tables above, the Proposed Project would not exceed SCAQMD thresholds for ROG, NOx, CO, PM_{10}, or $PM_{2.5}$. Because project-related emissions would remain below these thresholds, the Proposed Project's incremental contribution to regional air quality impacts would not be cumulatively considerable. Therefore, cumulative air quality impacts would be less than significant.

Mitigation Measures

No mitigation measures are required. Because the Proposed Project's construction and operational emissions would remain below SCAQMD regional thresholds and would not result in a cumulatively

considerable contribution to regional air quality impacts, cumulative impacts would be less than significant, and mitigation is not warranted.

3.2.4 References

South Coast Air Quality Management District (SCAQMD) 2022. Final 2022 Air Quality Management Plan. Available online at: https://www.aqmd.gov/home/air-quality/air-quality-management-plans/air-quality-mgt-plan. Accessed March 5, 2026.

Western Region Climate Center (WRCC) 2026a. Long Beach California (045082). Available online at: *https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5082*. Accessed March 5, 2026.

WRCC 2026b. Station Wind Rose: Long Beach Airport California. Available online at: *https://wrcc.dri.edu/cgi-bin/wea_windrose.pl?laKLGB*. Accessed March 5, 2026.

3.3 CULTURAL RESOURCES

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. Numerous laws, regulations, and statutes at the federal level govern archaeological and historic resources deemed to have scientific, historic, or cultural value.

The environmental setting and analysis of potential environmental impacts in this section is based in part on a background record search completed by the South Central Coastal Information Center (SCCIC; Records Search File No.: 27504.13493) completed on October 2, 2025, and the technical reports below:

- Archaeological Resources Assessment of the Proposed Long Beach Unified School District Facility Master Plan, City of Long Beach, Los Angeles County, California, PCR Services Corporation, 2017.
- *District-Wide Historical Resources Assessment for Long Beach Unified School District*, City of Long Beach, Los Angeles County, California, PCR Services Corporation, 2017.
- *District-Wide Cultural Resources Assessment Report Update for Long Beach Unified School District*, Los Angeles County, California. Report prepared for Long Beach Unified School District. Kleinfelder, 2025.
- Millikan High School Aquatic Center Project. Phase II Intensive Historic Resources Impact Assessment Report, Delcamp Preservation and Planning, 2025, included in **Appendix C** to this EIR.

3.3.1 Regulatory Setting

3.3.1.1 Federal

National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA)[45] as amended, and its implementing regulations found in 36 CFR Part 800[46], require federal agencies to identify cultural resources that may be affected by actions involving federal lands, funds, or permitting. The significance of the resources must be evaluated using established criteria outlined in 36 CFR Part 60 § 60.4[47], as described below.

If a resource is determined to be a historic property, Section 106 of the NHPA requires that effects of the federal undertaking on the resource be determined. A historic property is defined as:

> …any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in the National Register of Historic Places, including artifacts, records, and material remains related to such a property (NHPA § 301[5]).

[45] NHPA (full text)
[46] 36 CFR Part 800
[47] 36 CFR Part 60 § 60.4

Section 106 of the NHPA prescribes specific criteria for determining whether a project would adversely affect a historic property, as defined in 36 CFR § 800.5[48]. An impact is considered adverse when prehistoric or historic archaeological sites, structures, or objects that are listed or are eligible for listing in the National Register of Historic Places (NRHP) are subjected to the following:

- physical destruction of or damage to all or part of a property;
- alteration of a property;
- removal of the property from its historic location;
- change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- neglect of a property that causes its deterioration; or
- transfer, lease, or sale of the property out of federal control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

Section 106 of the NHPA as amended, and its implementing regulations found in 36 CFR Part 800[49], require federal agencies to take into consideration the potential effects of proposed undertakings on cultural resources listed on or determined potentially eligible for inclusion in the NRHP, and to afford the Advisory Council on Historic Preservation the opportunity to comment on the proposed undertaking. If the historic property will be adversely affected by development, then prudent and feasible measures to avoid or reduce adverse impacts must be taken.

National Register of Historic Places

The NRHP is the nation's master inventory of known historic resources. It is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, and cultural districts that are considered significant at the national, state, or local level.

The formal criteria (36 CFR Part 60 § 60.4[50]) for determining NRHP eligibility include possession of at least one of the following characteristics:

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

B. Association with the lives of persons significant in the past.

C. 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, distinguishable entity whose

[48] 36 CFR § 800.5
[49] 36 CFR Part 800
[50] 36 CFR Part 60 § 60.4

components may lack individual distinction.

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

For a historic property to retain and convey historic integrity, it must possess most of the 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 a historic event occurred. Integrity of location refers to whether the property has been moved since its construction. 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 that illustrates the character of the place. Materials are the physical elements that were combined or deposited during a particular period 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. This is an intangible quality evoked by physical features that reflect a sense of a past time and place. Association is the direct link between the important historic event or person and a historic property. Continuation of historic use and occupation help maintain integrity of association.

Listing in the NRHP does not entail specific protection or assistance for a property but it does guarantee recognition in planning for federal or federally assisted projects, eligibility for federal tax benefits, and qualification for federal historic preservation assistance. Additionally, project effects on properties listed in the NRHP must be evaluated under CEQA.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979[51] (ARPA) was signed into law on October 31, 1979. ARPA was enacted "to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites which are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data which were obtained before October 31, 1979."

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act[52] (NAGPRA) is a federal law passed in 1990. NAGPRA provides a process for museums and federal agencies to return certain Native American cultural items—human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants, and culturally affiliated Indian tribes and Native Hawaiian organizations. NAGPRA includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional and inadvertent discovery of Native American burials and cultural items on federal and tribal lands, and penalties for non-compliance and illegal trafficking.

[51] Archaeological Resources Protection Act of 1979 (16 U.S.C. § 470aa (b))

[52] Native American Graves Protection and Repatriation Act (25 U.S.C. Chapter 32 § 3001)

Secretary of the Interior's Standards for the Treatment of Historic Properties

The Secretary of the Interior's Standards for the Treatment of Historic Properties (SOIS) defines four treatment approaches: preservation, restoration, reconstruction and rehabilitation. Preservation involves preserving the existing form, materials, and spaces of a historic resource. Restoration is the process of returning the form and features of a resource to a particular time in its history. Reconstruction involves new construction that recreates the appearance of a historic resource that is no longer present due to prior natural or manmade acts. Finally, rehabilitation makes possible new uses at a historic resource through alterations or additions while preserving the buildings, structures, and/or elements sufficiently to convey the resource's historical significance. Projects that are consistent with the SOIS generally avoid adverse impacts to historic resources. There are 10 standards under the SOIS rehabilitation treatment approach:

1. A property will be used as it was historically or be given a new use that requires minimal change.
2. The historic character of a property will be retained and preserved.
3. Each property will be recognized as a physical record of its time, place, and use.
4. Changes to a property that have acquired historic significance will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible.
8. Archeological resources will be protected and preserved in place.
9. New additions, exterior alterations, or related new construction will not destroy historic materials that characterize the property. The new work will be differentiated from the old and will be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent new construction will be undertaken such that, if removed in the future, the essential form/integrity of historic property would be unimpaired.

3.3.1.2 State

California Environmental Quality Act

CEQA requires public agencies to consider the effects of their actions on unique archaeological resources and historical resources. Pursuant to PRC § 21084.1[53], a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." An historical resource is a resource eligible for listing on the California Register of Historical Resources (CRHR).

[53] PRC § 21084.1

California Register of Historical Resources

All properties in California that are listed in or formally determined eligible for listing in the NRHP are also listed in the CRHR. The CRHR is a listing of State of California resources that are significant in the context of California's history. It is a Statewide program with a scope and with criteria for inclusion similar to those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR.

A historical resource must be significant at the local, State, or national level under one or more of the criteria defined in CCR Title 14, Division 3, Chapter 11.5, § 4850[54] to be included in the CRHR. The CRHR criteria are tied to CEQA because any resource that meets the criteria listed below is considered an historical resource under CEQA. As noted above, all resources listed in or formally determined eligible for listing in the NRHP are automatically listed in the CRHR.

The CRHR uses four evaluation criteria, considering whether a resource:

1. is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
2. is associated with the lives of persons important to local, California, or national history.
3. embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.
4. has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Similar to the NRHP, a resource must meet one of these four criteria and retain integrity. The CRHR uses the same seven aspects of integrity (location, design, setting, materials, workmanship, feeling, and association) as the NRHP.

Unique Archaeological Resources

CEQA also requires lead agencies to consider whether projects would affect unique archaeological resources. PRC § 21083.2(g)[55] states that "unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

1. contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. has a special and particular quality such as being the oldest of its type or the best available example of its type; or

[54] CCR Title 14, Division 3, Chapter 11.5, § 4850
[55] PRC § 21083.2(g)

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

Public Resources Code Section 21083.2

Treatment options under PRC § 21083.2(b)[56] to mitigate impacts to unique archaeological resources include activities that preserve such resources in place in an undisturbed state. PRC § 21083.2 states:

> (a) As part of the determination made pursuant to Section 21080.1, the lead agency shall determine whether the project may have a significant effect on archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources, the EIR shall address the issue of those resources. An EIR, if otherwise necessary, shall not address the issue of nonunique archaeological resources. A negative declaration shall be issued with respect to a project if, but for the issue of nonunique archaeological resources, the negative declaration would be otherwise issued.
>
> (b) If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:
>
> 1. Planning construction to avoid archaeological sites.
> 2. Deeding archaeological sites into permanent conservation easements.
> 3. Capping or covering archaeological sites with a layer of soil before building on the sites.
> 4. Planning parks, greenspace, or other open space to incorporate archaeological sites.
>
> (c) To the extent that unique archaeological resources are not preserved in place or not left in an undisturbed state, mitigation measures shall be required as provided in this subdivision.
>
> (d) Excavation as mitigation shall be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project.

[56] PRC § 21083.2(b)

Historical Resources

"Historical resource" is a term with a defined statutory meaning (PRC § 21084.1[57]; CEQA Guidelines §§ 15064.5[a] and [b][58]). Under CEQA Guidelines § 15064.5(a), historical resources include the following:

1. A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR is considered a historical resource (PRC § 5024.1[59]).
2. A resource included in a local register of historical resources, as defined in PRC § 5020.1(k)[60] or identified as significant in a historical resource survey meeting the requirements of PRC § 5024.1(g)[61], will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the CRHR (PRC § 5024.1).
4. The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC § 5020.1[k]), or not identified in a historical resources survey (meeting the criteria in PRC § 5024.1[g]) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC §§ 5020.1(j)[62] or 5024.1.

Health and Safety Code Section 7050.5

Health and Safety Code (HSC) § 7050.5[63] establishes procedures to be followed in the event that human remains are discovered during construction or excavation activities. The statute requires that all ground-disturbing activities in the vicinity of the discovery be halted immediately and that the county coroner be notified. The coroner is responsible for determining whether the remains are of forensic interest. If the remains are determined not to be subject to the coroner's authority and are identified as Native American, the coroner must notify the NAHC within 24 hours.

[57] PRC § 21084.1
[58] CEQA Guidelines §§ 15064.5[a] and [b]
[59] PRC § 5024.1
[60] PRC § 5020.1(k)
[61] PRC § 5024.1(g)
[62] PRC § 5020.1(j)
[63] HSC § 7050.5

Following notification, the NAHC designates a Most Likely Descendant (MLD), who is responsible for providing recommendations regarding the treatment and disposition of the remains and any associated grave goods. The landowner or project proponent must consult with the MLD to determine appropriate treatment measures, which may include preservation in place or reinterment. These requirements are implemented in coordination with PRC § 5097.98[64], which provides additional procedures for consultation and treatment of Native American human remains.

Public Resources Code Section 5097

PRC § 5097[65] specifies the procedures to be followed in the event of the unexpected discovery of human remains on nonfederal land. The disposition of Native American human burials falls within the jurisdiction of the NAHC. PRC § 5097.5[66] states the following: "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, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands." Violation of this section is a misdemeanor.

3.3.1.3 Local

Development on the campus is not subject to local plans, policies, regulations, or ordinances governing cultural resources.[67] The City of Long Beach General Plan concerning historical resources is provided herein for informational purposes only.

City of Long Beach, California 2030 General Plan Historic Preservation Element

The Historic Preservation Element of the 2030 General Plan[68] includes goals, objectives, and policies for the protection of cultural resources and scientific sites that emphasize identification, documentation, and protection of cultural resources.

GOAL 1: Maintain and support a comprehensive, citywide historic preservation program to identify and protect Long Beach's historic, cultural, and archaeological resources.

POLICY P1.1: The City shall comply with City, State, and federal historic preservation regulations to ensure adequate protection of the City's cultural, historic, and archaeological resources.

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[64] PRC § 5097.98

[65] PRC § 5097

[66] PRC § 5097.5

[67] Pursuant to California Government Code § 53094 et seq., the governing board of a school district may render city or county zoning ordinances and general plan requirements inapplicable. It is anticipated that the District's Board of Education will exempt the Proposed Project and campus from any zoning ordinances or regulations of the City of Long Beach, including, without limitation, the City's Municipal Code, General Plan, and related ordinances and regulations that otherwise would be applicable.

[68] Historic Preservation Element of the City of Long Beach, California, 2030 General Plan

IMPLEMENTATION MEASURE I.M.1.2: Alterations to historic properties will be reviewed according to the Secretary of the Interior's Standards and in accordance with CEQA.

GOAL 2: Protect historic resources from demolition and inappropriate alterations through the use of the City's regulatory framework, technical assistance, and incentives.

POLICY P2.1: The City shall discourage the demolition and inappropriate alteration of historic buildings.

POLICY P2.2: The City shall continue to use the Secretary of the Interior's Standards as guidelines for appropriate rehabilitation projects, adaptive reuse, or additions to historic structures.

POLICY P2.4: The City shall ensure compliance of all historic preservation, redevelopment, and new construction projects with CEQA and Section 106 of the NHPA.

IMPLEMENTATION MEASURE I.M.2.2: The City will ensure compliance with CEQA and Section 106 of the NHPA and will continue to consult with the appropriate organizations and individuals to minimize potential impacts to historic, cultural, and archaeological resources.

3.3.2 Environmental Setting

The District is located near the northern end of the Peninsular Ranges, the mountain and valley system that stretches from near downtown Los Angeles to Baja and which includes mountains, coastal plains, with diverse ecosystems available to Native Americans and early European settlers. The subsistence of prehistoric hunter-gatherers in the coastal zone and near-shore islands depended on marine shellfish, fish, and mammals supplemented with terrestrial game and a variety of terrestrial plants, all of which were present within the project site region (PCR 2017a). The project site is approximately 1 mile from the San Gabriel River, near its confluence with Coyote Creek.

3.3.2.1 Regional Prehistory

The prehistoric chronology of the region is traditionally divided into Milling Stone, Intermediate and Late Prehistoric periods, but more currently into Early, Middle, and Late Holocene periods, though evidence of a Paleo Indian period is emerging (PCR 2017a). These time periods are distinguished by changes in adaptive patterns and geographical distributions. The interpretive system continues to evolve as more sites are identified, but the system currently in use includes the following major periods.

Paleo Indian Period (11,500 – 7000 years before present [BP]): The Paleo-Indian Period is the first to be sufficiently defined and is marked by the earliest evidence available of human occupation in California. It is characterized by short-term settlement patterns, use of large, fluted spear points used for big game hunting, and the absence of either developed milling technologies or elaborate mechanisms of exchange (PCR 2017a).

Milling Stone Horizon (7000 – 4000 BP): The Milling Stone Horizon marks a shift from a subsistence strategy which emphasized big game hunting to one which, for inland populations, emphasized plant seeds (as represented by the manos and metates used to mill them, and carbonized seeds) (PCR 2017a).

Intermediate Period (4000 – 1500 BP): More elaborate material culture represents the subsequent Intermediate Period, including basket hopper mortars, bowl mortars, pestles, broad leaf-shaped blades, heavy side-notched and leaf-shaped spear points, stemmed atlatl dart points, implements and ornaments made from bone, horn, shell, asphalt, and steatite, and inhumations with red ocher and stone cairns. This elaboration of material culture may reflect burgeoning and aggregating populations and intensified social and political interaction (PCR 2017a).

Late Prehistoric Period (1,500 BP – Anno Domini [AD] 1542): The Late Prehistoric period marks the advent of the bow and arrow as evidenced by finely chipped, stemless, concave- and convex-based arrow points, and steatite arrow straighteners. The material culture also included steatite containers and a large increase in the quantities of shell, bone, and stone body ornaments. Inhumations included abundant and diverse grave goods. Intricately manufactured containers and ornaments as well as burials with large quantities of grave goods suggest a fully developed concept of wealth and social status (PCR 2017a).

3.3.2.2 Regional History

Protohistoric Period (AD 1542 – 1769): In the Southern California Coast culture area, the advent of protohistory is marked by the maritime explorations of Cabrillo in AD 1542. During the following 227 years, direct contact between local indigenous people and Europeans was limited to occasional European visits by sea, Spanish exploration and the establishment of Spanish colonies in Mexico, including along the Baja California Peninsula.

Early Historic Period (AD 1769 – 1822): The history of the southern California coastal region is commonly divided into the Spanish Period, AD 1769-1822, the Mexican Period, AD 1822-1847, and the American Period, post-AD 1847. For the Gabrielino and other Native Americans, Euro-American exploration and settlement, and the Spanish mission system, meant disease, strife, capture, displacement, and population decline from first contact until the 20th century. During the Spanish period, from the time of the overland Portolá expedition until the culmination of the Mexican War of Independence, the Long Beach area was subdivided into portions of Rancho Los Cerritos and Rancho Los Alamitos. It was a considerable distance from the centers of population and commerce. The Pueblo de Los Angeles was 20 miles to the north, Mission San Gabriel was 24 miles to the north-northeast, Mission San Juan Capistrano was 36 miles to the southeast, and Mission San Fernando was 38 miles to the north-northwest (PCR 2017a).

City of Long Beach

The present city of Long Beach is located on a portion of the 300,000 acres of land granted to Manuel Nieto by the Spanish colonial government in 1784. This property would subsequently be divided into five smaller land grants, including Rancho Los Alamitos and Rancho Cerritos, on which Long Beach would later be established (PCR 2017b). An initial development effort failed in the late 19th century however the town site was purchased in 1884 by the Long Beach Land and Water Company, which began making significant improvements, including the construction of a wharf and hotel, and connecting the town to the Southern Pacific Railroad's Wilmington branch. The elements for growth now in place, the expansion was explosive, especially after the opening of a Pacific Electric line to the city in 1902. Long Beach, which

in the early 1900s had become one of the region's premier seaside resorts, was incorporated as a city in 1908.

Establishment of a harbor and shipbuilding facilities in addition to the discovery of oil nearby led to a building boom, including residential, commercial, and industrial development. Architecturally, from the late 19th century through the first decade of the 20th, the vernacular cottage and bungalow became the dominant building types in Long Beach and Southern California. Then, starting around 1907, Craftsman style architecture became ubiquitous in residential construction. By the late 1910s and into the 1920s, the Craftsman style was often melded with period revival styles such as the Colonial Revival, Spanish Colonial Revival, Tudor Revival, and Classical Revival (PCR 2017b).

On March 10, 1933, at 5:55 p.m., a major earthquake shook Southern California, causing extensive damage to the buildings throughout the Long Beach area. The area impacted extended from Long Beach, where the quake was centered to as far north as Pasadena, where major buildings also suffered severe damage. At a magnitude of 6.3, the Long Beach earthquake was the second deadliest in California history after the 1906 San Francisco earthquake. The Long Beach earthquake caused $50 million (in 1933 dollars) in property damage. The stock market crash in 1929 and the 1933 earthquake had a devastating impact on the built environment, both financially and physically. In 1935, thanks to funding from the federal Works Progress Administration (WPA), parks and transportation facilities, and civic and recreational buildings in the city were reconstructed (PCR 2017b).

Long Beach Unified School District

The District has completed two District-wide Cultural Resources Assessments. The District prepared its first District-wide Cultural Resources Assessment in 2017 to address built historical resources, archaeological resources, and paleontological resources (PCR 2017a; PCR 2017b). In 2025, the District updated the District-wide cultural resources report; the update included a reconnaissance survey of 84 school campuses, an update to the historic context, and identification of school campuses that required updates to their previous recordation and evaluation, as well as previously unrecorded campuses that required evaluation and recordation (Kleinfelder 2025).

The chronology of school construction in the District mirrors the growth and development of the City of Long Beach. The first school in Long Beach, located near Willow Street and Santa Fe Avenue, was founded in 1879. The District was established in 1885. The first bond election was held by the newly-formed Board of Trustees to construct a school building. After the $6,000.00 bond measure passed, a one-story wood-frame structure was constructed at 6th Street and Pine Avenue, named the Central School (not extant). In May 1888, $3,500.00 was allocated to construct a second-story onto the Central School and to construct a second school at Hill Street and Atlantic Avenue, the present site of the Burnett Elementary School. Following the real estate and population boom of the 1880s, there was a high demand for teachers and school buildings. Between the 1890s and early 1920s schools were separated into grammar schools, grades 1 to 8, and high schools, grades 9 to 12. During the late 1890s, five new schools were constructed. As Long Beach continued to grow, so did the school system, particularly after World War I and the population boom (PCR 2017b).

Seven schools in the District survived the earthquake and retained enough structural integrity that they were rehabilitated and additions were constructed, however the majority were replaced by concrete

and steel WPA/Public Works Administration (PWA) style buildings in 1935 and 1936 that exhibited the mix of classicism, Art Deco, and streamlining referred to as "WPA/PWA Moderne." District schools and buildings representative of the Post-World War II style include Charles Middle School, MHS, Lakewood High School, and Nightingale School (PCR 2017a).

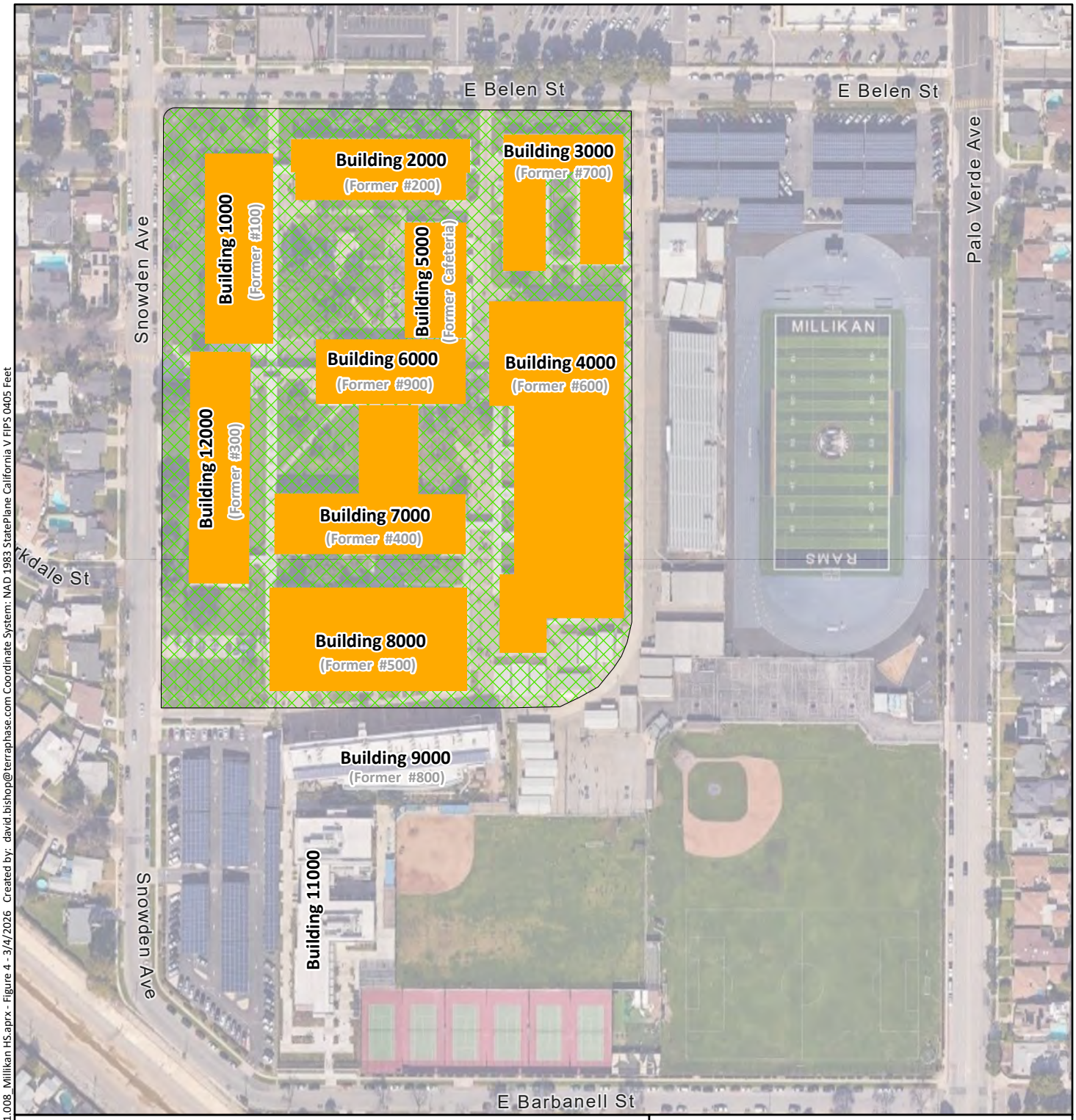
Millikan High School

After the construction hiatus caused by World War II, the outlying areas of Long Beach grew rapidly in the post-war climate, but many downtown areas suffered. The District continued to erect new elementary, middle, and high schools in the outlying areas of Long Beach to accommodate the increasing population and resulting generation of baby boomers. Schools constructed during this period primarily displayed the midcentury modern styles that became the standard for schools during the second half of the 20th century, and at least two schools (MHS and Lakewood High School) were designed using the same plan (PCR 2017a). In 1955, MHS was the first new high school to be constructed in the District in 21 years, built on land previously used for agriculture.

The original MHS was constructed on a 34-acre agricultural site and included three classroom buildings, an auditorium seating 1,800 people, P.E., industrial arts, cafeteria buildings and a combination administration and library building. The school officially opened to students in September 1957. Since then, various improvements and alterations have been made to the campus.

MHS was designed by prolific architect C. Hugh Gibbs with landscaping by Eckbo, Royston, and Williams. Gibbs schooled and worked in Southern California, designed numerous public structures in the City of Long Beach and for the District (PCR 2017a). Garrett Eckbo was a known landscape designer for campus landscapes across the United States, include all of the schools in both the Whittier Public School District and the Long Beach Public School District, including elementary, junior high, high schools, and community colleges within the communities of Long Beach and Lakewood, California. The firm of Garrett Eckbo, Robert Royston, and Edward Williams was also responsible for the mid-1950s enlargement and reconfiguration of the Santa Monica High School landscape plan. At the time, the partnership of Eckbo, Royston, and Williams was one of the most forward-looking, innovative and successful Modern landscape architectural firms in California (PCR 2017a).

Millikan HS was assessed as eligible for listing in both the NRHP (Criterion C) and CRHR (Criterion 3) as an excellent example of a Post-War Modern style school campus designed after World War II by locally prominent architect C. Hugh Gibbs and landscape architect Garrett Eckbo (Kleinfelder 2025; PCR 2017a). The period of historical significance is between 1954 and 1957. Eight buildings that were constructed during this period (Building Nos. 1000, 2000, 3000, 4000, 5000, 7000, 8000, and 12000) and their associated landscaping contribute to historical significance of the original campus. **Figure 5** identifies the location of the contributing elements and buildings on the campus, including the area of historical significance. The other remaining structures and portable buildings on the campus are not considered contributing resources to the Register-eligible site. The *Phase II Intensive Historic Resources Impact Assessment Report* (**Appendix C**) further included the information that Building 6000 (formerly Building 900), which was identified as one of the "original" buildings, was actually constructed circa 1962, outside the period of significance and that the architectural features and designs of Building 6000 do not match those from the previous construction. The Phase II report updates the findings of the contributing



0 100 200 400 Feet

1 inch = 200 feet

N

Legend

Contributing Resource

Area of Significance

Base Map: Google Earth

SAFETY FIRST

terraphase engineering

CLIENT: LBUSD

PROJECT: Millikan HS
2800 Snowden Ave, Long Beach, CA

PROJECT NUMBER: S051.008.C009

NRHP/CRHR-Contributing Elements

FIGURE 5

File: N:\GIS\Prj\S051 LBUSD\008_Millikan HS\Pro Project\S051.008_Millikan HS.aprx - Figure 4 - 3/4/2026 Created by: david.bishop@terraphase.com Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet

features of Millikan HS's historical significance. **Table 6** lists the buildings that contribute to the historical significance of the Millikan HS campus per **Appendix C**. These buildings and surrounding landscape, as well as the core area of the original school buildings are shown in **Figure 5.**

Table 6. Contributing Features of Millikan High School's Historical Significance

Original Building No./Name	New Building No.
100/Administration and Library	1000
200/Social Studies	2000
300/Commerce and Science	12000
400/Arts and Home Economics	7000
500/Auditorium	8000
600/Physical Education	4000
700/Industrial Arts	3000
Cafeteria	5000
Site Plan	Site Plan of Original Core Buildings and Interior Quad Landscape Area

3.3.2.3 Background Research

In 2017 the District commissioned a District-wide archaeological study (PCR 2017b) which provided background information regarding archaeological resources at District facilities, including Millikan HS. This study did not identify any archaeological resources within 0.25 miles of the project site.

For the current effort, a record search request was submitted to the SCCIC of the California Historical Resources Information System (Records Search File No.: 27504.13493). Results were received on October 10, 2025. In their response, the SCCIC reported that five archaeological surveys have been completed within 0.5 miles of the project site, but none are noted within the MHS campus. Only one survey, for a 2008 cell tower location immediately north of MHS, was conducted adjacent to the school. The only archaeological site noted within the search radius consists of P-19-000831, located approximately 0.45 miles to the southwest. P-19-000831 includes a shell midden with burials that was disturbed in the 1950s and partially re-recorded in the 1970s.

Starting in the early 1850s, the Bureau of Land Management General Land Office (GLO) started conducting widespread mapping of lands within California, as well as throughout the western U.S. These "plat" maps, ranges, and sections typically depicted major landforms, waterways, historic-era developments such as ranches, farms, and associated buildings, and occasionally provided assessments of the suitability of land for livestock grazing, agriculture, or timber harvesting. However, the GLO typically did not survey Spanish/Mexican West land grant areas, including the Los Alamitos land grant, where the project site is located. Rancho Los Alamitos was a 25,500-acre land grant awarded to Manuel Nieto in 1790 for his service on the Gaspar de Portolá expedition to California (Rancho Los Alamitos 2025).

The District conducted Native American outreach for the Proposed Project as discussed in **Section 3.6**.

3.3.2.4 Archaeological Sensitivity

The courses of the rivers of the Los Angeles Basin, prior to modern, artificial channelization, fluctuated horizontally as sediments built up, or were transported and shifted due to stormwaters and, at their estuaries, tidal and wave forces. Prehistoric village site locations, therefore, may correlate with former, pluvial river channels rather than with current channels. Prior to floods in 1824-1825, for example, the Los Angeles River emptied into Santa Monica Bay, not San Pedro Bay (PCR 2017b).

The proximity to a freshwater source has always been a key predictive factor for archaeological sensitivity, and Portuguese explorer Juan Cabrillo observed numerous villages while in the region in 1542, noting that they were situated near the shore on relatively level ground wherever fresh water was available from springs or drainages.

3.3.3 Environmental Impacts and Mitigation Measures

The following impact analysis evaluates the Proposed Project's impacts compared to the thresholds of significance for which the IS disclosed as potentially significant.

3.3.3.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines[69], a project would normally result in a significant impact on the environment if the project would:

- **CUL-1** Cause a substantial adverse change in the significance of a historical resource pursuant to 14 CCR § 15064.5[70],
- **CUL-2** Cause a substantial adverse change in the significance of an archaeological resource as defined in 14 CCR § 15064.5, or
- **CUL-3** Disturb any human remains, including those interred outside of formal cemeteries.

3.3.3.2 Methodology

The evaluation of cultural resources and TCRs for the Proposed Project was conducted in accordance with CEQA (PRC § 21000 et seq.[71]) and the CEQA Guidelines (14 CCR § 15000 et seq.[72]), including Appendix G. The analysis considers the definitions of historical resources (PRC § 21084.1[73]; CEQA Guidelines § 15064.5) and TCRs (PRC § 21074[74]), as well as applicable regulatory requirements related to archaeological resources and human remains (HSC § 7050.5[75]; PRC § 5097.98[76]).

[69] Appendix G of the CEQA Guidelines
[70] 14 CCR § 15064.5
[71] PRC § 21000 et seq.
[72] 14 CCR § 15000 et seq.
[73] PRC § 21084.1
[74] PRC § 21074
[75] HSC § 7050.5
[76].PRC § 5097.98

The methodology included a review of existing conditions within the project site and surrounding area based on prior cultural resource studies, archival research, and available environmental documentation prepared for the site, including the IS (**Appendix A**) and the cultural resource technical studies summarized in the introduction to **Section 3.3**. This review evaluated whether any previously identified historical resources, archaeological resources, or TCRs are present within or adjacent to the Proposed Project area.

In addition, the analysis considers the potential for unknown subsurface resources based on the age of the surrounding development, regional cultural history, and prior disturbance within the project site. Given that many cultural resources, particularly archaeological deposits and TCRs, may not be visible on the surface, the assessment assumes the possibility of encountering previously unidentified resources during ground-disturbing activities.

3.3.3.3 Analysis of Project Impacts

The following impact analysis evaluates the Proposed Project's impacts compared to the thresholds of significance for which the IS disclosed as potentially significant.

Impact CUL-1: Cause a Substantial Adverse Change in the Significance of a Historical Resource Pursuant to § 15064.5[77]

Impact: Potentially Significant

The Proposed Project would result in the demolition of one CRHR-contributing building to the historical significance of MHS. MHS is eligible for listing as a historical resource under Criterion C of the NRHP and Criterion 3 of the CRHR.

- **NRHP Criterion C:** 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, distinguishable entity whose components may lack individual distinction.
- **CRHR Criterion 3:** Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.

The eight buildings at MHS built between 1954 and 1957, and the original site plan of the buildings and quad courtyard area (**Table 6**) have been found to be an excellent example of a Post-War Modern style school campus designed after World War II by locally prominent architect C. Hugh Gibbs and landscape architect Garrett Eckbo. Neither the whole campus nor any of the contributing building elements are individually significant; however, collectively, they supply the overall historic significance of MHS.

The Proposed Project, involving the construction of a new aquatic center, would require the demolition of one of the nine elements that contributes to the historical significance of MHS. Specifically, the Proposed Project would require the demolition of Building 3000 and the surrounding hardscape and landscape elements. Building 3000 (formerly Building 700; referred to as Building 700/3000 in this document) was built as part of the original plan for MHS and was the industrial arts building. The floor

[77] CEQA Guidelines § 15064.5

plan includes large rooms for shops and smaller rooms for other programs (e.g., dark room, journalism, typewriting) and office and storage spaces. The floor plan has not changed from the original construction though the use of the rooms has changed over time. The character-defining features of Building 700/3000 are similar to those of the other contributing buildings, and include the following:

- Post-War Modern style,
- U-shaped plan around internal courtyard and rectangular massing,
- One-story,
- Flat roof,
- Rectangular continuous cantilevered concrete overhang supported by pilotis covering internal courtyard walkways,
- Painted concrete surfaces,
- Aluminum-frame single-pane fixed and awning windows (some windows painted over, alteration),
- Internal courtyard partially-landscaped with asphalt and concrete paving/walkways (benches replaced, alteration),
- Freestanding brick wall with pilotis (piers) supporting cantilevered overhang that "encloses" south end of internal courtyard between walkway entrances; overhang fascia exhibits original "Industrial Arts" sign lettering, and
- Interiors contain some original cabinetry and fixtures, including metal, circular, communal handwashing fixture in original automotive shop.

Generally, projects that are consistent with the SOIS are considered as mitigated to a level of insignificance (CEQA Guidelines § 15064.5(b)(3)[78]). As the Proposed Project would result in a new use at the historical resource, analysis of the Proposed Project's consistency with the SOIS Standards for Rehabilitation was conducted and is presented in **Table 7**.

Table 7. Consistency with SOIS Standards for Rehabilitation

Standard for Rehabilitation	SOIS Consistency Finding
1. A property will be used as it was historically or be given a new use that requires minimal change.	**CONSISTENT.** The property (MHS) would remain in use as a high school. Replacement of Building 700/3000 with a new aquatic center is considered a new use within the boundary, but still consistent with the overall historic use.
2. The historic character of a property will be retained and preserved.	**INCONSISTENT.** MHS's historic character is conveyed by the overall site plan and multiple contributing buildings together. Demolition of contributing Building 700/3000 is determined to

[78] CEQA Guidelines § 15064.5(b)(3)

Standard for Rehabilitation	SOIS Consistency Finding
	cause a loss of historic integrity and an adverse effect on the historic character of the resource.
3. Each property will be recognized as a physical record of its time, place, and use.	**CONSISTENT.** Even with demolition Building 700/3000, the campus will remain recognizable as the historic school resource. The replacement structure would maintain the campus' historic site plan layout (notably the rectangular plan), allowing the resource to still be understood as a physical record of its historic period and use.
4. Changes to a property that have acquired historic significance will be retained and preserved.	**CONSISTENT.** The Proposed Project does not propose alterations to areas identified as historically significant changes from within the period of significance.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.	**INCONSISTENT.** Demolition of Building 700/3000 results in a complete loss of the building and its materials/features. Because Building 700/3000 contributes to the overall significance of the campus, its removal is found inconsistent with preserving character-defining elements.
6. Deteriorated historic features will be repaired rather than replaced.	**INCONSISTENT.** Any deteriorated historic features of Building 700/3000 would not be repaired, because the building would be demolished.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible.	**NOT APPLICABLE.** The Proposed Project does not include chemical or physical treatments of building features.
8. Archeological resources will be protected and preserved in place.	**CONSISTENT.** The Proposed Project would be consistent with protecting archaeological resources; refer to **Impact CUL-2** below.
9. New additions, exterior alterations, or related new construction will not destroy historic materials that characterize the property. The new work will be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.	**INCONSISTENT.** The Proposed Project would demolish Building 700/3000, a contributor to the historic resource, in order to allow for construction of the new aquatic center. Thus, the project would "destroy historic materials that characterize the property" and is not consistent with the first threshold contained in this standard.
10. New additions and adjacent new construction will be undertaken such that, if removed in the future, the essential form/integrity of historic property would be unimpaired.	**INCONSISTENT.** Because Building 700/3000 would be demolished and replaced, any future removal of the proposed aquatic center would leave a void and impair the essential form/integrity of the historic property.

The Proposed Project would be consistent with SOIS Standards 1, 3, 4, and 8. However, it would not be consistent with SOI Standards 2, 5, 6, 9, and 10; additionally, Standard 7 is not applicable. Accordingly, the Proposed Project is not consistent with all the SOIS Standards. Nevertheless, under CEQA, a project that is not consistent with the SOIS could still be found to not result in a substantial adverse change to the historical resource if the project does not materially alter physical characteristics of the resource.

The proposed demolition of Building 700/3000, however, would materially impair the historical resource, i.e., MHS. As discussed above, Building 700/3000 embodies character-defining features of the historical significance of MHS and contributes to its period of significance. The demolition of the contributing element would cause a substantial adverse change to the significance of MHS because the Proposed Project would materially alter the physical characteristics of the resource that justifies its eligibility for inclusion in the CRHR (and NRHP). Therefore, project implementation would result in a significant impact to a historical resource. **Mitigation Measures CUL-1A** through **CUL-C** have been recommended to reduce impacts and include documenting and recording Building 700/3000, salvaging and reusing the salvaged materials, and creating an interpretive exhibit. These measures, however, would not fully mitigate the impacts. Therefore, the Proposed Project impacts to the historical resource would remain significant and unavoidable.

Mitigation Measures

CUL-1A: Historic American Buildings Survey Documentation. Historic American Buildings Survey-Like Documentation. Prior to the commencement of demolition, the Long Beach Unified School District (District) shall record Building 700/3000 (Industrial Arts building) through a documentation report based on Historic American Buildings Survey (HABS) standards. The report shall be completed by an architectural historian, historian, or historic architect who meets the applicable Secretary of the Interior's Professional Qualification Standards and shall be based on the National Park Service HABS Level III standards for format and content requirements. The HABS-like report shall include a full set of available as-builts for the contributing building, photographs of exterior and interior views, and a written history and description of the building. A hard copy and digital copy of the HABS-like report shall be filed with District, and additional copies may be deposited in the collections of the Long Beach Public Library and Long Beach Heritage Museum, if requested. A digital copy shall also be deposited in the California Historical Resources Information System South Central Coastal Information Center.

CUL-1B: Salvage and Use of Salvaged Materials. Prior to the commencement of demolition, the District shall coordinate with an architectural historian, historian, or historic architect who meets the applicable Secretary of the Interior's Professional Qualification Standards, the project architect, and the demolition contractor, to develop a list of materials that would be salvaged during demolition of Building 700/3000, as well as a salvage plan which may include architectural history monitoring during demolition. Materials to be salvaged should include the original exterior building signage letters, the circular communal handwashing fixture, and any interior fixtures, cabinetry and/or fittings deemed to be of historical/salvage value. Salvaged items may be reused as a part of the Proposed Project or elsewhere within the project site or other District location. Salvaged items may also be incorporated into interpretive displays within the school (if displayed in an appropriate, archival manner) or donated to museums, historical societies, or other appropriate organizations or architectural salvage company.

CUL-1C: Interpretive Exhibit. The District shall coordinate with an architectural historian or historian who meets the applicable Secretary of the Interior's Professional Qualification Standards to create an exhibit about MHS's historic significance and Building 700/3000. The District shall ensure fabrication of the exhibit in permanent materials and shall display it near the public entrance of the new aquatic center, or in the MHS library, administration office, or other well-visited location on the school campus. The exhibit shall consist of one permanent panel, measuring at minimum 24" by 36," or equivalent size depending on the medium. The exhibit must include a representation of Building 700/3000, ideally in context with the other historic resource contributing elements, and consist of historic photos, an architectural rendering, plans, and/or artistic representation, along with information about MHS's history and significance.

Impact after Mitigation: Significant and Unavoidable

Implementation of **Mitigation Measures CUL-1A** through **CUL-1C** would reduce, but not eliminate, the Proposed Project's significant impact to historical resources. These measures are designed to document, preserve, and interpret the historical significance of Building 700/3000 and the MHS campus; however, they do not avoid the physical loss of a contributing element of the historic resource.

Mitigation Measure CUL-1A requires preparation of HABS-like documentation, which would create a permanent archival record of Building 700/3000, including as-built drawings, photographs, and a written historical narrative. This measure would ensure that the building's architectural and historical significance is preserved in the historical record, consistent with professional standards (National Park Service HABS guidelines), but it does not retain the physical structure or its contribution to the integrity of the campus.

Mitigation Measure CUL-1B requires the identification, salvage, and potential reuse of character-defining features and materials from Building 700/3000. While salvage and reuse of architectural elements—such as original signage, fixtures, and distinctive features—would retain select components of the building, these elements would be removed from their original context. As such, this measure would not preserve the building's integrity of location, design, setting, materials, workmanship, feeling, or association, which collectively convey its contribution to the significance of MHS.

Mitigation Measure CUL-1C requires the development of an interpretive exhibit to convey the historical significance of the campus and Building 700/3000 to the public. This measure would enhance public understanding and appreciation of the site's history and would partially offset the loss of the resource through educational interpretation. However, interpretive materials do not substitute for the preservation of the physical resource itself.

As discussed earlier, Building 700/3000 is a contributing element to the overall significance of MHS as a Post-War Modern campus designed by C. Hugh Gibbs and Garrett Eckbo. Its demolition would materially alter the physical characteristics that convey the significance of the historical resource and would result in a loss of integrity. Because the Proposed Project would remove one of the character-defining

components of the campus, it would not be consistent with the Secretary of the Interior's Standards for Rehabilitation and would constitute a substantial adverse change under CEQA Guidelines § 15064.5[79].

Although the recommended mitigation measures would reduce the severity of the impact through documentation, salvage, and interpretation, they cannot avoid or fully mitigate the loss of a contributing historic resource. Therefore, impacts to historical resources would remain significant and unavoidable.

Impact CUL-2: Cause a Substantial Adverse Change in the Significance of an Archaeological Resource Pursuant to § 15064.5

Impact: Potentially Significant

Ground-disturbing construction activities could uncover previously unknown unique archaeological resources or historical resources of an archaeological nature, as defined in CEQA Guidelines § 15064.5. This is a potentially significant impact. The project site has been developed with the MHS campus since 1955, and prior to that, it was used for agricultural production dating back to 1928. Based on record searches with the SCCIC and the PCR (2017b) report, no evidence suggests that any prehistoric or historic-era archaeological materials are present within the project site or the immediate vicinity. However, the project site is entirely developed and was constructed prior to the enactment of laws requiring investigation, no subsurface investigation has been completed within the project site. Therefore, it is possible that ground-disturbing construction activities could uncover previously unknown unique archaeological resources or historical resources of an archaeological nature, as defined in CEQA Guidelines § 15064.5. Should any as-yet unknown archaeological deposits be uncovered during ground-disturbing activities, impacts could damage or destroy unique archaeological resources or historical resources of an archaeological nature. Therefore, this impact would be potentially significant. Implementation of **Mitigation Measure CUL-2** would lessen impacts on archaeological resources to a less-than-significant level.

Mitigation Measures

CUL-2: Halt Work Upon Discovery of Subsurface Archaeological Features. If any precontact or historic-era subsurface archaeological features or deposits (e.g., ceramic, shell, stone, bone, trash scatters, foundations), including locally darkened soil ("midden"), which may conceal cultural deposits, are discovered during construction, all ground-disturbing activity within 100 feet of the resources shall halt, and a qualified professional archaeologist (one who meets the Secretary of the Interior's Professional Qualification Standards for Archeology) shall be retained to assess the significance of the find. If the qualified archaeologist determines the archaeological material to be Native American in nature, the Native American community shall be included in the consultation process between the District, construction contractor, and archaeologist to develop a plan for avoidance, further evaluation, or treatment and documentation, consistent with current standards. Construction shall not resume at the location of the find until mitigation has been completed.

[79] CEQA Guidelines § 15064.5(b)(3)

Impact after Mitigation: Less than Significant

Implementation of **Mitigation Measure CUL-2** would reduce potentially significant impacts to previously undiscovered archaeological resources to a less-than-significant level. This measure requires that all ground-disturbing activities cease within a defined buffer (100 feet) upon discovery of any potential archaeological materials, thereby immediately preventing further disturbance or destruction of the resource. The requirement to retain a qualified archaeologist ensures that any discovery is evaluated in accordance with professional standards and CEQA Guidelines § 15064.5[80], allowing for appropriate determination of significance and treatment.

In addition, if resources are determined to be Native American in origin, the measure mandates consultation with appropriate Tribal representatives. This provision ensures that culturally appropriate treatment measures—such as avoidance, preservation in place, or data recovery—are developed collaboratively, consistent with current regulatory and professional practices. The requirement that construction cannot resume until evaluation and any necessary mitigation is completed ensures that impacts are not only identified but also fully addressed prior to further disturbance.

Given that the Proposed Project involves substantial ground disturbance associated with construction of the aquatic center, including excavation for pool foundations, surge tanks, and associated infrastructure, this mitigation framework is critical to ensuring that any buried resources encountered during these activities are properly managed. By halting work, evaluating the resource, and implementing appropriate treatment measures before construction resumes, the potential for damage or destruction of significant archaeological resources would be avoided or minimized to the extent feasible.

Therefore, with implementation of **Mitigation Measure CUL-2**, impacts to unknown archaeological resources would be reduced to a less-than-significant level.

Impact CUL-3: Disturb any Human Remains, Including Those Interred Outside of Formal Cemeteries

Impact: Less than Significant

Based on documentary research, no evidence suggests that any prehistoric or historic-era marked or un-marked human interments are present within or in the immediate vicinity of the project site. Project construction would require excavation that would extend into native soils, with the potential to encounter previously unknown human remains. There are existing regulatory requirements for the handling of human remains inadvertently uncovered during excavation activities. These include HSC § 7050.5[81], PRC § 5097.98[82], and CEQA Guidelines § 15064.5(e)[83]. Pursuant to these codes, in the event of the discovery of unrecorded human remains during construction, excavations shall halt immediately, and the county coroner shall be notified. If the human remains are determined to be Native American, the NAHC would be notified within 24 hours and the guidelines of the NAHC would be

[80] CEQA Guidelines § 15064.5
[81] HSC § 7050.5
[82] PRC § 5097.98
[83] CEQA Guidelines § 15064.5(e)

adhered to in the treatment and disposition of the remains. Compliance with these regulatory protocols would ensure that impacts on human remains would be less than significant. This issue is not analyzed further.

Mitigation Measures

No mitigation measures are required. Compliance with existing regulatory requirements, including HSC § 7050.5[84], PRC § 5097.98[85], and CEQA Guidelines § 15064.5(e)[86], would ensure that impacts to human remains are less than significant; therefore, mitigation is not warranted.

3.3.3.4 Cumulative Impacts

Impact: Less than Significant

Cumulative impacts to historical resources would occur if the Proposed Project, in combination with past, present, and reasonably foreseeable future projects identified in **Section 2.5**, would result in a cumulatively considerable contribution to the loss or substantial adverse alteration of historical resources within the region (CEQA Guidelines §§ 15130[87] and 15064.5).

The Proposed Project involves improvements within the existing MHS campus, which has been identified as eligible for listing in the NRHP under Criterion C and the CRHR under Criterion 3 for its Post-World War II Modern architectural design (PCR 2017a). Potential impacts associated with the Proposed Project would be limited to on-site modifications to specific buildings and features within the campus.

Historic resources such as school campuses are typically evaluated as individual resources or, where applicable, as contributors to a defined historic district. MHS is not identified as part of a larger historic district that includes other District campuses. Therefore, impacts to MHS would not combine with impacts to other school sites to result in a cumulative impact to a single historical resource or district.

While other District campuses may also be eligible historical resources and may undergo separate modernization or improvement projects, these projects would affect distinct and geographically separate resources. As such, impacts to those resources would not be cumulatively considerable with impacts to MHS because they do not collectively contribute to the degradation of a shared historical resource or unified historical context beyond what is already accounted for in regional conditions.

Furthermore, each individual project affecting a historical resource would be subject to CEQA review and, where applicable, mitigation measures to reduce impacts to less-than-significant levels. This regulatory framework ensures that potential impacts to historical resources are addressed on a project-by-project basis.

[84] HSC § 7050.5
[85] PRC § 5097.98
[86] CEQA Guidelines § 15064.5
[87] CEQA Guidelines § 15130

Therefore, the Proposed Project would not result in a cumulatively considerable contribution to cumulative impacts on historical resources, and cumulative impacts would be less than significant.

Mitigation Measures

No mitigation measures are required. Because the Proposed Project would not result in a cumulatively considerable contribution to impacts on historical resources, cumulative impacts would be less than significant, and mitigation is not warranted.

3.3.4 References

Kleinfelder 2025. District-Wide Cultural Resources Assessment Report Update for Long Beach Unified School District, Los Angeles County, California. Report prepared for Long Beach Unified School District.

PCR Services Corporation 2017a. Archaeological Resources Assessment of the Proposed Long Beach Unified School District Facility Master Plan, City Of Long Beach, Los Angeles County, California. Report prepared for Long Beach Unified School District.

PCR Services Corporation 2017b. District-Wide Historical Resources Assessment for Long Beach Unified School District, City of Long Beach, Los Angeles County, California. Report prepared for Long Beach Unified School District.

Rancho Los Alamitos 2025. History of Rancho Los Alamitos. Available online at: https://www.rancholosalamitos.org/history-of-the-site.html. Accessed January 21, 2026.

3.4 GREENHOUSE GAS EMISSIONS

This section presents a summary of statutes, regulations, and plans applicable to GHG emissions; a summary of climate change science and GHG sources in California; quantification of project-generated GHGs and discussion about their contribution to global climate change; and analysis of the Proposed Project's resiliency to climate change-related risks. In addition, mitigation measures are recommended to reduce the Proposed Project's contribution to climate change.

3.4.1 Regulatory Setting

3.4.1.1 Federal

Supreme Court Ruling

In Carbon Dioxide is an Air Pollutant In Massachusetts et al. v. Environmental Protection Agency et al., 549 U.S. 497 (2007), the Supreme Court of the United States ruled that carbon dioxide (CO_2) is an air pollutant as defined under the federal CAA and that the USEPA has the authority to regulate GHG emissions. In 2010, the USEPA started to address GHG emissions from stationary sources through its New Source Review (NSR) permitting program, including operating permits for "major sources" issued under Title V of the federal CAA.

National Highway Traffic Safety Administration

Corporate Average Fuel Economy Standards

The National Highway Traffic Safety Administration regulates vehicle emissions through the Corporate Average Fuel Economy (CAFE) Standards. On April 1, 2022, the Secretary of Transportation unveiled new CAFE standards for 2024 – 2026 model year passenger cars and light-duty trucks. These new standards require new vehicles sold in the United States to average at least 40 miles per gallon and apply to all states except those that enforce stricter standards.

3.4.1.2 State

Statewide GHG Emission Targets and Climate Change Scoping Plan

Reducing GHG emissions in California has been the focus of the State government for nearly two decades. GHG emission targets established by the State Legislature include reducing Statewide GHG emissions to 1990 levels by 2020 (Assembly Bill [AB] 32 of 2006[88]) and reducing them to 40 percent below 1990 levels by 2030 (Senate Bill [SB] 32 of 2016[89]). Executive Order (EO) S-3-05[90], signed by former Governor Arnold Schwarzenegger, calls for Statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. This target was superseded by AB 1279[91], which codifies a goal for carbon neutrality and the reduction of emissions by 85 percent below 1990 levels by 2045. These

[88] AB 32 of 2006
[89] SB 32 of 2016
[90] EO S-3-05
[91] AB 1279

targets are consistent with internationally recognized scientific thresholds to limit global warming to well below 2 degrees Celsius (3.6 degrees Fahrenheit) above pre-industrial levels and to pursue efforts to limit warming to 1.5 degrees Celsius (2.7 degrees Fahrenheit)[92].

On December 16, 2022, CARB adopted the *Final 2022 Scoping Plan for Achieving Carbon Neutrality*[93] (2022 Scoping Plan), which traces the State's pathway to achieve its carbon neutrality and an 85 percent reduction in 1990 emissions goal by 2045 using a combined top-down, bottom-up approach under various scenarios. It identifies the reductions needed by each GHG emission sector (e.g., transportation [including off-road mobile source emissions], industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste) to achieve these goals. The State has also passed more detailed legislation addressing GHG emissions associated with transportation, electricity generation, and energy consumption, as summarized below.

Transportation-Related Standards and Regulations

As part of its Advanced Clean Cars program, CARB established more stringent GHG emission standards and fuel efficiency standards for fossil fuel-powered on-road vehicles than the USEPA standards. In addition, the program's Zero-Emission Vehicle (ZEV) regulation requires manufacturers to produce increasing numbers of battery electric, fuel cell, and plug-in hybrid electric vehicles, with CARB projecting that ZEVs would account for approximately 15 percent of new vehicle sales in California by 2025.[94] In August 2022, CARB adopted the Advanced Clean Cars II program, which sets sales requirements for ZEVs to ultimately reach the goal of 100 percent ZEV sales in the State by 2035[95].

EO B-48-18[96], signed by former Governor Jerry Brown in January 2018, requires all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as 200 hydrogen-fueling stations and 250,000 EV-charging stations installed by 2025. It specifies that 10,000 of these charging stations must be direct current fast chargers.

CARB adopted the Low Carbon Fuel Standard (LCFS) in 2007 to reduce the carbon intensity (CI) of California's transportation fuels. Low-CI fuels emit less CO_2 than other fossil fuel-based fuels such as gasoline and fossil diesel. The LCFS applies to fuels used by on-road motor vehicles and off-road vehicles, including construction equipment[97].

In addition to regulations addressing tailpipe emissions and transportation fuels, the State Legislature has enacted statutes to reduce vehicle miles traveled by on-road vehicles. Since passage of SB 375 in 2008, CARB requires metropolitan planning organizations to develop and adopt sustainable communities strategies as a component of the federally prepared regional transportation plans to demonstrate how the region will achieve CARB-adopted GHG emission reduction targets from passenger

[92] Intergovernmental Panel on Climate Change (IPCC), 2018. *Global Warming of 1.5°C*
[93] *Final 2022 Scoping Plan for Achieving Carbon Neutrality*
[94] *CARB Advanced Clean Cars Summary*
[95] Advanced Clean Cars II (CARB)
[96] EO B-48-18
[97] Low Carbon Fuel Standard Program Overview (CARB)

cars and light-duty trucks in their respective regions for 2020 and 2035[98]. These plans link land use and housing allocation to transportation planning and related mobile-source emissions.

Legislation Associated with Electricity Generation

The State has passed legislation requiring the increasing use of renewables to produce electricity for consumers. California utilities are required to generate 33 percent of their electricity from renewables by 2020 (SB X1-2 of 2011[99]); 44 percent by 2024 (SB 100 of 2018[100]); 52 percent by 2027 (SB 100 of 2018); 60 percent by 2030 (SB 100 of 2018); 90 percent by 2035 (SB 1020 of 2022[101]); 95 percent by 2040 (SB 1020 of 2022); and 100 percent by 2045 (SB 100 of 2018). By 2035, 100 percent of electricity procured by State agencies shall be from renewables (SB 1020 of 2022).

Building Energy Efficiency Standards (CCR Title 24, Part 6)

Energy consumption in new residential and nonresidential buildings in California is regulated by the Building Energy Efficiency Standards (Title 24, Part 6), adopted by the California Energy Commission (CEC). These standards were first established in 1978 in response to legislative direction to reduce statewide energy consumption and are updated on a triennial basis to incorporate technological advancements and improve energy performance.

The 2025 Building Energy Efficiency Standards (2025 Energy Code)[102] were adopted in 2024 and became effective on January 1, 2026, superseding the 2022 standards. The 2025 Energy Code builds upon prior updates by further advancing building electrification, improving heat pump performance requirements, expanding solar photovoltaic (PV) and battery storage provisions, and strengthening requirements for energy-efficient building envelopes and ventilation systems. These updates are intended to reduce building energy demand, support grid reliability, and further decrease greenhouse gas (GHG) emissions associated with building operations.

The preceding 2022 Energy Code[103], which became effective January 1, 2023, introduced requirements encouraging electric-ready construction, expanded PV and battery storage standards, and enhanced ventilation requirements to improve indoor air quality. The California Energy Commission (CEC) estimated that implementation of the 2022 Building Energy Efficiency Standards would result in approximately $1.5 billion in consumer benefits and reduce approximately 10 million metric tons of greenhouse gas (GHG) emissions over a 30-year period (CEC 2021; CEC 2023)[104].

[98] 2018 SB 375 Progress Report (CARB)
[99] SB X1-2 of 2011
[100] SB 100 of 2018
[101] SB 1020 of 2022
[102] 2025 Energy Code
[103] 2022 Energy Code
[104] CEC-400-2023-008

California Green Building Standards (CCR Title 24, Part 11)

The California Green Building Standards Code (CALGreen; Title 24, Part 11)[105] is adopted and maintained by the California Building Standards Commission (BSC) and establishes mandatory green building standards for residential and nonresidential construction statewide. CALGreen[106] is updated every three years in coordination with other Title 24 code updates and includes both mandatory measures and voluntary "Tier 1" and "Tier 2" reach standards that jurisdictions may adopt.

The 2025 CALGreen Code was adopted in 2024 and will become effective on January 1, 2026, replacing the 2022 CALGreen Code. The 2025 CALGreen Code continues to strengthen requirements related to electric vehicle (EV) charging infrastructure, water efficiency, construction waste reduction, and material conservation. It also supports statewide climate goals by promoting all-electric building design readiness, enhanced indoor environmental quality, and reduced lifecycle environmental impacts of construction.

The 2022 CALGreen Code[107], effective January 1, 2023, strengthened provisions related to EV infrastructure, bicycle parking, water conservation, and material efficiency compared to the 2019 code cycle. CALGreen works in conjunction with the Energy Code (Title 24, Part 6) to reduce GHG emissions through improved building performance, reduced energy and water consumption, and increased sustainability in construction practices. Local jurisdictions may adopt more stringent CALGreen reach standards to further advance climate and sustainability objectives.

These codes are adopted by local agencies that enforce building codes and used as guidelines by State agencies for meeting the requirements of EO B-18-12[108].

3.4.1.3 Local

South Coast Air Quality Management District

The project site is located within the jurisdiction of the SCAQMD, the regional agency responsible for regulating stationary sources of air pollution within the SCAB, which includes Los Angeles County. SCAQMD develops regional AQMPs and implements rules and regulations to achieve State and federal air quality standards. While GHGs are regulated primarily at the State and federal levels, SCAQMD provides guidance for evaluating GHG emissions under CEQA, including recommended screening thresholds and methodologies for assessing project-level GHG emissions. SCAQMD has identified a recommended 3,000 metric tons of carbon dioxide equivalent per year ($MTCO_2e/yr$) screening threshold for determining whether a project may have a cumulatively considerable contribution to GHG emissions. Projects that generate emissions below this screening level are generally considered less than significant with respect to GHG emissions under CEQA.

[105] CCR Title 24, Part 11
[106] CALGreen
[107] CALGreen
[108] EO B-18-12

City of Long Beach

At the local level, the City of Long Beach has adopted plans and policies intended to reduce GHG emissions and support Statewide climate objectives. The City's Climate Action and Adaptation Plan[109] (CAAP) establishes a framework to reduce communitywide GHG emissions through strategies focused on energy efficiency, renewable energy, sustainable transportation, waste reduction, water conservation, and climate resilience. In addition, the City's General Plan, including the Mobility Element[110] and Urban Design Element[111], promotes compact development patterns, multimodal transportation, and improvements to pedestrian and bicycle infrastructure that can reduce vehicle miles traveled and associated GHG emissions. Implementation of these local policies, along with Statewide regulations related to energy efficiency, renewable energy, and transportation emissions, contributes to ongoing reductions in GHG emissions within the City of Long Beach. The Proposed Project would be required to comply with applicable State and local regulations and policies that support GHG emission reductions.

3.4.2 Environmental Setting

The project site is located within the existing MHS campus in the City of Long Beach, an urbanized area characterized by institutional, residential, and commercial land uses. Existing GHG emissions in the Proposed Project area are primarily associated with mobile sources from vehicle travel on surrounding roadways, energy consumption from buildings, and other typical urban activities. As with most developed areas in Southern California, these sources collectively contribute to regional GHG emissions within the SCAB.

For CEQA analysis, GHG emissions associated with individual development projects are typically evaluated in terms of carbon dioxide equivalents (CO_2e), a metric that accounts for the global warming potential of different GHGs relative to CO_2. Proposed Project-related emissions would primarily result from construction activities (e.g., operation of construction equipment and worker trips) and operational activities (e.g., electricity and natural gas consumption, water use, solid waste generation, and vehicle trips associated with school operations). These emissions are evaluated relative to applicable significance thresholds and in the context of the Statewide regulatory framework intended to reduce GHG emissions over time.

3.4.3 Environmental Impacts and Mitigation Measures

The following impact analysis evaluates the Proposed Project's impacts compared to the thresholds of significance for which the IS disclosed as potentially significant.

[109] City of Long Beach Climate Action and Adaptation Plan
[110] City of Long Beach General Plan Mobility Element
[111] City of Long Beach General Plan Urban Design Element

3.4.3.1 Thresholds of Significance

The issue of global climate change is inherently a cumulative issue because the GHG emissions of individual projects cannot be shown to have any material effect on global climate. Thus, the Proposed Project's impact on climate change is addressed only as a cumulative impact.

According to Appendix G of the CEQA Guidelines[112], a project would normally result in a significant impact on the environment if the project would:

- **GHG-1:** Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or
- **GHG-2:** Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

3.4.3.2 Methodology

GHG emissions associated with the Proposed Project were estimated using CalEEMod, Version 2022.1, a Statewide land use emissions model developed by CAPCOA. CalEEMod quantifies emissions associated with both construction activities and long-term operation of land use projects. Construction emissions are based on project-specific assumptions regarding demolition, grading, building construction, paving, architectural coating, construction equipment usage, and worker vehicle trips. Operational emissions are estimated based on factors including building energy consumption, water use, solid waste generation, and vehicle trips associated with project operations.

GHG emissions are reported in $MTCO_2e/yr$, which accounts for the global warming potential of different GHGs including CO_2, methane, and nitrous oxide. For the purposes of this analysis, Proposed Project emissions were compared to the SCAQMD recommended screening threshold of 3,000 $MTCO_2e/yr$ for determining whether a project's operational emissions could have a cumulatively considerable contribution to regional GHG emissions. Construction emissions are considered temporary and are therefore assessed qualitatively in the context of the overall project emissions profile. The CalEEMod output tables are included as **Appendix B**.

3.4.3.3 Analysis of Project Impacts

Impact GHG-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment

Impact: Less Than Significant

Construction and operation of the Proposed Project would result in GHG emissions associated with fuel combustion from construction equipment, worker and vendor vehicle trips, building energy consumption, water use, solid waste disposal, and vehicle trips associated with school operations. These emissions were quantified using CalEEMod as described earlier.

[112] Appendix G of the CEQA Guidelines

Construction Emissions

Construction of the Proposed Project would include demolition of existing structures, site preparation, building construction, and installation of the new competition pool and support facilities. Construction activities would generate temporary GHG emissions primarily from the use of diesel-powered construction equipment and worker vehicle trips.

Based on the CalEEMod modeling results, the highest annual construction emissions occur during the first year of construction, with emissions estimated at approximately 215 $MTCO_2e$/year. Over the remaining construction period, annual emissions are lower than this peak year value. Because construction emissions occur over a limited timeframe and do not represent a long-term increase in GHG emissions, SCAQMD does not identify a specific significance threshold for construction-related GHG emissions. These emissions are therefore considered temporary and would not result in a significant impact.

Operational Emissions

Operational GHG emissions associated with the Proposed Project would result primarily from building electricity use, natural gas consumption, water conveyance and treatment, solid waste disposal, and vehicle trips associated with the use of the aquatic center and ongoing school activities.

According to the CalEEMod results, the Proposed Project would generate approximately 789 $MTCO_2e$/yr during operation.

SCAQMD recommends a screening threshold of 3,000 $MTCO_2e$/yr for determining whether a project's operational emissions may be considered cumulatively considerable. As shown in **Table 8**, the estimated operational emissions from the Proposed Project would be below the SCAQMD screening threshold of 3,000 $MTCO_2e$/yr.

Table 8. Annual Project Operational GHG Emissions

Emission Sources	CO_2e (Metric Tons per Year)
Energy	467.22
Water	0.61
Waste	8.43
Stationary Emissions (Heater)	312.91
Project Total GHG Emissions	**789.17**

Note: CO_2e = carbon dioxide equivalent
Source: Appendix B

Because the Proposed Project's operational emissions would not exceed the recommended screening threshold, the Proposed Project would not generate GHG emissions that would have a significant impact on the environment.

Mitigation Measures

No mitigation measures are required. Because construction emissions would be temporary and operational GHG emissions would remain below the SCAQMD screening threshold, the Proposed Project would not generate GHG emissions that would have a significant impact on the environment, and mitigation is not warranted.

Impact GHG-2: Would the Proposed Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions?

Impact: Less Than Significant

The Proposed Project would be required to comply with numerous federal, State, and local regulations intended to reduce GHG emissions. These include implementation of the CEC (Title 24 Part 11), CALGreen[113] and Statewide programs that promote renewable energy generation, increased vehicle fuel efficiency, and the transition to ZEVs.

The Proposed Project would also be consistent with local policies adopted by the City of Long Beach, including the CAAP and General Plan policies that support energy efficiency, sustainable building design, and reductions in vehicle miles traveled. The Proposed Project would involve construction of a new aquatic center within the existing MHS campus and would not substantially alter land use patterns or induce new development that would conflict with these policies.

Additionally, because the Proposed Project's operational GHG emissions would be below the SCAQMD screening threshold, the Proposed Project would not make a cumulatively considerable contribution to regional GHG emissions and would not interfere with the State's ability to meet its GHG reduction targets.

For these reasons, the Proposed Project would not conflict with applicable plans, policies, or regulations adopted to reduce GHG emissions.

Mitigation Measures

No mitigation measures are required. Because the Proposed Project would comply with applicable federal, State, and local regulations and would not conflict with plans, policies, or regulations adopted to reduce GHG emissions, impacts would be less than significant, and mitigation is not warranted.

3.4.3.4 Cumulative Impacts

Impact: Less than Significant

GHG emissions are, by their nature, cumulative because they contribute incrementally to global atmospheric concentrations that result in climate change. Unlike criteria pollutants, the impact of a single project's GHG emissions cannot be meaningfully evaluated in isolation. Therefore, consistent with

[113] CALGreen

CEQA Guidelines[114] and Appendix G[115], the evaluation of GHG emissions focuses on whether a proposed project's incremental contribution to cumulative global climate change would be cumulatively considerable. While related projects within the City of Long Beach and the District contribute to overall emissions, GHG impacts are evaluated at a global scale and are not meaningfully differentiated at the local project list level. The cumulative context for this analysis is global; however, the assessment is informed by applicable regional and Statewide regulatory frameworks, including targets established by CARB and implemented through local and regional planning efforts. As such, the Proposed Project's GHG emissions are evaluated based on consistency with applicable reduction targets and thresholds developed by the SCAQMD, which are designed to ensure that individual projects contribute their fair share toward achieving Statewide climate goals. Accordingly, no separate cumulative analysis is provided, as the Proposed Project's GHG impact determination inherently addresses cumulative conditions.

Mitigation Measures

No mitigation measures are required. Because the Proposed Project would comply with applicable federal, State, and local regulations and would not conflict with plans, policies, or regulations adopted to reduce GHG emissions, impacts would be less than significant, and mitigation is not warranted.

3.4.4 References

CARB (California Air Resources Board) 2018. 2018 Progress Report: California's Sustainable Communities and Climate Protection Act. Sacramento, CA: California Air Resources Board. November 2018. Available online at: 2018 Progress Report: California's Sustainable Communities & Climate Protection Act. Accessed April 2, 2026.

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CARB (California Air Resources Board). n.d**.** *Low Carbon Fuel Standard.* Sacramento, CA: California Air Resources Board. Available online at: Low Carbon Fuel Standard | California Air Resources Board. Accessed April 2, 2026.

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[114] CEQA Guidelines

[115] Appendix G of the CEQA Guidelines

CEC (California Energy Commission) 2023. *Impact Analysis: 2022 Update to the California Energy Code*. Publication No. CEC-400-2023-008. Sacramento, CA: California Energy Commission. June 2023. Available online at: Impact Analysis: 2022 Update to the California Energy Code | California Energy Commission. Accessed April 2, 2026.

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3.5 NOISE

This section evaluates the potential impacts of the Proposed Project on the ambient noise environment. The analysis addresses short-term construction noise and vibration associated with site preparation and building activities, as well as long-term operational noise associated with use of the aquatic center. The evaluation is based on the *Noise Impact Analysis, Millikan High School Aquatic Center Project* (**Appendix D**), which provides detailed modeling of project-related noise levels and assessment of potential impacts.

This section includes a discussion of the applicable regulatory framework governing noise, a description of existing noise conditions in the vicinity of the project site, a summary of the methodology used to assess noise and vibration impacts as presented in **Appendix D**, applicable thresholds of significance, an evaluation of project-related and cumulative impacts, and identification of feasible mitigation measures where necessary.

3.5.1 Regulatory Setting

3.5.1.1 Federal

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972[116], which serves three purposes:

- Promulgating noise emission standards for interstate commerce,
- Assisting state and local abatement efforts, and
- Promoting noise education and research.

The federal Office of Noise Abatement and Control (ONAC) was initially tasked with implementing the Noise Control Act. However, the ONAC has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees. For example, the Occupational Safety and Health Administration agency prohibits exposure of workers to excessive sound levels. The Department of Transportation assumed a significant role in noise control through its various operating agencies. The Federal Aviation Administration regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration (FTA). Transit noise is regulated by the FTA, while freeways that are part of the interstate highway system are regulated by the Federal Highway Administration (FHWA). The federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that "noise sensitive" uses are either prohibited from being sited adjacent to a highway or, alternately that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Although the Proposed Project is not under the jurisdiction of the FTA, the *Transit Noise and Vibration Impact Assessment Manual* [117](FTA Manual), published by the FTA in September 2018, is a document

[116] Noise Control Act of 1972 (federal)

[117] *Transit Noise and Vibration Impact Assessment Manual*

from a government agency that provides specific guidance for construction noise and is referenced in the City General Plan Noise Element[118] (June 2023) which details that the federal standards may be used when local criteria are not established. The FTA recommends developing construction noise criteria on a project-specific basis that utilizes local noise ordinances if possible. However, local noise ordinances usually relate to nuisance and hours of allowed activity and sometimes specify limits in terms of maximum levels but are generally not practical for assessing the noise impacts of a construction project. Project construction noise criteria should take into account the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land uses. The FTA standards are based on extensive studies by the FTA and other government agencies on the human effects and reaction to noise. A summary of the FTA findings for a general construction noise assessment are provided below in **Table 9**.

Table 9. FTA General Assessment Construction Noise Criteria

Land Use	Day (dBA Leq [1-hour])	Night (dBA Leq [1-hour])
Residential	90	80
Commercial	100	100
Industrial	100	100

Notes: dBA = A-weighted decibel; Leq = equivalent continuous sound level
Source: FTA 2018.

Because the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation sources, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

3.5.1.2 Noise Standards

California Department of Health Services Office of Noise Control

Established in 1973, the California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the "Land Use Compatibility for Community Noise Environments Matrix," which allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise.

California Noise Insulation Standards

Title 24, Chapter 1, Article 4 of the California Administrative Code (California Noise Insulation Standards) requires noise insulation in new hotels, motels, apartment houses, and dwellings (other than single-family detached housing) that provides an annual average noise level of no more than 45 A-weighted decibels (dBA) 24-hour average A-weighted sound level (CNEL). When such structures are located within a 60-dBA CNEL (or greater) noise contour, an acoustical analysis is required to ensure that interior levels

[118] City of Long Beach General Plan Noise Element

do not exceed the 45-dBA CNEL annual threshold. In addition, Title 21, Chapter 6, Article 1 of the California Administrative Code[119] requires that all habitable rooms, hospitals, convalescent homes, and places of worship shall have an interior CNEL of 45 decibels (dB) or less due to aircraft noise.

Government Code Section 65302

Government Code § 65302[120] mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

California Vehicle Code Section 27200-27207 – On-Road Vehicle Noise

California Vehicle Code §§ 27200-27207[121] provides noise limits for vehicles operated in California. For vehicles over 10,000 pounds noise is limited to 88 dB for vehicles manufactured before 1973, 86 dB for vehicles manufactured before 1975, 83 dB for vehicles manufactured before 1988, and 80 dB for vehicles manufactured after 1987. All measurements are based at 50 feet from the vehicle.

California Vehicle Sections 38365-38380 – Off-Road Vehicle Noise

California Vehicle Code §§ 38365-38380[122] provides noise limits for off-highway motor vehicles operated in California. 92 dBA for vehicles manufactured before 1973, 88 dBA for vehicles manufactured before 1975, 86 dBA for vehicles manufactured before 1986, and 82 dBA for vehicles manufactured after December 31, 1985. All measurements are based at 50 feet from the vehicle.

3.5.1.3 Vibration Standards

Title 14 of the California Administrative Code § 15000[123] requires that all State and local agencies implement the CEQA Guidelines, which requires the analysis of exposure of persons to excessive groundborne vibration. However, no statute has been adopted by the State that quantifies the level at which excessive groundborne vibration occurs.

The California Department of Transportation (Caltrans) issued the *Transportation and Construction Vibration Guidance Manual*[124] in April 2020. The Manual provides practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. However, this manual is also used as a reference point by many lead agencies and CEQA practitioners throughout California, as it provides numeric thresholds for vibration impacts. Thresholds are established for continuous (construction-

[119] California Administrative Code Title 21, Chapter 6, Article 1
[120] California Government Code § 65302
[121] California Vehicle Code §§ 27200-27207
[122] California Vehicle Code §§ 38365-38380
[123] California Administrative Code Title 14 § 15000
[124] *Transportation and Construction Vibration Guidance Manual*

related) and transient (transportation-related) sources of vibration, which found that the human response becomes distinctly perceptible at 0.25 inch per second peak particle velocity (PPV) for transient sources and 0.04 inch per second PPV for continuous sources.

3.5.1.4 Local

City of Long Beach Municipal Code

The City's Municipal Code identifies standards for noise intrusion from non-transportation sources within various Noise Districts. The Proposed Project is located in Noise District One. **Table 10** summarizes the applicable standards in Noise District One.[125]

Table 10. City of Long Beach Municipal Code Exterior Noise Standards

Noise level that may not be exceeded for more than:	Daytime[a] 7 a.m. – 10 p.m.	Nighttime[a] 10 p.m. – 7 a.m.
30 minutes in any hour	50 dBA	45 dBA
15 minutes in any hour	55 dBA	50 dBA
5 minutes in any hour	60 dBA	55 dBA
1 minute in any hour	65 dBA	60 dBA
Any time	70 dBA	65 dBA

Notes: dBA = A-weighted decibel
a. In the event that the alleged offensive noise contains a steady audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering or riveting or contains music or speech conveying informational content, the specified noise limits are reduced by 5 dBA.
Source: City of Long Beach Municipal Code Chapter 8.80.160[126].

Section 8.80.202[127] of the City's Municipal Code (Noise Ordinance) regulates noise from construction activities. These regulations limit the permissible hours of construction to between 7:00 a.m. and 7:00 p.m. on weekdays or federal holidays and between 9:00 a.m. and 6:00 p.m. on Saturdays. Construction is generally prohibited on Sundays. The Noise Ordinance also limits hours of operation for mechanically powered tools (e.g., saws, sanders, drills, grinders, lawnmowers, and garden tools) from 7:00 a.m. to 10:00 p.m. Leaf blowers have more stringent standards and can only be used between 8:00 a.m. and 8:00 p.m. on weekdays, 9:00 a.m. and 5:00 p.m. on Saturdays, and 11:00 a.m. and 5:00 p.m. on Sundays.

The Noise Ordinance also provides standards for vibration (Municipal Code Chapter 8.80.200(G)[128]). It is a violation to operate or permit the operation of any device that creates vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the source. The Noise Ordinance defines the perception threshold as 0.001 g's in the frequency range of 0-30 hertz (Hz)

[125] City of Long Beach Municipal Code Chapter 8.80 - Noise
[126] City of Long Beach Municipal Code Chapter 8.80.160 - Exterior noise limits-Correction for character of sound.
[127] City of Long Beach Municipal Code Chapter 8.80.202 - Construction activity-Noise regulations.
[128] City of Long Beach Municipal Code Chapter 8.80.200(G) - Noise disturbances-Acts specified.

and 0.003 g's in the frequency range between 30 and 100 Hz. It should be noted that this perception threshold is only applicable to vibration caused during operation of the Proposed Project.

3.5.2 Environmental Setting

3.5.2.1 Acoustic Fundamentals

Sound, Noise, and Acoustics

Sound is the mechanical energy of a vibrating object transmitted as pressure waves through a liquid or gas (e.g., air) to the human ear, while noise is defined as sound that is loud, unexpected, annoying, or otherwise unwanted. In acoustics, the fundamental model consists of a source, a receiver, and the propagation path between them. The perceived sound level and characteristics depend on the source intensity and factors affecting transmission, such as obstructions and atmospheric conditions. The field of acoustics focuses on the propagation and control of sound.

Continuous sound is characterized by frequency (pitch) and amplitude (loudness). Lower-frequency sounds are perceived as lower in pitch, and frequency is measured in cycles per second, or Hz (e.g., 250 Hz), with higher frequencies sometimes expressed in kilohertz. The typical audible range for humans extends from approximately 20 Hz to 20,000 Hz.

Vibration is the periodic oscillation of an object or medium relative to a reference point and may result from natural sources such as earthquakes, volcanic eruptions, sea waves, and landslides, or from human activities such as explosions, machinery, traffic, trains, and construction equipment. Vibration can be continuous (e.g., operating machinery) or transient (e.g., explosions) and is described by amplitude and frequency in terms of displacement, velocity, or acceleration.

Vibration amplitude is commonly expressed as PPV or root-mean-square (RMS) velocity, typically measured in inches or millimeters per second. PPV represents the maximum instantaneous peak of a vibration signal and is typically used to evaluate transient or impact vibrations, as it correlates well with structural stress and potential building damage (FTA 2018; Caltrans 2020).

RMS velocity better represents human perception of vibration because the human body responds to average vibration over time rather than instantaneous peaks. RMS is often expressed in vibration decibels (VdB), based on a reference value of 1 micro-inch per second, to compress the range of values (FTA 2018; Caltrans 2020).

Typical background vibration levels in residential areas are approximately 50 VdB, while vibration becomes perceptible to humans at around 65 VdB. A level of approximately 75 VdB generally marks the transition from barely perceptible to distinctly perceptible vibration (FTA 2018; Caltrans 2020).

Common outdoor sources of perceptible ground vibration include construction equipment, steel-wheeled trains, and traffic on rough roads, whereas smooth roadways rarely produce perceptible vibration. Vibration levels of interest typically range from approximately 50 VdB (background) to 100 VdB, which represents a general threshold at which minor damage to fragile structures may occur. Construction activities can generate ground vibrations sufficient to weaken structures, crack facades, and disturb occupants (FTA 2018).

Construction-related vibration may be transient, continuous, or random in nature. Transient vibrations are generated by activities such as blasting, impact pile driving, and wrecking balls; continuous vibrations are associated with vibratory pile drivers, large pumps, and compressors; and random vibrations may result from jackhammers, pavement breakers, and heavy construction equipment.

3.5.2.2 Existing Noise Environment

The field survey noted that noise within the Proposed Project area is generally characterized by vehicle traffic on the nearby roadways (Belen Street and Palo Verde Avenue) and from activities at MHS. Peak hourly noise levels are expected to occur during morning commute periods, while minimum levels occur during early morning hours. Overall, the ambient soundscape is dominated by vehicular traffic with intermittent contributions from on-campus activities, and represents a moderately high noise environment typical of developed urban educational land uses.

To determine the existing noise levels, ambient noise measurements were collected in the vicinity of the project site over a 24-hour period to assess daytime noise levels. Noise measurements were taken at the following locations between 2:02 p.m. on Monday, January 26, 2026 and 2:16 p.m. on Tuesday, January 27, 2026:

- near the northwest corner of MHS, approximately 45 feet south of Belen Street centerline and 50 feet east of Snowden Avenue centerline;
- near northeast corner of proposed aquatic center approximately 30 feet south of Belen Street centerline; and
- near the northeast corner of MHS, approximately 40 feet east of Palo Verde Avenue centerline and 80 feet south of Belen Street centerline.

Daytime levels of ambient noise range from approximately 64.7 to 67.4 dBA equivalent continuous sound level (Leq), while nighttime levels decrease to approximately 51.4 to 60.5 dBA Leq, reflecting reduced activity during evening hours. The calculated 24-hour CNEL values range from approximately 65.3 to 66.8 dBA. Details of the equipment used and measurements taken are provided in **Appendix D**.

3.5.3 Environmental Impacts and Mitigation Measures

The following impact analysis evaluates the Proposed Project's impacts compared to the thresholds of significance for which the IS disclosed as potentially significant.

3.5.3.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines[129], a project would normally result in a significant impact on the environment if the project would:

[129] Appendix G of the CEQA Guidelines

- **NOI-1** Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- **NOI-2** Generate excessive groundborne vibration or groundborne noise levels; or
- **NOI-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 2 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.

Impacts Not Discussed Further

In accordance with the IS (**Appendix A**), the nearest airport, Long Beach Airport, is located approximately 2.5 miles northwest of the project site. The project site is outside the airport's established Airport Influence Area and well beyond the 65 dBA CNEL noise contour identified in the Long Beach Airport within the Los Angeles County Airport Land Use Plan[130]. No private airstrips are located within 2 miles of the project site. Therefore, the Proposed Project would not expose students, staff, or visitors to excessive noise levels associated with airport operations and no further analysis for **NOI-3** is required.

3.5.3.2 Methodology

Noise impacts from construction of the Proposed Project have been analyzed through use of the FHWA's Roadway Construction Noise Model (RCNM). The FHWA compiled noise measurement data regarding the noise generating characteristics of several different types of construction equipment used during the Central Artery/Tunnel project in Boston. Table D in **Appendix D** provides a list of the construction equipment anticipated to be used for each phase of construction as detailed in the CalEEMod model run from the Air Quality Report (**Section 3.2**) that was prepared for the Proposed Project. Results from the RCNM as well as the construction equipment noise emissions and usage factors are located in **Appendix D**.

3.5.3.3 Analysis of Project Impacts

Impact NOI-1: Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Proposed Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies

Impact Level: Less than Significant

The Proposed Project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Proposed Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

[130] Los Angeles County Airport Land Use Plan

Construction Noise

Construction activities for the Proposed Project are anticipated to include the demolition of Building 700/3000 and adjacent portable buildings, site preparation and grading, and building construction that would include foundation and pool structure, vertical construction, interior buildout, building/landscape, decking/flatwork, and application of architectural coatings. Noise impacts from construction activities associated with the Proposed Project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities.

Section 8.80.202[131] of the City's Municipal Code (Noise Ordinance) restricts construction activities from occurring between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between 6:00 p.m. and 9:00 a.m. on Saturdays, or anytime on Sundays or federal holidays. Through adherence to the construction-related noise requirements provided in the City's Noise Ordinance, construction-related noise levels would not exceed any noise standards established in the General Plan or Noise Ordinance. However, the General Plan Noise Element[132] details that federal standards may be used when local criteria are not established. As such, the FTA construction noise level standard of 90 dBA at the nearby homes and 100 dBA at the nearby commercial uses have been utilized in this analysis.

Construction noise levels to the nearby sensitive receptors have been calculated through use of the RCNM and the parameters and assumptions detailed in **Appendix D**. The results are shown below in **Table 11** and the RCNM printouts are provided in **Appendix D**.

Table 11 shows that the greatest noise impacts would occur during the demolition, site preparation, grading, and foundations and pool structural shell construction phases, with noise levels as high as 66 dBA Leq at the nearest home to the northwest, 69 dBA Leq at the commercial building to the north, and 64 dBA Leq at the homes to the east. All calculated construction noise levels shown in **Table 11** are within the FTA daytime construction noise standards of 90 dBA at the nearby homes and 100 dBA at the nearby commercial uses. Therefore, through adherence to allowable construction times provided in Section 8.80.202 of the Municipal Code[133], construction activities for the Proposed Project would not create a substantial temporary increase in ambient noise levels that are in excess of applicable noise standards. Impacts would be less than significant. No mitigation would be required.

Operation Noise

Operational noise levels associated with the Proposed Project would remain similar to existing conditions and would not result in a substantial permanent increase in ambient noise levels. The aquatic center would function as part of the existing MHS campus and would support typical school-related activities, including P.E. classes, swim team practices, and occasional athletic events. These activities are

[131] City of Long Beach Municipal Code Chapter 8.80.202 - Construction activity-Noise regulations.

[132] City of Long Beach General Plan Noise Element

[133] City of Long Beach Municipal Code Chapter 8.80.202 - Construction activity-Noise regulations.

consistent with the types of noise-generating uses already occurring on campus and would not introduce new or unusual noise sources beyond those typical of a high school environment.

Table 11. Construction Noise Levels at Nearby Sensitive Receptors

Construction Phase	Construction Noise Level (dBA Leq) at:		
	Home to Northwest[1]	Commercial to North[2]	Homes to East[3]
Demolition	66	69	64
Site Preparation	66	69	64
Grading	66	69	64
Foundations + Pool Structural Shell	66	69	64
Vertical Construction	65	68	63
Interior Buildout	64	67	62
Building/Landscape	64	67	62
Decking/Flatwork	64	67	62
Architectural Coatings	62	66	61
FTA Construction Noise Threshold[4]	**90**	**100**	**90**
Exceed Thresholds?	**No**	**No**	**No**

Notes: dBA = A-weighted decibel; Leq = equivalent continuous sound level
[1] The home to the northwest is located as near as 490 feet from center of the proposed aquatic center.
[2] The commercial building to the north is located as near as 340 feet from center of the proposed aquatic center.
[3] The homes to the east are located as near as 610 feet from center of the proposed aquatic center.
[4] The Federal Transit Administration construction noise thresholds are detailed in Table 11.
Source: *Roadway Construction Noise Model* (FHWA 2006)

The Proposed Project would not result in an increase in student enrollment or staffing levels and therefore would not generate a substantial increase in campus population or associated activity noise. Students currently using other campus facilities would instead utilize the aquatic center, resulting in redistribution rather than an intensification of on-site noise sources. As such, operational noise would remain consistent with existing school operations and would not adversely affect students or other on-campus receptors.

Offsite, the nearest land uses to the north consist primarily of commercial properties, including parking lots associated with adjacent commercial buildings. These land uses are less sensitive to noise than residential receptors and are already subject to typical urban noise sources such as vehicular traffic, commercial activity, and parking lot circulation. Noise generated by the aquatic center, including intermittent noise from student activities or spectators, would be comparable to existing school-related noise and would attenuate with distance. Given the separation between the project site and nearby off-site receptors, and the compatibility of the Proposed Project with the surrounding land use context, operational noise would not result in a substantial increase in ambient noise levels.

Therefore, operational impacts would be less than significant. No mitigation would be required.

Mitigation Measures

No mitigation measures would be required. Because construction noise would comply with applicable City noise requirements and would remain below applicable FTA thresholds, and operational activities would not result in a substantial increase in ambient noise levels, impacts would be less than significant. Mitigation would not be warranted.

Impact NOI-2: Generation of excessive groundborne vibration or groundborne noise levels

Impact Level: Less Than Significant

The Proposed Project would not expose persons to or generation of excessive groundborne vibration or groundborne noise levels. The following section analyzes the potential vibration impacts associated with construction and operation of the Proposed Project.

Construction-Related Vibration Impacts

Construction activities for the Proposed Project are anticipated to include the demolition of Building 700/3000 and adjacent portable buildings, site preparation and grading, and building construction that would include foundation and pool structure, vertical construction, interior buildout, building/landscape, decking/flatwork, and application of architectural coatings. Vibration impacts from construction activities associated with the Proposed Project would typically be created from the operation of heavy off-road equipment. The nearest off-site sensitive receptors to the project site are employees at the commercial building located as near as 210 feet to the north.

Section 8.80.200(G)[134] of the City's Municipal Code limits vibration impacts to the nearby single-family homes to 0.001 g's in the frequency range of 0 to 30 hertz and 0.003 g's in the frequency range of 30 to 100 Hz. The acceleration of gravity (g), which is 32.2 feet per second can be converted into PPV by multiplying 0.001 g's by 32.2 and then converting to inches per second, which results in a threshold of 0.386 inches per second PPV.

The primary source of vibration during construction would be from the operation of a vibratory roller. A vibratory roller would create a vibration level of 0.21 inches per second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest off-site structure (210 feet away) would be 0.02 inches per second PPV. The vibration level at the nearest off-site structure to where heavy off-road equipment would operate would be below the 0.386 inches per second PPV threshold as detailed above. Impacts would be less than significant. No mitigation would be required.

Operations-Related Vibration Impacts

Operational activities associated with the Proposed Project would not generate substantial groundborne vibration or groundborne noise. The aquatic center would function as part of the existing MHS campus and would support typical school-related uses, including P.E. classes, swim practices, and athletic events. These activities do not involve equipment or operational characteristics that are known to

[134] City of Long Beach Municipal Code Chapter 8.80.200(G) - Noise disturbances-Acts specified. G. Vibration.

generate perceptible or excessive groundborne vibration, such as heavy industrial machinery, rail operations, or large mechanical systems with vibration-inducing components.

The Proposed Project would not include stationary sources of vibration such as large compressors, industrial pumps, or other mechanical equipment capable of producing sustained groundborne vibration. Mechanical equipment associated with the aquatic center (e.g., pool pumps and filtration systems) would be typical of school and recreational facilities and would be designed and installed in accordance with standard building codes and engineering practices to minimize vibration. Such equipment is typically enclosed within mechanical rooms or mounted with vibration-isolating features, which would further reduce the potential for vibration transmission beyond the immediate building area.

In addition, the Proposed Project would not result in an increase in student enrollment or traffic volumes that could introduce new sources of vibration, such as increased heavy vehicle activity. Any vehicular activity associated with the facility would be similar to existing school operations and would not result in a noticeable increase in groundborne vibration levels.

Off-site receptors, including nearby commercial uses to the north, are separated from the project site by distance and intervening development, which would further attenuate any minimal vibration that could occur. Given the absence of substantial vibration-generating sources and the compatibility of the Proposed Project with existing campus uses, operational vibration levels would be negligible and would not exceed applicable standards or thresholds.

Therefore, operational vibration impacts would be less than significant. No mitigation would be required.

Mitigation Measures

No mitigation measures would be required. Because construction-related vibration levels would remain below applicable City thresholds and operation of the Proposed Project would not generate substantial sources of vibration, impacts would be less than significant, and mitigation would not be warranted.

3.5.3.4 Cumulative Impacts

Impact: Less than Significant

Cumulative noise impacts would occur if noise generated by the Proposed Project, in combination with noise from past, present, and reasonably foreseeable future projects identified in **Section 2.5** would result in a cumulatively considerable increase in ambient noise levels at nearby sensitive receptors.

Short-term cumulative noise impacts are typically associated with overlapping construction activity. Related projects identified in **Section 2.5** include the Campuswide Renovation Project and the Natatorium Conversion Project on the MHS campus, as well as nearby off-campus development projects in the City of Long Beach. Of these, only the Campuswide Renovation Project could overlap geographically and temporarily with construction of the Proposed Project. However, construction noise associated with the Proposed Project would be temporary, would occur during limited daytime hours in compliance with the City of Long Beach Municipal Code, and would diminish with distance from the

active construction area. In addition, campus-related projects would be subject to the same construction hour limitations and standard construction practices intended to limit nuisance noise. Because construction noise is localized, temporary, and regulated, and because the nearest off-site sensitive receptors would not be exposed to construction noise levels exceeding applicable standards, the Proposed Project would not make a cumulatively considerable contribution to short-term cumulative noise impacts.

Long-term cumulative operational noise impacts would occur if operation of the Proposed Project, together with operation of other nearby projects, would substantially increase ambient noise levels in the project vicinity. Operation of the aquatic center would generate noise associated with student activities, athletic events, spectators, and pool operations. However, the Proposed Project would be located on an existing high school campus in an urbanized setting already characterized by school activity noise, traffic noise, and other community noise sources. The Proposed Project would not introduce a major new stationary noise source, and operational noise would remain generally consistent with the type of activity already occurring on campus. In addition, the related projects identified in **Section 2.5** would not be expected to combine with Proposed Project operations in a manner that would substantially increase ambient noise levels at nearby off-site sensitive receptors beyond existing conditions.

Therefore, the Proposed Project would not result in a cumulatively considerable contribution to cumulative noise impacts, and cumulative noise impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required. Because the Proposed Project would not result in a cumulatively considerable contribution to short-term or long-term noise impacts, cumulative impacts would be less than significant, and mitigation would not be warranted.

3.5.4 References

California Department of Transportation (Caltrans) 2013. *Technical Noise Supplement to the Traffic Noise Analytics Protocol*, September 2013.

Caltrans 2020. *Transportation and Construction Vibration Guidance Manual*, April 2020. Available online at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf. Accessed March 17, 2026.

Federal Transit Administration (FTA) 2018. *Transit Noise and Vibration Impact Assessment,* September 2018. Available online at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed March 18, 2026.

U.S. Department of Transportation, Federal Highway Administration (FHWA) 2006. *FHWA Roadway Construction Noise Model User's Guide,* January, 2006. Available online at: https://www.fhwa.dot.gov/Environment/noise/construction_noise/rcnm/rcnm00.cfm. Accessed March 18, 2026.

3.6 TRIBAL CULTURAL RESOURCES

3.6.1 Regulatory Setting

3.6.1.1 Federal

In addition to the federal laws discussed in **Section 3.3**, other federal laws include the following.

Executive Order 13007 (Indian Sacred Sites)

Executive Order (EO) 13007[135] directs federal agencies to, to the extent practicable and permitted by law, accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sites. The EO applies to federal land-managing agencies and requires that, where appropriate, agencies maintain the confidentiality of sacred site locations to protect them from unauthorized disturbance. It further encourages agencies to consult with federally recognized Tribes and traditional practitioners when actions may affect sacred sites, including undertaking reasonable efforts to identify such sites and consider measures to avoid or minimize impacts. Although EO 13007 does not create a private right of action, it establishes a federal policy framework emphasizing the protection of sacred sites, which may inform agency decision-making under related environmental and cultural resource statutes, including the National Environmental Policy Act and the NHPA.

American Indian Religious Freedom Act (AIRFA)

The American Indian Religious Freedom Act (AIRFA) of 1978[136] establishes a federal policy to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise traditional religions. This includes, but is not limited to, access to sacred sites, use and possession of sacred objects, and the freedom to conduct traditional ceremonies. AIRFA directs federal agencies to evaluate their policies and procedures, in consultation with Native American Tribes and religious leaders, to identify and eliminate unnecessary interference with the practice of traditional religions.

While AIRFA does not provide specific procedural requirements or a private right of action, it serves as an important policy directive guiding federal decision-making, particularly in land management and environmental review processes. Federal agencies are encouraged to consider potential impacts to religious practices and sacred sites when undertaking actions on federal lands or approving federally funded or permitted projects. As such, AIRFA often operates in conjunction with other federal laws, such as the National Historic Preservation Act and the National Environmental Policy Act, to ensure that Tribal religious and cultural concerns are appropriately considered during project planning and implementation.

[135] EO 13007 Indian Sacred Sites
[136] AIRFA

Native American Graves Protection and Repatriation Act

NAGPRA (25 U.S.C. § 3001 et seq.)[137], enacted in 1990, establishes procedures for the treatment and repatriation of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony. NAGPRA applies primarily to federal agencies and institutions that receive federal funding, requiring them to inventory such cultural items and consult with affiliated Tribes regarding their return. The law also establishes requirements for the intentional excavation or inadvertent discovery of Native American human remains and cultural items on federal or tribal lands, including immediate notification and consultation with appropriate Tribes.

While NAGPRA does not directly apply to projects on private or state lands, it provides an important federal framework for the respectful treatment of Native American cultural items and informs best practices for handling inadvertent discoveries during construction. In California, similar requirements are implemented through State laws such as HSC § 7050.5[138] and PRC § 5097.98[139], which require notification of the NAHC and consultation with the MLD in the event that human remains are discovered.

3.6.1.2 State

In addition to the State laws discussed in **Section 3.3**, other State laws and provisions include the following.

Assembly Bill 52

AB 52140, codified in PRC §§ 21073[141] and 21080.3.1[142] through 21080.3.2[143], establishes a formal process for consultation with California Native American Tribes during the CEQA process. AB 52 requires lead agencies to notify tribes that have requested notification of projects within the agency's jurisdiction within 14 days of determining that an application is complete or deciding to undertake a project. Upon receipt of notification, Tribes have 30 days to request consultation. If requested, the lead agency must engage in meaningful, good faith consultation prior to the release of an environmental document or adoption of a negative declaration, mitigated negative declaration, or EIR.

AB 52 also establishes TCRs as a distinct category of cultural resources under CEQA. TCRs may include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe. These resources are unique in that tribes are considered the primary experts in identifying and evaluating their significance, and TCRs may not be readily identifiable through conventional archaeological or historical methods.

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[137] NAGPRA
[138] HSC § 7050.5
[139] PRC § 5097.98
[140] AB 52
[141] PRC § 21073
[142] PRC § 21080.3.1
[143] PRC § 21080.3.2

Under CEQA, a project that may cause a substantial adverse change in the significance of a TCR is considered to result in a significant impact on the environment. AB 52 further requires that consultation consider project alternatives, mitigation measures, and avoidance strategies to reduce or avoid impacts to TCRs. Where appropriate and agreed upon in consultation, mitigation measures may include preservation in place, avoidance, or other culturally appropriate treatment measures. Confidentiality provisions are also included to protect sensitive tribal information shared during consultation (PRC §§ 21082.3 and 21082.3(c)[144]).

Public Resources Code Section 5097.98

This PRC section [145]establishes procedures for the treatment of Native American human remains and associated grave goods discovered on non-federal lands. Following notification by the county coroner pursuant to HSC § 7050.5[146], the NAHC designates an MLD. The MLD is provided the opportunity to make recommendations for the treatment or disposition of the remains and associated items, including preservation in place or reburial. If agreement cannot be reached, the landowner must rebury the remains in a location not subject to further disturbance. This statute ensures that Native American human remains are treated with dignity and in consultation with affiliated Tribes.

3.6.2 Environmental Setting

The NAHC Sacred Lands File (SLF) search identified the presence of Native American cultural resources or places of concern within or in the vicinity of the Proposed Project area. In addition, consultation conducted pursuant to AB 52 confirmed that the project site is located within an area of cultural sensitivity associated with the Gabrielino/Tongva (Kizh) people.

Although no specific TCRs have been identified within the project site, the Proposed Project area is considered sensitive for the potential presence of previously unidentified TCRs, particularly in subsurface contexts.

3.6.3 Environmental Impacts and Mitigation Measures

3.6.3.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines[147], a project would normally result in a significant impact on the environment if the project would:

TCR-1: Cause a substantial adverse change in the significance of a TCRs, defined in PRC § 21074[148] as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and

[144] PRC §§ 21082.3 and 21082.3(c)
[145] PRC § 5097.98
[146] HSC § 7050.5
[147] Appendix G of the CEQA Guidelines
[148] PRC § 21074

scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC § 5020.1(k)[149], or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC § 5024.1[150]. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

3.6.3.2 Methodology

The evaluation of potential impacts to TCRs was based on a combination of database review and consultation with California Native American Tribes. An SLF search request was submitted to the NAHC on August 19, 2025. The NAHC responded on August 26, 2025, indicating that the SLF search was positive.

In accordance with AB 52, the District initiated consultation with California Native American Tribes traditionally and culturally affiliated with the Proposed Project area. On September 26, 2025, consultation request letters were provided to the Torres Martinez Desert Cahuilla Indians, the Gabrieleño Band of Mission Indians – Kizh Nation, and the San Gabriel Band of Mission Indians.

The Gabrieleño Band of Mission Indians – Kizh Nation requested consultation and provided general information regarding their cultural affiliation with the Proposed Project area, including regional ethnographic context and the types of cultural resources known to occur in the greater Long Beach region. No specific TCRs were identified within the project site during consultation. The remaining Tribes did not respond.

Information obtained through the SLF search and AB 52 consultation, in conjunction with the Proposed Project's scope of ground-disturbing activities, was used to evaluate the potential for the Proposed Project to impact TCRs.

3.6.3.3 Analysis of Project Impacts

Impact TCR -1: Cause a substantial adverse change in the significance of a TCR, defined in PRC § 21074[151] 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: 1. Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC § 5020.1(k), or 2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC § 5024.1. In

[149] PRC § 5020.1(k)
[150] PRC § 5024.1
[151] PRC § 21074

applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Impact: Potentially Significant

Construction of the Proposed Project would involve ground-disturbing activities, including excavation, grading, and foundation construction, which have the potential to disturb previously unidentified TCRs that may be present in subsurface soils. Pursuant to PRC § 21074, TCRs may include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe. A substantial adverse change in the significance of a TCR would constitute a significant impact under CEQA (CEQA Guidelines Appendix G[152]).

As described in the Environmental Setting, the NAHC SLF search identified the presence of Native American cultural resources or places of concern within or in the vicinity of the Project area. In addition, consultation conducted pursuant to Assembly Bill 52 (AB 52) confirmed that the project site is located within an area of cultural sensitivity associated with the Gabrieleño Band of Mission Indians – Kizh Nation. Although no specific TCRs were identified within the project site, the tribe indicated that the broader region contains known ethnographic resources and that the potential exists for previously unidentified resources to be encountered during ground disturbance.

Because TCRs may be buried and not visible on the surface, ground-disturbing activities associated with the Proposed Project could result in the inadvertent discovery and potential disturbance or destruction of such resources. This could include cultural deposits, artifacts, or human remains, which may qualify as TCRs. Therefore, the Proposed Project could cause a substantial adverse change in the significance of a TCRs, consistent with CEQA Guidelines Appendix G thresholds, and impacts would be potentially significant.

Implementation of **Mitigation Measures TCR-1** and **TCR-2** (inadvertent discovery procedures and tribal monitoring, as applicable) and T**RC-3** (human remains treatment in accordance with HSC § 7050.5[153] and PRC § 5097.98[154]) would ensure that any previously unidentified TCRs encountered during construction are appropriately identified, evaluated, and treated in consultation with affiliated Tribes. These measures would reduce the potential for disturbance or destruction of TCRs by requiring avoidance, preservation in place where feasible, or culturally appropriate treatment. With implementation of these measures, impacts to TCRs would be reduced to a less-than-significant level.

Mitigation Measures

In order to minimize potential impacts to TCRs, the following mitigation measures would be implemented.

TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.

[152] Appendix G of the CEQA Guidelines
[153] HSC § 7050.5
[154] PRC § 5097.98

A. The District or their designated representative shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. In addition:

B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground- disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.

D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial).

A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects.

A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.

C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).

D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.

E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

Impact after Mitigation: Less Than Significant

Implementation of **Mitigation Measures TCR-1** through **TCR-3**, in combination with compliance with existing regulatory requirements, would reduce potentially significant impacts to TCRs to a less than significant level. **Mitigation Measures TCR 1** requires the presence of a qualified Native American monitor, approved by the Gabrieleño Band of Mission Indians – Kizh Nation, during ground-disturbing activities, ensuring that any previously unidentified TCRs are identified in real time during construction. The monitoring requirement provides an immediate mechanism for recognizing cultural materials that may not be identifiable by construction personnel or visible at the surface.

In the event that a potential TCR is encountered, **Mitigation Measure TCR-2** requires that all work halt within the vicinity of the discovery until the resource can be evaluated by the Kizh monitor and/or a qualified tribal representative. This provision ensures that no further disturbance occurs until the significance of the resource is determined and appropriate treatment measures are implemented. Treatment may include avoidance, preservation in place, or culturally appropriate recovery and curation, as determined by the Tribe. This process ensures that tribal cultural resources are handled in a manner that protects their cultural significance and prevents inadvertent damage or loss.

Mitigation Measure TCR-3 specifically addresses the inadvertent discovery of Native American human remains and associated funerary or ceremonial objects. This measure requires compliance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5, including notification of the County Coroner, consultation with the Native American Heritage Commission (NAHC), and coordination with the Most Likely Descendant (MLD), as applicable. The measure prioritizes preservation in place, where feasible, and requires confidential handling of discoveries to prevent further disturbance. These procedures ensure that human remains and associated cultural materials are treated with dignity and in accordance with state law and tribal preferences.

Because the Project involves ground disturbance associated with construction of the aquatic center, including excavation for foundations, pools, and associated infrastructure, these measures are critical to ensuring that any buried tribal cultural resources are properly identified, evaluated, and treated. Through the combined requirements for monitoring, halting work, tribal consultation, and appropriate treatment of both cultural materials and human remains, the potential for disturbance or destruction of tribal cultural resources would be avoided or minimized to the extent feasible.

Therefore, with implementation of **Mitigation Measures TCR-1** through **TCR-3**, impacts to tribal cultural resources would be reduced to a less than significant level.

3.6.3.4 Cumulative Impacts

Impact: Less Than Significant

Cumulative impacts to TCRs could occur if multiple projects in the region involve ground-disturbing activities that disturb or destroy known or previously unidentified TCRs. The Proposed Project is located within a region identified as culturally sensitive, and other past, present, and reasonably foreseeable future projects in the Long Beach area, including LBUSD campus improvements and regional development, may also involve ground disturbance with the potential to affect subsurface TCRs.

Because TCRs are often not visible at the surface, cumulative impacts could theoretically result from the incremental loss of such resources over time. However, pursuant to CEQA, projects that may affect TCRs are required to comply with AB 52, which mandates consultation with California Native American Tribes, as well as standard regulatory requirements related to the treatment of cultural resources and human remains, including PRC § 5097.98[155] and HSC § 7050.5. These regulatory requirements, in combination with project-specific mitigation measures, are intended to avoid or minimize impacts through consultation, monitoring, and appropriate treatment of discovered resources.

As discussed earlier, implementation of **Mitigation Measures TCR-1** through **TCR-3** would reduce the Proposed Project's impacts to TCRs to a less-than-significant level by requiring tribal monitoring, halting work upon discovery, and consultation regarding appropriate treatment of resources. Because similar regulatory requirements and mitigation measures would apply to other related projects in the region, and because the Proposed Project would not result in a cumulatively considerable contribution to the loss of TCRs, the Proposed Project's incremental contribution to cumulative impacts would not be cumulatively considerable.

Therefore, cumulative impacts to TCRs would be less than significant.

Mitigation Measures

No mitigation measures are required. Because the Proposed Project's incremental contribution to cumulative impacts to TCRs would not be cumulatively considerable with implementation of **Mitigation Measures TCR-1** through **TCR-3**, cumulative impacts would be less than significant, and additional mitigation would not be warranted.

[155] PRC § 5097.98

4 Other CEQA Sections

4.1 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

Section 15126.2[156] of the CEQA Guidelines requires an EIR to identify any significant environmental impacts that cannot be avoided or reduced to a less-than-significant level through the implementation of mitigation measures or project alternatives.

As described in **Section 3.3**, implementation of the Proposed Project would result in a significant and unavoidable impact to a historical resource due to demolition of Building 700/3000. Demolition of this building would materially impair its significance and integrity, resulting in a substantial adverse change to a historical resource under CEQA. While mitigation measures, such as documentation and archival recordation, would reduce the severity of the impact, they would not avoid the loss of the resource. Therefore, this impact would remain significant and unavoidable.

All other environmental impacts identified in this EIR, including those related to air quality, GHG emissions, noise and vibration, and TCRs, would be less than significant or less than significant with mitigation.

As discussed in **5.4.4**, Alternative 4 (Historic Rehabilitation and Alternative Location) would avoid demolition of Building 700/3000 and would reduce impacts to historical resources to a less-than-significant level. However, this alternative would not fully meet all project objectives and may introduce other operational and site planning constraints. Therefore, if the Proposed Project is approved, the lead agency must adopt a Statement of Overriding Considerations in accordance with CEQA Guidelines § 15093[157], balancing the Proposed Project's benefits against its significant and unavoidable environmental impact.

In summary, the Proposed Project would result in one significant and unavoidable adverse impact related to cultural resources, specifically the demolition of a historical resource. All other impacts would be reduced to less-than-significant levels with implementation of mitigation measures or would be less than significant without mitigation.

4.2 REASONS WHY THE PROJECT IS BEING PROPOSED, NOTWITHSTANDING SIGNIFICANT UNAVOIDABLE IMPACTS

CEQA Guidelines § 15093 requires that when a project will result in significant and unavoidable environmental impacts, the lead agency must balance the benefits of the project against its adverse

[156] CCR Title 14 § 15126.2
[157] CEQA Guidelines § 15093

environmental effects. If the benefits of the project outweigh the unavoidable impacts, the lead agency may approve the project by adopting a Statement of Overriding Considerations.

As described in this EIR, the Proposed Project would result in a significant and unavoidable impact related to demolition of Building 700/3000, which is identified as a historical resource (**Section 3.3**). However, the Proposed Project is being proposed to achieve important educational, athletic, and community objectives that are not met under existing conditions.

The Proposed Project would provide a modern, competition-capable aquatic facility at MHS to support swim and water polo programs, P.E. instruction, and community aquatic programming. The Proposed Project would enhance the District's ability to provide high-quality athletic and instructional facilities, improve student access to aquatic programs, and support inclusive programming, including activities such as swim instruction and Special Olympics events. In addition, the Proposed Project would provide updated facilities designed to meet current safety standards and operational requirements, improving the overall functionality and efficiency of campus infrastructure.

As discussed in **Section 5**, Alternative 4 (Historic Rehabilitation and Alternative Location) would avoid the significant impact to the historical resource; however, this alternative would not fully meet all project objectives and would introduce operational, site planning, and potential cost constraints. Other alternatives evaluated in this EIR would reduce, but not avoid, impacts to the historical resource and would also constrain the project's ability to efficiently provide the desired aquatic facilities.

Accordingly, the Proposed Project represents the most effective means of achieving the District's objectives while balancing environmental considerations. The benefits of the Proposed Project, including improved educational and athletic facilities, enhanced student and community programming opportunities, and improved campus functionality—are considered to outweigh the significant and unavoidable impact to the historical resource. Therefore, if approved, the lead agency would be required to adopt a Statement of Overriding Considerations in accordance with CEQA Guidelines § 15093[158].

4.3 IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines § 15126.2(c)[159] requires an EIR to identify any significant irreversible environmental changes that would be caused by implementation of a Proposed Project. Irreversible environmental changes include the use of nonrenewable resources during construction and operation of a project and the commitment of land to uses that preclude other potential future uses.

Implementation of the Proposed Project would result in the irreversible commitment of resources, including construction materials such as concrete, steel, and other building materials, as well as energy resources required for construction and long-term operation of the facility. These resources would be

[158] CEQA Guidelines § 15093
[159] 14 CCR § 15126.2(c)

consumed in the development and operation of the aquatic center and would not be recoverable for other uses.

The Proposed Project would also involve the irreversible commitment of the project site to an aquatic facility and associated infrastructure. While the project site is already developed as part of the MHS campus, redevelopment with a new aquatic center would preclude alternative future uses of that portion of the campus for the life of the facility.

In addition, demolition of Building 700/3000 would result in an irreversible environmental change through the permanent loss of a historical resource. As described in **Section 3.3**, demolition would materially impair the significance of the building and eliminate its historic integrity. Once demolished, the resource cannot be restored to its original condition, and this loss would constitute an irreversible change to the historical environment.

4.4 GROWTH INDUCEMENT

PRC § 21100(b)(5)[160] specifies that the growth-inducing impacts of a project must be addressed in an EIR. CEQA Guidelines § 15126.2(e)[161] provides the following guidance for assessing growth-inducing impacts of a project.

Discuss the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also, discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can induce growth directly, indirectly, or both. Direct growth inducement would result if a project involved construction of new housing. Indirect growth inducement would result, for instance, if implementing a project resulted in any of the following:

- Substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises);
- Substantial short-term employment opportunities (e.g., construction employment) that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; and/or

[160] PRC § 21100(b)(5)
[161] 14 CCR § 15126.2(e)

- Removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area).

The CEQA Guidelines do not distinguish between planned and unplanned growth for purposes of considering whether a project would foster additional growth. Therefore, for purposes of this EIR, to reach the conclusion that a project is growth-inducing as defined by CEQA, the EIR must find that the project would foster (i.e., promote or encourage) additional growth in economic activity, population, or housing, regardless of whether the growth is already approved by and consistent with local plans. The conclusion does not determine that induced growth is beneficial or detrimental, consistent with the CEQA Guidelines (14 CCR § 15126.2(d)[162]).

If the analysis conducted for the EIR results in a determination that a project is growth-inducing, the next question is whether that growth may cause adverse effects on the environment. Environmental effects resulting from induced growth fit the CEQA definition of "indirect" effects in the CEQA Guidelines (14 CCR § 15358(a)(2)[163]). These indirect or secondary effects of growth may result in significant environmental impacts. CEQA does not require that the EIR speculate unduly about the precise location and site-specific characteristics of significant, indirect effects caused by induced growth, but a good-faith effort is required to disclose what is feasible to assess. Potential secondary effects of growth could include consequences—such as conversion of open space to developed uses, increased demand on community and public services and infrastructure, increased traffic and noise, degradation of air and water quality, or degradation or loss of plant and wildlife habitat—that are the result of growth fostered by the project.

4.4.1 Growth-Inducing Impacts of the Proposed Project

The Proposed Project is located within an existing developed high school campus in an urbanized area of the City of Long Beach and is intended to serve institutional uses associated with MHS. The Proposed Project would not include construction of housing or other land uses that would directly induce population growth. Therefore, direct growth-inducing impacts would not occur.

The Proposed Project also would not indirectly induce substantial population or economic growth. The proposed aquatic center is designed to support existing and planned school programs, including athletic activities, P.E. instruction, and community-oriented aquatic programming. While the Proposed Project would provide improved facilities for these uses, it would not generate substantial new permanent employment opportunities beyond minor increases associated with facility operation and maintenance. Similarly, construction of the Proposed Project would result in temporary employment; however, such short-term construction activity is typical of development projects and would not be expected to induce population growth or require the development of additional housing or services.

The Proposed Project would not remove an obstacle to growth or development in the surrounding area. The aquatic center would not expand infrastructure capacity (such as water, wastewater, or

[162] 14 CCR § 15126.2(d)
[163] 14 CCR § 15358(a)(2)

transportation systems) in a manner that would facilitate additional residential or commercial development. Instead, the Proposed Project represents an upgrade and modernization of existing school facilities within an already developed campus and would not extend infrastructure into previously undeveloped areas.

In addition, the Proposed Project would not result in the extension of utilities or services that could encourage growth in surrounding undeveloped areas, nor would it change land use designations or zoning in a manner that would allow for increased development intensity beyond that already planned. The Proposed Project is consistent with existing land use plans and would not alter the planned growth patterns for the area.

While the improved aquatic facilities could enhance the attractiveness of the MHS campus and provide expanded opportunities for community use, such improvements would be limited to the existing school population and surrounding community and would not result in measurable increases in population, housing demand, or economic growth.

Overall, the Proposed Project would not directly or indirectly induce substantial population growth, housing development, or economic expansion. Therefore, the Proposed Project would not result in growth-inducing impacts as defined by CEQA.

4.5 SECONDARY EFFECTS RELATED TO PROPOSED PROJECT MITIGATION MEASURES

CEQA Guidelines § 15126.4(a)(1)(D)[164] requires that an EIR consider the potential for mitigation measures to result in secondary or indirect environmental impacts. While mitigation measures are intended to avoid or reduce significant environmental effects, their implementation may, in some cases, result in additional environmental consequences.

As described in this EIR, mitigation measures are limited and primarily associated with cultural resources and TCRs (**Sections 3.3** and **3.6**). These measures include, but are not limited to, documentation and archival recordation of Building 700/3000, as well as implementation of inadvertent discovery procedures, tribal consultation requirements pursuant to AB 52, and monitoring during ground-disturbing activities.

Implementation of cultural resources mitigation measures, such as HABS-level documentation or similar archival recordation, would involve preparation of written and photographic documentation of the historical resource prior to demolition. These activities are administrative in nature and would not result in physical environmental impacts.

Mitigation measures related to cultural resources and TCRs, including the presence of qualified monitors during ground-disturbing activities and adherence to inadvertent discovery protocols, would not result in new ground disturbance or expansion of the project footprint. Rather, these measures would occur

[164] CEQA Guidelines § 15126.4(a)(1)(D)

within the limits of construction activities already analyzed in this EIR. As such, they would not result in additional impacts to environmental resources beyond those already evaluated.

In the event that previously unidentified cultural or TCRs are encountered, implementation of mitigation measures could result in temporary construction delays or minor modifications to construction methods to allow for evaluation and treatment of the resource. However, such actions would not result in new or more severe environmental impacts and would instead serve to reduce potential impacts to cultural resources and TCRs.

Overall, implementation of mitigation measures identified in this EIR would not result in significant adverse secondary environmental effects. Mitigation measures would be implemented within the scope of the Proposed Project and would not introduce new impacts beyond those disclosed in this EIR.

4.6 EFFECTS FOUND NOT TO BE SIGNIFICANT

CEQA Guidelines § 15128[165] states that an EIR shall contain a brief statement indicating the reasons that various possible significant effects of a project were determined not to be significant and therefore were not discussed in detail in the EIR. As documented in the IS prepared for the Proposed Project, included as **Appendix A** to this EIR, several environmental issue areas were evaluated and determined to result in no impact or less-than-significant impacts. These determinations are based on the characteristics of the project, its location within an existing developed high school campus, and compliance with applicable regulations and standards. Accordingly, these issue areas were not carried forward for detailed analysis in this EIR. For the full text of the environmental setting, significance thresholds, analysis, and impact statements please refer to **Appendix A**.

4.6.1 Aesthetics

Threshold AES-1: Substantial adverse effect on a scenic vista

The project site is located within a fully urbanized portion of Long Beach on an existing developed high school campus. The site is flat and does not contain, and does not provide views toward, any recognized scenic vista. The nearest eligible State scenic highway, State Route 1, is more than 2 miles away and is not visible from the project site. Therefore, the Proposed Project would not have a substantial adverse effect on a scenic vista, and no impact would occur.

Threshold AES-2: Substantial damage to scenic resources within a state scenic highway

The project site is not adjacent to a designated or eligible State scenic highway and does not contain scenic resources visible from such a roadway. The Proposed Project would therefore not damage scenic resources within a State scenic highway. No impact would occur.

[165] CEQA Guidelines § 15128

Threshold AES-3: Substantially degrade visual character or conflict with regulations governing scenic quality

The Proposed Project would replace existing campus structures with a new aquatic center within an already developed institutional campus. The new facility would be consistent with the architectural character, scale, and massing of the campus, and construction-related visual changes would be temporary. Accordingly, impacts related to visual character and scenic quality would be less than significant.

Threshold AES-4: Create a new source of substantial light or glare

The Proposed Project would introduce sports lighting and related site lighting, but the lighting system would use shielded, precision-aimed fixtures and programmable controls designed to contain illumination within the facility. The Musco lighting analysis included as an appendix to the IS concluded that off-site spill and glare would remain very low and would not adversely affect surrounding properties. Therefore, impacts would be less than significant.

4.6.2 Agriculture and Forestry Resources

Thresholds AG-1 through AG-5: Significant impacts to agriculture and forestry resources

The project site is located on an existing developed high school campus in a fully urbanized area and is designated Urban and Built-Up Land by the California Department of Conservation. The project site is not zoned for agricultural use, is not subject to a Williamson Act contract, and does not contain forest land, timberland, or timberland production land. Because the Proposed Project would not convert farmland or forest land and would not cause indirect conversion of such resources, no impacts would occur.

4.6.3 Biological Resources

Threshold BIO-1: Substantial adverse effect on special-status species

The project site is entirely developed and does not provide habitat for special-status species. Although ornamental trees on campus could provide limited nesting habitat for birds protected under the Migratory Bird Treaty Act and California Fish and Game Code, the District would conduct nesting bird surveys if tree removal occurs during nesting season. With compliance with applicable regulations and standard avoidance practices, impacts would be less than significant.

Threshold BIO-2: Substantial adverse effect on riparian habitat or sensitive natural communities

No riparian habitat or sensitive natural community occurs on or adjacent to the project site. Therefore, no impact would occur.

Threshold BIO-3: Substantial adverse effect on wetlands

No wetlands or other jurisdictional aquatic resources are present on the project site. No impact would occur.

Threshold BIO-4: Interfere with wildlife movement or nursery sites

The campus is located in a fully urbanized setting and does not function as a wildlife corridor or nursery site. The Proposed Project would not interfere with wildlife movement. Impacts would be less than significant.

Threshold BIO-5: Conflict with local biological resource policies or ordinances

The Proposed Project would not conflict with local policies protecting biological resources. To the extent tree removal is required, the Proposed Project would comply with applicable local requirements. Impacts would be less than significant.

Threshold BIO-6: Conflict with a habitat conservation plan or similar plan

The project site is not within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or similar conservation plan area. No impact would occur.

4.6.4 Energy

Threshold EN-1: Wasteful, inefficient, or unnecessary energy consumption

Construction would involve temporary fuel and electricity use typical of institutional redevelopment. During operation, the Proposed Project would use energy for pool heating, pumping, lighting, and support spaces; however, the facility would be designed in compliance with Title 24 and CALGreen[166] and would include high-efficiency systems. The IS concluded that the Proposed Project would not result in wasteful, inefficient, or unnecessary energy consumption. Impacts would be less than significant.

Threshold EN-2: Conflict with a state or local plan for renewable energy or energy efficiency

The Proposed Project would comply with applicable energy efficiency requirements and would not obstruct implementation of state or local renewable energy or efficiency plans. Impacts would be less than significant.

4.6.5 Geology and Soils

Threshold GEO-1(a)(i): Rupture of a known earthquake fault

The project site is not located within an Alquist-Priolo Earthquake Fault Zone, and no active fault crosses the site. Therefore, no impact related to fault rupture would occur.

Threshold GEO-1(a)(ii): Strong seismic ground shaking

Although the project site is in a seismically active region, all school construction would be designed and reviewed in accordance with the California Building Code and Division of the State Architect requirements. Compliance with these standards would reduce impacts from seismic shaking to a less-than-significant level.

[166] CALGreen

Threshold GEO-1(a)(iii): Seismic-related ground failure, including liquefaction

The project site is within a mapped liquefaction hazard zone, but State law and DSA review require site-specific geotechnical analysis and incorporation of design recommendations addressing liquefaction hazards. Therefore, impacts would be less than significant.

Threshold GEO-1(a)(iv): Landslides

The project site is essentially flat and not within a mapped landslide hazard area. No impact would occur.

Threshold GEO-2: Soil erosion or loss of topsoil

Construction would be subject to erosion and sediment control measures required by the Statewide California Construction Stormwater General Permit (Order WQ 2022-0057-DWQ) or most current. Following construction, the project site would be stabilized with buildings, hardscape, and landscaping, and post-construction BMPs if applicable. Impacts would be less than significant.

Threshold GEO-3: Unstable soils

Potential soil instability, including liquefaction-related effects associated with the school being mapped within a liquefaction zone, would be addressed through project-specific geotechnical recommendations and code-compliant engineering design. Impacts would be less than significant.

Threshold GEO-4: Expansive soils

The NRCS soil mapping indicates that soils on the project site are not expansive. No impact would occur.

Threshold GEO-5: Soils unsuitable for septic systems

The Proposed Project would connect to the municipal sewer system and would not rely on septic systems or alternative wastewater disposal systems. No impact would occur.

Threshold GEO-6: Unique paleontological resources or geologic features

The IS concluded that the District would comply with recommendations from the District-wide paleontological assessment, and impacts would be less than significant. Accordingly, this issue was not carried forward for detailed analysis.

4.6.6 Hazards and Hazardous Materials

As discussed in **Section 1.2.3**, DTSC submitted comments on the NOP/Initial Study regarding regulatory considerations for school construction projects, including hazardous building materials surveys prior to demolition, proper abatement and disposal procedures, soil management near current and/or former buildings, imported fill testing/documentation, and Education Code requirements if CDE State funding is used (DTSC 2025). DTSC did not identify the Project site as a listed hazardous materials site or identify a known hazardous materials release at the Project site. The Initial Study determined that hazards and hazardous materials impacts would be less than significant or no impact, and therefore this topic was not carried forward for detailed analysis in the Draft EIR (Terraphase 2025). The following summarizes

the Initial Study findings and clarifies how applicable regulatory requirements address the issues raised during scoping.

Threshold HAZ-1: Routine transport, use, or disposal of hazardous materials

The Proposed Project would involve the routine use of limited quantities of construction-related hazardous materials and disposal of demolition waste. Demolition of Building 700/3000 and adjacent portable buildings could involve hazardous building materials such as asbestos-containing materials, lead-based paint, mercury-containing materials, and PCB-containing caulk. DTSC's NOP/Initial Study comment letter recommended that surveys be conducted for these materials prior to demolition and that removal, demolition, and disposal be conducted in compliance with applicable California environmental regulations and policies. During operation, hazardous materials use would be limited primarily to pool chemicals, custodial supplies, and routine maintenance materials. Existing regulatory requirements, hazardous materials surveys, use of licensed abatement contractors, applicable waste handling and disposal requirements, and standard handling and storage procedures would ensure impacts remain less than significant.

Threshold HAZ-2: Reasonably foreseeable upset and accident conditions

Potential upset conditions associated with demolition, excavation, construction materials handling, soil management, and pool chemical storage would be managed through compliance with applicable Cal/OSHA, DTSC, Certified Unified Program Agency, SCAQMD, and NPDES requirements. DTSC recommended soil sampling near current and/or former buildings as appropriate, and testing/documentation of imported fill material if imported fill is required. Compliance with applicable soil management, imported fill, hazardous waste, stormwater, and worker safety requirements would reduce potential hazards associated with accidental releases or upset conditions. Impacts would be less than significant.

Threshold HAZ-3: Hazardous emissions or hazardous materials within one-quarter mile of a school

The Project site is itself an existing school campus. Hazardous materials used during construction would be temporary and limited to materials commonly used for demolition and construction. Operational hazardous materials use would be limited primarily to pool chemicals, custodial supplies, and routine maintenance materials. These materials would be stored and handled in accordance with applicable regulatory requirements. DTSC did not identify a known hazardous materials release at the Project site or request that hazardous materials be analyzed as a separate EIR topic. The Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials in a manner that would create a significant hazard to students, staff, visitors, or nearby residents. Impacts would be less than significant.

Threshold HAZ-4: Hazardous materials sites pursuant to Government Code Section 65962.5

The Project site is not listed on a hazardous materials site list compiled pursuant to Government Code § 65962.5. The Initial Study reviewed EnviroStor and GeoTracker records and found no contaminated sites listed on or adjacent to the Project site (Terraphase 2025). DTSC's NOP/Initial Study comment letter did

not identify the Project site as a listed hazardous materials site or identify a known release requiring remediation. No impact would occur.

Threshold HAZ-5: Airport safety hazard or excessive airport noise

The project site is approximately 2.5 miles from Long Beach Airport and outside the applicable airport influence area. No impact would occur.

Threshold HAZ-6: Interfere with an emergency response or evacuation plan

The Proposed Project would not alter emergency access in a way that would interfere with adopted emergency response or evacuation plans. No impact would occur.

Threshold HAZ-7: Wildland fire risk

The project site is in an urbanized area and not within a fire hazard severity zone. No impact would occur.

4.6.7 Hydrology and Water Quality

Threshold HYD-1: Violate water quality standards or waste discharge requirements

Construction would be covered under the Statewide California Construction Stormwater General Permit (Order WQ 2022-0057-DWQ) or most current and a SWPPP and BMPs would be implemented. Operational stormwater and pool water management systems are designed to avoid pollutant discharges to the storm drain system. Impacts would be less than significant.

Threshold HYD-2: Decrease groundwater supplies or interfere with recharge

The Proposed Project would not extract groundwater and would include LID features that promote infiltration. Impacts would be less than significant.

Threshold HYD-3(a): Erosion or siltation from altered drainage patterns

No natural drainage course would be altered, and erosion controls would be implemented during construction. Impacts would be less than significant.

Threshold HYD-3(b): Flooding from altered drainage patterns

The Proposed Project would not substantially increase runoff rates or volumes that would cause on-site or off-site flooding. Implementation of the Proposed Project would also comply with post-construction stormwater requirements of the Statewide California Construction Stormwater General Permit. Impacts would be less than significant.

Threshold HYD-3(c): Exceed drainage capacity or create polluted runoff

The site drainage design includes stormwater treatment and detention features sized to meet applicable requirements, and pool water would be isolated from stormwater drainage. Impacts would be less than significant.

Threshold HYD-3(d): Impede or redirect flood flows

The Proposed Project would not alter any natural floodway or redirect flood flows. Impacts would be less than significant.

Threshold HYD-4: Release of pollutants due to inundation in flood, tsunami, or seiche zones

The project site is outside tsunami hazard areas, not subject to seiche risk, and not expected to experience such inundation hazards. No impact would occur.

Threshold HYD-5: Conflict with a water quality control plan or sustainable groundwater management plan

The Proposed Project would comply with applicable regional and local stormwater requirements and would not interfere with groundwater management. Impacts would be less than significant.

4.6.8 Land Use and Planning

Threshold LU-1: Physically divide an established community

All improvements would occur within the existing school campus and would not introduce barriers, roadways, or features that would divide the surrounding community. No impact would occur.

Threshold LU-2: Conflict with an applicable land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect

The Proposed Project would continue the site's existing educational use and would not create a land use conflict. The IS concluded no impact would occur.

4.6.9 Mineral Resources

Thresholds MR-1 and MR-2: Loss of known or available mineral resources

The developed school campus is not within an identified mineral resource area and is not designated as a locally important mineral resource recovery site. The Proposed Project would not affect mineral resource availability. No impact would occur.

4.6.10 Population and Housing

Threshold PH-1: Induce substantial population growth

The Proposed Project would not increase student enrollment, would not construct housing or businesses, and would not extend infrastructure in a manner that would induce growth. No impact would occur.

Threshold PH-2: Displace people or housing

The project site contains no housing and would not displace residents or require replacement housing. No impact would occur.

4.6.11 Public Services

Threshold PS-1(a): Fire protection

The Proposed Project would not increase campus population and would continue to be served by existing fire protection services. It would not require new or expanded fire facilities. Impacts would be less than significant.

Threshold PS-1(b): Police protection

The Proposed Project would not substantially increase demand for police services or require new or expanded police facilities. No impact would occur.

Threshold PS-1(c): Schools

The Proposed Project is itself a school modernization project and would not increase enrollment beyond existing capacity. No impact would occur.

Threshold PS-1(d): Parks

The Proposed Project would not create demand for new or expanded park facilities. No impact would occur.

Threshold PS-1(e): Other public facilities

The Proposed Project would not increase demand for other public facilities, such as libraries or community centers. No impact would occur.

4.6.12 Recreation

Threshold REC-1: Increase the use of existing parks or recreation facilities such that substantial physical deterioration would occur

The Proposed Project would not increase student capacity or otherwise create demand for off-site recreation facilities. No impact would occur.

Threshold REC-2: Include or require construction of recreation facilities that might have an adverse physical effect

Although the Proposed Project includes an aquatic facility, it would not create a significant new recreational demand beyond the school's existing educational and athletic functions. Impacts would be less than significant.

4.6.13 Transportation and Circulation

Threshold T-1: Conflict with a circulation plan, ordinance, or policy

The Proposed Project would not increase enrollment or substantially alter site access, circulation, bicycle access, or pedestrian access. No impact would occur.

Threshold T-2: Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)[167]

The Proposed Project would not substantially increase vehicle miles traveled because it would not increase student capacity or create a new trip-generating land use. No impact would occur.

Threshold T-3: Substantially increase hazards due to a design feature or incompatible uses

The Proposed Project would not alter roadway geometry or introduce incompatible transportation uses. No impact would occur.

Threshold T-4: Result in inadequate emergency access

Existing emergency access would be maintained during construction and operation. No impact would occur.

4.6.14 Utilities and Service Systems

Threshold U-1: Require new or expanded utility facilities that could cause significant environmental effects

The Proposed Project would connect to existing utility systems and would not require expansion of regional utility infrastructure. Impacts would be less than significant.

Threshold U-2: Sufficient water supplies during normal, dry, and multiple dry years

The Proposed Project would use municipal water supplies, and the IS concluded sufficient supplies are available. Impacts would be less than significant.

Threshold U-3: Adequate wastewater treatment capacity

The Proposed Project would be developed within an existing school site with existing wastewater demands. The Proposed Project does not increase student enrollment and only replaces existing facilities, wastewater generation would remain consistent with current levels. Impacts would be less than significant.

Threshold U-4: Generate solid waste in excess of standards or capacity

Although demolition would generate waste, available landfill capacity exists, and recycling during construction would be required, operational waste generation would remain similar to existing conditions. Impacts would be less than significant.

Threshold U-5: Comply with federal, state, and local solid waste regulations

The Proposed Project would comply with applicable waste diversion and disposal requirements. Impacts would be less than significant.

[167] CEQA Guidelines § 15064.3(b)

4.6.15 Wildfire

Threshold W-1: Substantially impair an adopted emergency response plan or evacuation plan

The project site is not in a fire hazard severity zone, and emergency access would be maintained. Impacts would be less than significant.

Threshold W-2: Exacerbate wildfire risks

The project site is flat, urbanized, and outside mapped wildfire hazard areas. No impact would occur.

Threshold W-3: Require infrastructure that may exacerbate fire risk

The Proposed Project would not require off-site infrastructure that would increase wildfire risk. Impacts would be less than significant.

Threshold W-4: Expose people or structures to post-fire flooding, landslides, or drainage changes

Because the project site is not in a wildfire hazard area and is relatively flat, the Proposed Project would not expose people or structures to these post-fire risks. Impacts would be less than significant.

5 Alternatives

5.1 INTRODUCTION

CEQA Guidelines § 15126.6(a)[168] requires an EIR to describe

> *… a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a range of potentially feasible alternatives that will avoid or substantially lessen the significant adverse impacts of a project as well as foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.*

This section of the CEQA Guidelines also provides guidance regarding what the alternatives analysis should consider. Subsection (b) further states the purpose of the alternatives analysis is as follows:

> *Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (PRC § 21002.1), the 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.*

The CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with a proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (14 CCR § 15126.6[d]).

The CEQA Guidelines further require that the "no project" alternative be considered (CCR § 15126.6[e]). The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving a proposed project. If the no project alternative is the environmentally superior alternative, CEQA requires that the EIR "…shall

[168] CEQA Guidelines § 15126.6

also identify an environmentally superior alternative among the other alternatives." (14 CCR § 15126(e)(2)[169]).

In defining "feasibility" (e.g., "… feasibly attain most of the basic objectives of the project …"), 14 CCR § 15126.6(f)(1) states, in part:

> *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 (projects with a regionally significant impact should consider the regional context), 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). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.*

In determining what alternatives should be evaluated in the EIR, it is important to consider the Proposed Project's objectives, significant effects, and unique characteristics. These factors are crucial to the development of alternatives that meet the criteria specified in CEQA Guidelines Section 15126.6(a)[170]. Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body.

5.2 PROJECT OBJECTIVES

The District is planning the Proposed Project to provide modern aquatic facilities that support the District's educational, athletic, and community programming needs. The primary objectives of the Proposed Project are as follows:

1. **Provide a Modern Aquatic Facility at MHS.** Develop a new aquatic center on the MHS campus that supports student athletics, physical education instruction, and aquatic programming.
2. **Provide a Competition-Ready Aquatic Facility.** Construct a regulation-size swimming pool and associated facilities capable of supporting interscholastic swim and water polo competitions hosted by MHS.
3. **Provide Adequate Spectator and Event Facilities.** Provide spectator seating and event infrastructure necessary to support swim meets, water polo competitions, and other aquatic events hosted at the campus.
4. **Provide Supporting Facilities Necessary for Aquatic Operations.** Develop supporting facilities required for the operation of an aquatic center, including locker rooms, team rooms, offices, equipment storage, mechanical and filtration systems, and related operational spaces.

[169] CEQA Guidelines § 15126.6

5. **Support Physical Education and Instructional Programs.** Provide aquatic facilities capable of accommodating P.E. classes and instructional programs for typical class sizes at MHS.
6. **Provide Accessible and Inclusive Facilities.** Provide locker rooms, changing areas, and related facilities designed to accommodate students of all abilities and support inclusive programming.
7. **Provide Facilities that Support School and Community Aquatic Programs.** Provide aquatic facilities that can support District programming such as swim instruction, Special Olympics activities, and other community aquatic uses consistent with District policies.
8. **Improve the Functionality and Safety of Aquatic Facilities on the Campus.** Provide modern facilities designed to meet current safety standards and operational requirements for high school aquatic facilities.

5.3 ALTERNATIVES CONSIDERED BUT NOT EVALUATED IN DETAIL

Section 15126.6[171] of the CEQA Guidelines requires an EIR to evaluate a reasonable range of alternatives that could feasibly attain most of the basic objectives of the Proposed Project while avoiding or substantially lessening significant environmental impacts. However, the CEQA Guidelines also allow the lead agency to eliminate alternatives from detailed analysis if they are determined to be infeasible, fail to meet most of the project objectives, or are otherwise unreasonable. Pursuant to CEQA Guidelines § 15126.6(c), an EIR must briefly describe the reasons for eliminating alternatives from detailed consideration.

In developing the range of alternatives evaluated in this EIR, the District considered a variety of potential alternatives that could reduce or avoid environmental impacts associated with the Proposed Project. These alternatives were screened based on their ability to meet the Proposed Project objectives, their technical and operational feasibility, site constraints within the MHS campus, and whether they would substantially reduce or avoid the Proposed Project's significant environmental impact related to demolition of the historic Building 700/3000.

Several alternatives were considered during the planning process but were determined not to warrant detailed evaluation in this EIR because they would not feasibly attain most of the Proposed Project objectives, would introduce other substantial constraints, or would not meaningfully reduce environmental impacts. These alternatives are briefly described below, along with the reasons they were eliminated from further consideration.

5.3.1 Alternative 1: Off-Site Aquatic Facility Alternative

Under this alternative, the aquatic center would be constructed at an off-campus location rather than at MHS. Potential locations could include other District-owned properties or publicly accessible recreational facilities within the City of Long Beach. While this alternative would avoid demolition of Building 700/3000 and therefore avoid impacts to the historic resource, it would not meet several of the

[171] CEQA Guidelines § 15126.6

fundamental Proposed Project objectives. The purpose of the Proposed Project is to provide an aquatic facility directly integrated with MHS's athletic programs and P.E. curriculum. Locating the facility off campus would require transportation of students during the school day, would reduce instructional efficiency for P.E. classes, and would limit the ability to host school athletic events integrated with campus operations. In addition, acquiring or developing an off-site location would introduce substantial logistical, cost, and operational constraints. Because this alternative would not meet the primary objective of providing an aquatic facility located at and integrated with the MHS campus, it was not carried forward for detailed evaluation.

5.3.2 Alternative 2: Alternative Campus Locations (General)

This alternative would involve constructing the aquatic center at various alternative locations within the MHS campus to avoid demolition of Building 700/3000. During project planning, multiple potential locations were considered; however, the campus is substantially developed and contains academic buildings, athletic facilities, parking areas, and circulation infrastructure that constrain available development sites.

In general, relocating the aquatic center to other portions of the campus would result in conflicts with existing uses, including displacement of athletic fields, loss of parking areas, or disruption of campus circulation and operations. In addition, many potential locations would not accommodate the spatial requirements of a competition-size pool, spectator seating, and associated support facilities without substantial redesign or secondary impacts to campus facilities.

For these reasons, generalized alternative campus locations were determined to be infeasible or would introduce substantial operational and physical constraints and were not carried forward for detailed evaluation.

However, a specific alternative involving relocation of the aquatic center to identified locations on campus for the purpose of preserving Building 700/3000 was developed in coordination with the architectural historian and is evaluated in detail in this EIR as Alternative 3 (Historic Rehabilitation and Alternative Location).

5.3.3 Alternative 3: Renovation or Expansion of Existing Aquatic Facilities

Under this alternative, the District would renovate or expand existing aquatic facilities at MHS rather than constructing a new aquatic center. However, the District has identified a separate campus improvement project that would repurpose the existing pool and locker room building into a multipurpose gym and educational space, including the installation of a new high-efficiency air conditioning system. Implementation of that project would convert the existing aquatic facilities to a different campus use intended to support indoor athletic and educational programming.

Because the existing pool and associated facilities are planned to be removed or repurposed as part of that campus improvement effort, renovation or expansion of the existing aquatic facilities would conflict with the District's planned campus modernization projects. In addition, even if renovation were feasible, the existing facilities are not configured to support the programmatic needs of MHS, including a

competition-capable pool, spectator seating, and modern support facilities necessary for swim and water polo programs, P.E. instruction, and community aquatic programming. Renovation or expansion would therefore not meet several key project objectives and would be inconsistent with planned campus improvements. For these reasons, this alternative was not carried forward for detailed evaluation in this EIR.

5.4 REASONABLE RANGE OF ALTERNATIVES FOR FURTHER ANALYSIS

As described above, the Proposed Project would result in a significant and unavoidable impact related to demolition of Building 700/3000, which has been identified as a historic resource. Accordingly, the alternatives evaluated in detail in this section focus on modifications to the Proposed Project that would reduce or avoid impacts to the historic resource while still meeting most of the objectives.

Consistent with CEQA Guidelines § 15126.6[172], the alternatives selected for detailed evaluation represent a reasonable range of feasible options that vary in their ability to preserve the historic resource and accommodate the operational and programmatic requirements of a modern aquatic facility. In developing this range, the District considered site constraints at MHS, the spatial and functional requirements of a competition-capable aquatic center, and the need to support student athletics, P.E., and community aquatic programming.

The alternatives evaluated in this section were developed in coordination with the project team and architectural historian and reflect a progression of approaches to historic resource treatment, including partial demolition with adaptive reuse, façade retention, and full preservation with relocation of the aquatic facility. These alternatives represent varying degrees of impact avoidance and minimization, while also introducing differing levels of design constraints, operational limitations, and potential secondary impacts to the campus.

Each alternative is evaluated relative to the Proposed Project to determine its effectiveness in reducing impacts to historic resources and its ability to meet the Proposed Project objectives.

The following alternatives are evaluated in detail in this EIR:

- No Project Alternative
- Alternative 1: Partial Demolition (Adaptive Reuse)
- Alternative 2: Partial Historic Rehabilitation (Façade Preservation)
- Alternative 3: Historic Rehabilitation and Alternative Location

Together, these alternatives provide a reasonable range of feasible options that allow for a meaningful comparison of environmental impacts and project feasibility, particularly with respect to the identified impact to the historic resource.

[172] CEQA Guidelines § 15126.6

5.4.1 Alternative 1: No Project Alternative

The No Project Alternative assumes that the Proposed Project would not be implemented. Under this alternative, the existing conditions at the project site would generally remain unchanged, and no new aquatic facilities would be constructed. Building 700/3000 would not be demolished and would remain in its current condition. As such, this alternative would avoid the significant and unavoidable impact to the historic resource associated with demolition of the building.

Under the No Project Alternative, MHS would continue to operate without a new aquatic center capable of supporting modern swim and water polo programs, P.E. classes, and community aquatic programming. The District would not achieve its objectives to provide a competition-capable pool, spectator seating, or associated support facilities necessary for aquatic operations. As a result, existing limitations in aquatic facilities would remain, and opportunities to expand or improve student athletic programs, P.E. instruction, and community use would not be realized.

In addition, implementation of other planned campus improvements could still occur independently of the Proposed Project. As identified in the cumulative projects discussion, the District has plans to repurpose the existing pool and locker room building into a multipurpose gym and educational space with a new high-efficiency air conditioning system. Under the No Project Alternative, this repurposing effort could proceed, further eliminating the availability of existing aquatic facilities on campus and reinforcing the absence of on-site aquatic infrastructure.

5.4.1.1 Air Quality

Under the No Project Alternative, the Proposed Project would not be constructed, and existing conditions at the project site would generally remain unchanged. As a result, construction activities associated with demolition of Building 700/3000 and development of the aquatic center, including site preparation, grading, building construction, and equipment installation, would not occur. Therefore, the No Project Alternative would avoid all short-term construction-related emissions of criteria air pollutants and precursors, including ROG, NOx, CO, PM_{10}, and $PM_{2.5}$, as well as associated localized air quality impacts.

With respect to operations, the No Project Alternative would not introduce new sources of emissions associated with operation of an aquatic center, such as increased vehicle trips from athletic events and community programming, energy demand from pool mechanical systems, or ongoing maintenance activities. Accordingly, the incremental operational emissions identified for the Proposed Project would not occur. Air pollutant emissions under the No Project Alternative would remain consistent with existing campus conditions or would reflect only minor changes associated with ongoing campus activities.

As described in the cumulative projects discussion, the District may proceed with other planned campus improvements, including repurposing the existing pool and locker room building into a multipurpose gym and educational facility with a new high-efficiency air conditioning system. While this project could result in minor operational emissions associated with building energy use and changes in activity patterns, such emissions would be typical of institutional land uses and would not represent a substantial increase compared to existing conditions.

Overall, the No Project Alternative would result in lower air pollutant emissions compared to the Proposed Project because it would avoid both construction and operational emissions associated with development of the aquatic center. Therefore, air quality impacts under the No Project Alternative would be less than those identified for the Proposed Project and would not result in significant impacts.

5.4.1.2 Cultural Resources

Under the No Project Alternative, the Proposed Project would not be implemented, and Building 700/3000 would not be demolished. As a result, the historic resource would remain in place, and the significant and unavoidable impact to historical resources identified for the Proposed Project would not occur. Therefore, the No Project Alternative would avoid direct impacts to the identified historic resource.

However, under the No Project Alternative, the existing conditions of Building 700/3000 would remain, and no improvements, rehabilitation, or adaptive reuse associated with the Proposed Project would be implemented. While this alternative would preserve the building in its current state, it would not provide for active preservation, restoration, or enhancement of the structure or its character-defining features. Over time, the absence of reinvestment or modernization could result in continued aging or deterioration of the building, depending on future maintenance practices.

In addition, as described in the cumulative projects discussion, the District has identified a separate project to repurpose the existing pool and locker room building into a multipurpose gym and educational space. Although this project does not directly involve Building 700/3000, changes to the surrounding campus environment could alter the setting or context of the historic resource. However, such changes would be subject to separate environmental review, as applicable.

Overall, the No Project Alternative would avoid the significant impact associated with demolition of Building 700/3000 but would not implement improvements or adaptive reuse opportunities that could support the long-term preservation or continued functional integration of the historic resource within the campus.

5.4.1.3 Greenhouse Gas Emissions

Under the No Project Alternative, the Proposed Project would not be implemented, and no demolition or construction activities associated with the Proposed Project would occur. Therefore, the temporary construction-related GHG emissions identified for the Proposed Project—including emissions from construction equipment, material transport, and worker vehicle trips—would not be generated.

With respect to operations, the No Project Alternative would not introduce new sources of GHG emissions associated with operation of an aquatic center. The Proposed Project would generate operational GHG emissions from mobile sources (vehicle trips associated with school events and community use), energy consumption (electricity and natural gas for pool heating, pumping, lighting, and buildings), and area sources. Under the No Project Alternative, these incremental emissions would not occur, and GHG emissions would remain consistent with existing campus conditions.

As described in the cumulative projects discussion, the District may proceed with other planned campus improvements, including repurposing the existing pool and locker room building into a multipurpose gym and educational facility with a new high-efficiency air conditioning system. While operation of this facility would result in some GHG emissions associated with energy use, the incorporation of high-efficiency systems would reduce energy demand compared to older infrastructure and would be consistent with applicable energy efficiency standards and Statewide GHG reduction goals.

Overall, the No Project Alternative would result in lower GHG emissions compared to the Proposed Project because it would avoid both construction and operational emissions associated with the aquatic center. Consistent with the thresholds and significance criteria identified in **Section 3.4**, the No Project Alternative would not generate substantial GHG emissions and would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Therefore, impacts related to GHG emissions under the No Project Alternative would be less than those associated with the Proposed Project and would not be significant.

5.4.1.4 Noise and Vibration

Under the No Project Alternative, the Proposed Project would not be constructed, and demolition of Building 700/3000 and construction of the new aquatic center would not occur. As a result, the temporary construction-related noise and vibration sources associated with demolition, grading, and building activities—identified in the noise analysis as the primary contributors to short-term noise and vibration—would not be generated. Therefore, the No Project Alternative would avoid all short-term construction noise and groundborne vibration impacts associated with heavy equipment use, haul trucks, and site development activities.

With respect to operations, the No Project Alternative would not introduce new noise-generating sources associated with the aquatic center, including pool activities, spectator events, mechanical equipment, or amplified sound systems. The noise study indicates that operational noise associated with the proposed aquatic center would comply with City of Long Beach noise standards and would result in less-than-significant impacts at nearby sensitive receptors. Under the No Project Alternative, these incremental noise sources would not occur, and ambient noise conditions would remain similar to existing conditions, which are primarily influenced by traffic on nearby roadways and ongoing school activities.

Similarly, the No Project Alternative would not introduce any new sources of groundborne vibration. The noise and vibration analysis determined that construction-related vibration levels associated with the Proposed Project would be below applicable thresholds and less than significant. Because no construction would occur under the No Project Alternative, these temporary vibration sources would be eliminated entirely. In addition, ongoing campus operations would not generate substantial vibration sources.

As described in the cumulative projects discussion, the District may proceed with other planned campus improvements, including repurposing the existing pool and locker room building into a multipurpose gym and educational facility. While this project could result in typical construction and operational

noise, such activities would be subject to applicable City noise regulations and would not be expected to result in substantial increases in ambient noise levels beyond those typical of school campus operations.

Overall, the No Project Alternative would result in lower noise and vibration levels compared to the Proposed Project because it would avoid all construction-related noise and vibration and would not introduce new operational noise sources. Noise and vibration impacts under the No Project Alternative would therefore be less than those associated with the Proposed Project and would be less than significant.

5.4.1.5 Tribal Cultural Resources

Under the No Project Alternative, the Proposed Project would not be implemented, and no ground-disturbing activities associated with demolition, grading, or construction would occur. As a result, the No Project Alternative would avoid the potential for impacts to TCRs that could otherwise occur during subsurface excavation or site disturbance. Therefore, any impacts to previously unidentified TCRs, including buried archaeological materials or cultural deposits of significance to Native American Tribes, would not occur under this alternative.

Because no construction would occur, there would be no potential to disturb unknown TCRs that may be present beneath the existing developed campus. In addition, the No Project Alternative would not require implementation of mitigation measures, such as tribal monitoring or inadvertent discovery protocols, that are typically applied to address potential impacts during construction.

As described in the cumulative projects discussion, the District may proceed with other planned campus improvements, including repurposing the existing pool and locker room building into a multipurpose gym and educational facility. To the extent that such activities involve ground disturbance, they would be subject to separate environmental review and applicable regulatory requirements, including compliance with AB 52 consultation requirements and standard inadvertent discovery procedures, as appropriate.

Overall, the No Project Alternative would avoid potential impacts to TCRs associated with ground disturbance and would not result in significant impacts related to TCRs.

5.4.1.6 Relationship to Project Objectives

The No Project Alternative would not meet the objectives of the Proposed Project. Under this alternative, a new aquatic center would not be constructed, and the District would not provide a modern aquatic facility capable of supporting swim and water polo programs, P.E. classes, or community aquatic programming. The No Project Alternative would not provide a competition-capable pool, spectator seating, or associated support facilities necessary for aquatic operations.

While this alternative would avoid demolition of Building 700/3000 and associated impacts to historical resources, it would not achieve the District's objectives to improve aquatic facilities, enhance student and community programming opportunities, or improve the functionality and safety of campus facilities.

5.4.2 Alternative 2: Partial Demolition

Alternative 2 would modify the Proposed Project to reduce demolition of Building 700/3000 by retaining and adaptively reusing a portion of the existing historic structure as part of the new aquatic facility in its proposed location on the MHS campus. Under this alternative, the project design would be revised to incorporate part of the northerly section of the existing building into the aquatic center program (midsection, northwest or northeast portions) as the ticket booth/concessions functions, or the pool machine/chemical room. Reducing demolition could preserve some character-defining features.

Alternative 2 would slightly reduce impacts to the historic resource compared to the Proposed Project by avoiding complete demolition. However, design constraints, functional limitations, and the need to meet modern aquatic facility standards would limit the feasibility of this alternative. The footprint of the existing building is set back further from the street along the northerly façade than the Proposed Project, which may force the pool itself to be shifted south and could reduce the pool's length to no longer meet competitive pool specifications. Furthermore, the physical changes to the portion of the existing northerly façade to accommodate the proposed uses may impact character-defining features. This alternative could lessen the severity of the historic resource impact compared to the Proposed Project, but it would not fully avoid a significant impact on the historic structure.

5.4.2.1 Air Quality

Under Alternative 2, the Proposed Project would be modified to retain and adaptively reuse a portion of Building 700/3000 while constructing the new aquatic center. This alternative would reduce the extent of demolition compared to the Proposed Project but would still require substantial construction activities, including site preparation, grading, building construction, and installation of the aquatic facilities and associated infrastructure.

Construction Emissions

Construction activities under Alternative 2 would generate emissions of criteria pollutants and precursors, including ROG, NOx, CO, PM_{10}, and $PM_{2.5}$, from the use of heavy-duty construction equipment, material hauling, and worker vehicle trips. Because Alternative 2 would involve partial demolition rather than full demolition of Building 700/3000, demolition-related emissions would be somewhat reduced compared to the Proposed Project. However, the majority of construction emissions are associated with grading, building construction, and installation of the pool and support facilities, which would still occur under this alternative.

In addition, incorporation of portions of the existing building into the project design could introduce additional construction complexity, potentially increasing the duration or intensity of certain construction activities (e.g., structural modifications, integration of new and existing systems), which could offset some of the emission reductions associated with reduced demolition. Overall, construction emissions under Alternative 2 would be slightly lower than, but generally comparable to, those associated with the Proposed Project. As such, construction-related air quality impacts would remain consistent with those identified for the Proposed Project and would not be substantially reduced.

Operational Emissions

Operation of the aquatic center under Alternative 2 would be similar to the Proposed Project. The same general uses would occur, including swim meets, water polo events, P.E. classes, and community programming. As a result, operational emissions associated with mobile sources (vehicle trips), energy use (pool heating, pumping, lighting, and building operations), and area sources would be similar to those of the Proposed Project.

Because Alternative 2 would not substantially change the size, capacity, or intensity of use of the aquatic facility, operational emissions would be comparable to the Proposed Project and would not result in a meaningful reduction in long-term air pollutant emissions.

Consistency with Air Quality Plans

Similar to the Proposed Project, Alternative 2 would be consistent with applicable AQMPs, as it would not conflict with regional strategies for reducing emissions and would not result in population growth or substantial changes in land use patterns.

Conclusion

Overall, Alternative 2 would result in slightly reduced construction emissions due to reduced demolition but would otherwise generate similar construction and operational emissions as the Proposed Project. Therefore, air quality impacts under Alternative 2 would be similar to those identified for the Proposed Project and would not represent a substantial reduction in impacts.

5.4.2.2 Cultural Resources

Under Alternative 2, the Proposed Project would be modified to retain and adaptively reuse a portion of Building 700/3000, while still demolishing other portions of the structure to accommodate construction of the aquatic center. This approach would preserve some elements of the historic resource, including portions of the building that may contain character-defining features, while incorporating them into the new facility.

Although Alternative 2 would reduce the extent of demolition compared to the Proposed Project, it would still result in the removal of a substantial portion of Building 700/3000 and would require modifications to the retained portions of the structure to accommodate new uses such as concessions, mechanical rooms, or other support functions. These alterations could affect the integrity of the building's design, materials, workmanship, and setting, which are key aspects of its significance as a historic resource. In addition, integration of new construction with the retained portions of the building may require physical changes that could further diminish the building's historic character.

As noted by the architectural historian, while this alternative could preserve some character-defining features, it would not retain the building in a manner that fully maintains its historic integrity, and the required alterations could result in adverse effects. Therefore, although Alternative 2 would lessen the severity of the impact compared to the Proposed Project by avoiding complete demolition, it would not avoid a significant impact to a historical resource under CEQA.

With respect to archaeological and subsurface cultural resources, Alternative 2 would involve ground-disturbing activities similar to the Proposed Project, including grading, excavation, and utility installation. As such, the potential to encounter previously unidentified archaeological resources would remain similar to the Proposed Project, and impacts would be addressed through the same regulatory compliance measures and standard inadvertent discovery procedures.

While Alternative 2 would not avoid a significant impact to a historical resource, it would reduce the extent of demolition and retain portions of Building 700/3000, thereby lessening the severity of the impact compared to the Proposed Project. CEQA Guidelines § 15126.6(a)[173] requires consideration of alternatives that would feasibly attain most of the project objectives while avoiding or substantially lessening significant environmental effects. In this case, Alternative 2 represents a feasible option that would partially preserve the historic resource and reduce the degree of impact, even though the impact would remain significant and unavoidable. Accordingly, this alternative is considered a reasonable alternative under CEQA.

5.4.2.3 Greenhouse Gas Emissions

Under Alternative 2, the Proposed Project would be modified to retain and adaptively reuse a portion of Building 700/3000 while constructing the aquatic center. This alternative would reduce the extent of demolition compared to the Proposed Project but would still involve substantial construction activities, including grading, building construction, and installation of the pool and associated facilities.

Construction Emissions

Construction of Alternative 2 would generate GHG emissions from construction equipment exhaust, material delivery, worker commutes, and other construction-related activities. Because this alternative would involve partial demolition rather than complete demolition of Building 700/3000, demolition-related emissions would be reduced compared to the Proposed Project. In addition, adaptive reuse of portions of the existing structure could reduce the need for new building materials, resulting in a marginal reduction in embodied GHG emissions associated with construction.

However, the majority of construction-related GHG emissions would be associated with grading, structural construction, and installation of the aquatic center and support facilities, which would still occur under this alternative. Furthermore, integration of existing building components with new construction could increase construction complexity and duration, potentially offsetting some of the GHG reductions associated with reduced demolition and material reuse. Overall, construction-related GHG emissions under Alternative 2 would be slightly lower than, but generally comparable to, those of the Proposed Project.

Operational Emissions

Operation of the aquatic center under Alternative 2 would be similar to the Proposed Project in terms of facility size, capacity, and intensity of use. The alternative would continue to support swim meets, water polo events, P.E. classes, and community programming. As a result, operational GHG emissions

[173] CEQA Guidelines § 15126.6(a)

associated with mobile sources (vehicle trips), energy use (pool heating, pumping, lighting, and building operations), and area sources would be comparable to those of the Proposed Project.

While adaptive reuse of a portion of the existing building could provide minor efficiencies by reducing the need for new construction, any retained structures would be upgraded to meet current building and energy efficiency standards. Therefore, overall operational GHG emissions would remain similar to the Proposed Project and would not result in a substantial reduction in long-term emissions.

Consistency with GHG Reduction Plans

Similar to the Proposed Project, Alternative 2 would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions, including Statewide reduction targets and energy efficiency standards. The Proposed Project would not induce substantial population growth or land use changes that would conflict with regional GHG reduction strategies.

Conclusion

Overall, Alternative 2 would result in a minor reduction in construction-related GHG emissions due to reduced demolition and partial reuse of existing building materials but would otherwise generate similar construction and operational emissions as the Proposed Project. Therefore, GHG impacts under Alternative 2 would be similar to those identified for the Proposed Project and would not represent a substantial reduction in impacts.

5.4.2.4 Noise and Vibration

Under Alternative 2, the Proposed Project would be modified to retain and adaptively reuse a portion of Building 700/3000 while constructing the aquatic center. This alternative would reduce the extent of demolition compared to the Proposed Project but would still involve substantial construction activities, including grading, structural modifications, and new building construction.

Construction Noise

Construction activities under Alternative 2 would generate noise from heavy equipment, haul trucks, and construction crews similar to those identified for the Proposed Project. Although demolition-related noise would be reduced due to partial retention of the building, demolition is only one component of the overall construction process. The noise study indicates that the highest construction noise levels are typically associated with grading and heavy equipment operation, which would still occur under this alternative.

In addition, adaptive reuse of portions of the existing structure could require specialized construction activities, such as structural retrofitting, cutting, and integration of new systems, which could extend the duration of construction or introduce intermittent noise sources. As a result, while peak demolition noise may be somewhat reduced, overall construction noise levels and duration would be similar to those of the Proposed Project. Construction noise impacts would therefore remain consistent with those identified in the noise study and would not be substantially reduced.

Operational Noise

Operation of the aquatic center under Alternative 2 would be similar to the Proposed Project in terms of facility size, use, and activity levels. Noise sources would include pool activities, spectator events, and mechanical equipment. The noise study determined that operational noise from the aquatic center would comply with applicable City of Long Beach noise standards and would result in less-than-significant impacts at nearby sensitive receptors. Because Alternative 2 would not substantially alter the scale or intensity of use of the facility, operational noise levels would be comparable to those of the Proposed Project.

Vibration

Construction-related vibration under Alternative 2 would be similar to the Proposed Project, as ground-disturbing activities such as grading and equipment operation would still occur. The noise and vibration analysis concluded that construction vibration levels associated with the Proposed Project would be below applicable thresholds and would not result in damage to nearby structures or disturbance to sensitive receptors. Because Alternative 2 would involve similar construction activities, vibration impacts would remain less than significant.

Operational vibration would not be substantially different from the Proposed Project, as typical aquatic center operations do not generate substantial groundborne vibration.

Conclusion

Overall, Alternative 2 would result in slightly reduced demolition-related noise but would otherwise generate construction and operational noise and vibration levels similar to those of the Proposed Project. Therefore, noise and vibration impacts under Alternative 2 would be comparable to those identified for the Proposed Project and would not represent a substantial reduction in impacts.

5.4.2.5 Tribal Cultural Resources

Under Alternative 2, the Proposed Project would be modified to retain and adaptively reuse a portion of Building 700/3000 while still requiring demolition of other portions of the structure and construction of the aquatic center. This alternative would involve ground-disturbing activities similar to those of the Proposed Project, including grading, excavation, trenching for utilities, and construction of new facilities.

As discussed in **Sections 3.3** and **3.6**, implementation of the Proposed Project would have the potential to impact previously unidentified TCRs during ground-disturbing activities. However, compliance with AB 52 consultation requirements and implementation of mitigation measures identified in the EIR—such as tribal monitoring, inadvertent discovery procedures, and treatment of discovered resources—would reduce impacts to TCRs to a less-than-significant level.

Because Alternative 2 would involve a similar extent and depth of ground disturbance as the Proposed Project, the potential to encounter TCRs would be comparable. Retention of portions of Building 700/3000 would not eliminate or substantially reduce the need for excavation associated with construction of the aquatic center and related infrastructure. Therefore, the potential for impacts to TCRs would be similar to the Proposed Project.

With implementation of the same mitigation measures and regulatory compliance described in **Sections 3.3** and **3.6**, impacts to TCRs under Alternative 2 would be reduced to a less-than-significant level.

Conclusion

Alternative 2 would not substantially reduce impacts to TCRs compared to the Proposed Project. Impacts would remain less than significant with mitigation.

5.4.2.6 Relationship to Project Objectives

Alternative 2 would meet many of the Proposed Project objectives by providing a new aquatic facility capable of supporting swim and water polo programs, P.E. classes, and community aquatic programming. The alternative would allow for construction of a competition-capable pool and associated support facilities; however, retention and adaptive reuse of portions of Building 700/3000 would impose constraints on site design and facility layout.

Incorporation of existing building elements into the Proposed Project could limit flexibility in the configuration and orientation of the pool, spectator seating, and support facilities, potentially reducing operational efficiency compared to the Proposed Project. In addition, adapting the existing structure for new uses would increase design complexity and construction costs.

Overall, Alternative 2 would meet most of the Proposed Project objectives but would be less effective than the Proposed Project in achieving objectives related to efficient site planning, operational functionality, and cost-effective implementation.

5.4.3 Alternative 3: Partial Historic Rehabilitation – Façade Preservation

This alternative would preserve the exterior of Building 700/3000's U-shaped façade and incorporate it into the plans for the aquatic center. Under this alternative, the project design would be revised to incorporate only the north, east, and west exterior façade walls of the existing building into the aquatic center program. New construction of locker room, ticket booth/concessions, pool machine/chemical rooms, and bleachers would attach to and be located within the preserved facades. Further reducing demolition compared to Alternative 1, this alternative would preserve more of the building's character-defining features.

Alternative 3 would reduce impacts to the historic resource compared to the Proposed Project by avoiding complete demolition and leaving existing exterior façade walls. However, similar to Alternative 2, design constraints, functional limitations, and the need to meet modern aquatic facility standards would significantly reduce the feasibility of this alternative. The footprint of the existing building's exterior facades is narrower than the width required by the proposed design to accommodate all of the necessary program components. Again, similar to Alternative 2, the northerly facade is set back further from the street than the Proposed Project, which may force the pool itself to be shifted south and could reduce the pool's length to no longer meet competition pool specifications. Building the bleachers into the existing westerly façade wall may not be structurally feasible. Although the exterior

facades of most of the existing building may physically remain, the changes to the façades to accommodate the proposed programming may impact character-defining features. This alternative would lessen the severity of the historic resource impact compared to the Proposed Project, but it would not fully avoid a significant impact on the historic structure.

5.4.3.1 Air Quality

Under Alternative 3, the Proposed Project would be modified to retain a greater portion of Building 700/3000, such as preserving the building façade and incorporating it into the design of the aquatic center. This alternative would reduce the extent of demolition compared to both the Proposed Project and Alternative 1 but would still require substantial construction activities, including site preparation, grading, structural integration, and construction of the aquatic facilities.

Construction Emissions

Construction activities under Alternative 3 would generate emissions of criteria pollutants and precursors, including ROG, NOx, CO, PM_{10}, and $PM_{2.5}$, from heavy-duty equipment, material hauling, and worker trips. Because this alternative would retain a larger portion of the existing building, demolition-related emissions would be further reduced compared to the Proposed Project and Alternative 1.

In addition, façade retention and rehabilitation could reduce the need for new building materials, resulting in a modest reduction in embodied emissions associated with construction. However, similar to Alternative 2, the majority of construction emissions would be associated with grading, pool construction, and installation of mechanical and support facilities, which would still occur. Furthermore, integrating preserved façade elements into a new structure typically requires specialized construction techniques, structural reinforcement, and sequencing constraints, which could increase construction duration or equipment usage. These factors may partially offset reductions in demolition-related emissions.

Overall, construction-related air pollutant emissions under Alternative 3 would be somewhat lower than the Proposed Project but would remain generally comparable in magnitude. Construction impacts would therefore remain similar to those identified for the Proposed Project and would not be substantially reduced.

Operational Emissions

Operation of the aquatic center under Alternative 3 would be similar to the Proposed Project in terms of facility size, capacity, and intensity of use. The facility would continue to support swim meets, water polo competitions, P.E. classes, and community programming. As a result, operational emissions associated with vehicle trips, energy use (including pool heating, pumping, and lighting), and area sources would be comparable to those of the Proposed Project.

While partial rehabilitation of the existing building envelope could provide minor efficiencies in materials use, retained elements would be upgraded to comply with current building and energy efficiency standards. Therefore, operational emissions would not differ substantially from those of the Proposed Project.

Consistency with Air Quality Plans

Similar to the Proposed Project, Alternative 3 would not conflict with or obstruct implementation of applicable air quality management plans. The alternative would not induce population growth or result in land use changes that would be inconsistent with regional air quality planning efforts.

Conclusion

Overall, Alternative 3 would reduce demolition-related emissions compared to the Proposed Project and Alternative 2 but would otherwise generate similar construction and operational emissions. Therefore, air quality impacts under Alternative 3 would be similar to those identified for the Proposed Project and would not represent a substantial reduction in impacts.

5.4.3.2 Cultural Resources

Under Alternative 3, the Proposed Project would be modified to retain a greater portion of Building 700/3000, such as preservation of the building façade, while constructing the aquatic center behind or integrated with the retained elements. This approach would preserve certain character-defining features of the historic resource, particularly those associated with its exterior appearance and architectural expression.

As described in **Section 3.3**, the Proposed Project would result in a significant and unavoidable impact to a historical resource due to demolition of Building 700/3000, which would materially impair the significance of the resource under CEQA. Alternative 3 would reduce the extent of demolition and would retain visible portions of the building; however, this alternative would still require removal of substantial portions of the structure and would involve alteration and integration of the retained façade into a new facility.

Retention of the façade alone would not preserve the building's overall integrity, as the loss of structural components, interior spaces, and original context would diminish key aspects of significance, including design, materials, workmanship, and association. In addition, modifications necessary to stabilize and incorporate the façade into the new construction could further alter or obscure character-defining features. As a result, consistent with the analysis in **Section 3.3**, Alternative 3 would still result in a substantial adverse change to a historical resource as defined by CEQA.

Therefore, while Alternative 3 would reduce the severity of the impact compared to the Proposed Project by preserving portions of the historic building, it would not avoid the impact. Impacts to historical resources under this alternative would remain significant and unavoidable.

With respect to archaeological resources, Alternative 3 would involve ground-disturbing activities similar to the Proposed Project, including excavation and grading. As discussed in **Section 3.3**, implementation of mitigation measures, including inadvertent discovery procedures, would reduce impacts to archaeological resources to a less-than-significant level. Because the extent of ground disturbance would be similar, impacts under Alternative 3 would also be less than significant with mitigation.

Conclusion

Alternative 3 would lessen the extent of demolition and retain portions of Building 700/3000; however, it would not avoid a substantial adverse change to a historical resource. Consistent with the conclusions within **Section 3.3**, impacts would remain significant and unavoidable.

5.4.3.3 Greenhouse Gas Emissions

Under Alternative 3, the Proposed Project would be modified to retain a greater portion of Building 700/3000, such as preservation of the building façade, while constructing the aquatic center. This alternative would reduce the extent of demolition and incorporate portions of the existing structure into the project design but would still require substantial construction and full operation of the aquatic facility.

Construction Emissions

Construction of Alternative 3 would generate GHG emissions from construction equipment exhaust, material transport, and worker vehicle trips, similar to the Proposed Project. Because this alternative would retain a larger portion of the existing building compared to the Proposed Project and Alternative 2, demolition-related emissions would be further reduced. In addition, partial retention of the building façade and structural elements would reduce the quantity of new building materials required, resulting in a modest reduction in embodied GHG emissions associated with construction.

However, as described in **Section 3.4**, the majority of construction-related GHG emissions for the Proposed Project are associated with grading, pool construction, and installation of building systems, all of which would still occur under this alternative. Furthermore, façade retention and structural integration typically require additional reinforcement, specialized construction techniques, and sequencing constraints, which could increase construction duration or equipment usage. These factors may offset some of the reductions associated with decreased demolition and material reuse.

Overall, construction-related GHG emissions under Alternative 3 would be somewhat lower than those of the Proposed Project but would remain generally comparable in magnitude.

Operational Emissions

Operation of the aquatic center under Alternative 3 would be similar to the Proposed Project in terms of facility size, capacity, and intensity of use. The facility would continue to support swim meets, water polo competitions, P.E. classes, and community programming. As a result, operational GHG emissions associated with vehicle trips, energy use (including pool heating, pumping, and lighting), and building operations would be comparable to those of the Proposed Project.

While retention of portions of the existing building could reduce the need for new construction materials, all rehabilitated components would be required to meet current building and energy efficiency standards. Therefore, operational energy use and associated GHG emissions would not differ substantially from the Proposed Project.

As concluded in **Section 3.4**, the Proposed Project's GHG emissions would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Alternative 3 would similarly be consistent with applicable GHG reduction strategies and would not result in substantial additional emissions.

Conclusion

Alternative 3 would result in a modest reduction in construction-related GHG emissions due to reduced demolition and partial building retention; however, overall construction and operational emissions would remain similar to those of the Proposed Project. Consistent with the conclusions of **Section 3.4**, GHG impacts under Alternative 3 would be less than significant and would not represent a substantial reduction in impacts compared to the Proposed Project.

5.4.3.4 Noise and Vibration

Under Alternative 3, the Proposed Project would be modified to retain a greater portion of Building 700/3000, such as preservation of the building façade, while constructing the aquatic center. This alternative would reduce the extent of demolition but would still involve substantial construction activities, including grading, structural reinforcement, and new building construction.

Construction Noise

Construction activities under Alternative 3 would generate noise from heavy equipment, haul trucks, and construction crews similar to those identified for the Proposed Project. While demolition-related noise would be reduced due to façade retention, demolition represents only a portion of the overall construction noise profile. The noise study indicates that the highest construction noise levels are typically associated with grading and heavy equipment operations, which would still occur under this alternative.

In addition, façade preservation would require specialized construction techniques, such as structural bracing, stabilization, and integration of the retained façade into the new facility. These activities could extend the duration of construction or introduce intermittent high-noise activities, potentially offsetting reductions associated with reduced demolition. As a result, overall construction noise levels and duration would be similar to those of the Proposed Project. Consistent with the conclusions of the noise study, construction noise impacts would remain less than significant with implementation of standard construction practices and compliance with applicable regulations.

Operational Noise

Operation of the aquatic center under Alternative 3 would be similar to the Proposed Project in terms of facility size, capacity, and intensity of use. Noise sources would include pool activities, spectator events, and mechanical equipment. As identified in the noise study, operational noise from the aquatic center would comply with applicable City of Long Beach noise standards and would result in less-than-significant impacts at nearby sensitive receptors. Because Alternative 3 would not substantially change the scale or intensity of use, operational noise levels would be comparable to the Proposed Project.

Vibration

Construction-related vibration under Alternative 3 would be similar to the Proposed Project, as ground-disturbing activities and use of heavy equipment would still occur. The noise and vibration analysis determined that construction vibration levels would be below applicable thresholds and would not result in damage to nearby structures or disturbance to sensitive receptors. Retention of the façade would not substantially change the types of equipment used or the nature of ground disturbance. Therefore, vibration impacts would remain less than significant.

Operational activities associated with the aquatic center would not generate substantial groundborne vibration.

Conclusion

Alternative 3 would reduce demolition-related noise but would otherwise result in construction and operational noise and vibration levels similar to those of the Proposed Project. Consistent with the conclusions of the noise study, impacts would remain less than significant and would not represent a substantial reduction in impacts compared to the Proposed Project.

5.4.3.5 Tribal Cultural Resources

Under Alternative 3, the Proposed Project would be modified to retain a greater portion of Building 700/3000, such as preservation of the building façade, while constructing the aquatic center. This alternative would still require substantial ground-disturbing activities, including grading, excavation, trenching for utilities, and construction of new facilities.

As discussed in **Section 3.6**, implementation of the Proposed Project has the potential to impact previously unidentified TCRs during ground-disturbing activities. **Section 3.6** further describes the AB 52 consultation process to be undertaken for the Proposed Project and identifies mitigation measures, including tribal monitoring (as requested through consultation), inadvertent discovery procedures, and treatment protocols for any discovered resources, which would reduce impacts to TCRs to a less-than-significant level.

Because Alternative 3 would involve a similar extent and depth of ground disturbance as the Proposed Project, the potential to encounter TCRs would be comparable. Retention of the building façade would not eliminate or substantially reduce excavation associated with construction of the aquatic center and related infrastructure. Therefore, the potential for impacts to TCRs would remain similar to the Proposed Project.

With implementation of the mitigation measures and compliance with AB 52 consultation requirements described in **Section 3.6**, impacts to TCRs under Alternative 3 would be reduced to a less-than-significant level.

Conclusion

Alternative 3 would not substantially reduce impacts to TCRs compared to the Proposed Project. Consistent with **Section 3.6**, impacts would remain less than significant with mitigation.

5.4.3.6 Relationship to Project Objectives

Alternative 3 would meet some of the Proposed Project objectives by providing a new aquatic facility capable of supporting swim and water polo programs, P.E. classes, and community aquatic programming. The alternative would allow for development of a competition-capable pool and associated support facilities; however, retention of the building façade would impose design constraints on the layout and configuration of the aquatic center.

Preservation of the façade would limit site planning flexibility and could restrict the size, orientation, and efficient arrangement of the pool, spectator seating, and support facilities. This constraint could reduce the overall functionality and operational efficiency of the aquatic facility compared to the Proposed Project. In addition, integration of the retained façade into the new facility would increase design complexity and construction costs.

Overall, Alternative 3 would partially meet the Proposed Project objectives but would be less effective than the Proposed Project in achieving objectives related to efficient site design, operational functionality, and cost-effective implementation.

5.4.4 Alternative 4: Historic Rehabilitation and Alternative Location

This alternative would preserve and rehabilitate Building 700/3000 in total to continue its current use as a classroom building or adaptively re-use it for similar purposes. The new aquatic center would be constructed in an alternative location on the MHS campus. Potential alternative locations would include the North Parking Lot (corner of E. Belen Street and Palo Verde Avenue); the South Parking Lot (corner of Snowden Avenue and E. Barbanell Street); or the East Athletic Field (corner of Palo Verde Avenue and E. Barbanell Street).

Alternative 4 would eliminate impacts to the historic resource compared to the Proposed Project. However, relocating the aquatic center to another area of campus would eliminate or impact existing, necessary facilities.

The dimensions of the North Parking Lot are not sufficient to accommodate the proposed program design and would necessitate redesigning to an L-shaped footprint extending south next to Building 700/3000. The pool and bleachers would be located within the existing parking lot, along with the ticket booth/concessions building adjacent to Palo Verde Avenue; the locker room and pool machine/chemical rooms would need to be located within the base of the “L.” Furthermore, the redesign would eliminate a significant amount of campus parking.

The dimensions of the South Parking Lot are also not sufficient to accommodate the proposed program design. Its long rectangular shape with a severe angle at the southerly end may make a redesign of the aquatic center infeasible. Furthermore, if feasible, the redesign would eliminate a significant amount of campus parking, which is also in close proximity to the school’s auditorium.

The East Athletic Field is more than sufficient in size and dimensions to accommodate the aquatic center proposed design. To avoid eliminating the soccer field, it would need to be relocated to partially overlap

with the baseball field at the northerly half of the field. The aquatic center would be located in the south half of the existing field. This location offers the most flexibility for relocating the aquatic center, but it may create operational constraints on the school's baseball and soccer programs. Furthermore, this location would place significant infrastructure in an area of the campus well away from existing infrastructure.

5.4.4.1 Air Quality

Under Alternative 4, the Proposed Project would be modified to fully preserve Building 700/3000 and relocate the aquatic center to an alternative location on the MHS campus. This alternative would avoid demolition of the historic resource but would still require construction of a new aquatic facility at a different campus location.

Construction Emissions

Construction activities under Alternative 4 would generate emissions of criteria pollutants and precursors, including ROG, NOx, CO, PM_{10}, and $PM_{2.5}$, from heavy-duty equipment, material hauling, and worker vehicle trips. Because this alternative would avoid demolition of Building 700/3000, demolition-related emissions would be reduced compared to the Proposed Project and Alternatives 2 and 3.

However, construction of the aquatic center at an alternative location would still require site preparation, grading, excavation, and building construction similar in scope to the Proposed Project. Depending on the selected location, additional site preparation activities—such as removal of existing improvements, relocation of utilities, or reconfiguration of campus facilities—could be required, potentially increasing construction duration or intensity. As described in **Section 3.2**, the majority of construction emissions are associated with grading and construction activities rather than demolition. Therefore, overall construction emissions under Alternative 4 would be slightly lower than, but generally comparable to, those of the Proposed Project.

Operational Emissions

Operation of the aquatic center under Alternative 4 would be similar to the Proposed Project in terms of facility size, capacity, and intensity of use. The alternative would continue to support swim meets, water polo competitions, P.E. classes, and community programming. As a result, operational emissions associated with mobile sources (vehicle trips), energy use (including pool heating, pumping, and lighting), and area sources would be comparable to those of the Proposed Project.

Relocation of the aquatic center within the campus could result in minor changes to internal circulation patterns or parking distribution; however, these changes would not be expected to substantially alter overall trip generation or regional vehicle miles traveled. Therefore, operational emissions would remain similar to those identified for the Proposed Project.

Consistency with Air Quality Plans

Similar to the Proposed Project, Alternative 4 would not conflict with or obstruct implementation of applicable AQMPs. The alternative would not induce population growth or result in land use changes that would be inconsistent with regional air quality planning efforts.

Conclusion

Alternative 4 would reduce demolition-related emissions by avoiding demolition of Building 700/3000; however, overall construction and operational emissions would remain similar to those of the Proposed Project. Therefore, air quality impacts under Alternative 4 would be comparable to those identified for the Proposed Project and would not represent a substantial reduction in impacts.

5.4.4.2 Cultural Resources

Under Alternative 4, the Proposed Project would be modified to fully preserve Building 700/3000 in place and relocate construction of the aquatic center to an alternative location on the MHS campus. This alternative would avoid demolition and substantial alteration of the building and would retain the historic resource within its existing location and campus context.

As described in **Section 3.3**, the Proposed Project would result in a significant and unavoidable impact due to demolition of Building 700/3000, which would materially impair the significance of a historical resource under CEQA. In contrast, Alternative 4 would avoid demolition and would retain the building's character-defining features, integrity, and ability to convey its historical significance. Therefore, Alternative 4 would avoid a substantial adverse change to a historical resource as defined by CEQA.

Retention of Building 700/3000 under this alternative would preserve the aspects of integrity identified in **Section 3.3**, including design, materials, workmanship, feeling, and association. Because the building would remain in its original location and would not be substantially altered, the relationship between the building and its surrounding campus environment would be maintained. This approach is consistent with the fundamental principles of historic preservation, which prioritize retention of historic fabric and avoidance of demolition.

While Alternative 4 would avoid direct impacts to the historic resource, relocation of the aquatic center to another portion of the campus could result in indirect changes to the setting of Building 700/3000, depending on the location, scale, and design of new development. Such changes could include alterations to nearby views, circulation patterns, or the spatial organization of the campus. However, these potential changes would not materially impair the characteristics of the resource that convey its historical significance, as the building itself would be retained and its defining features preserved. As a result, indirect impacts to the historic resource's setting would be less than significant.

With respect to archaeological resources, Alternative 4 would involve ground-disturbing activities at a different location on campus. As discussed in **Section 3.3**, such activities could result in the potential to encounter previously unidentified archaeological resources. However, implementation of mitigation measures, including inadvertent discovery procedures and regulatory compliance, would reduce impacts to archaeological resources to a less-than-significant level.

Conclusion

Alternative 4 would avoid the significant and unavoidable impact to historical resources identified for the Proposed Project by preserving Building 700/3000 in place and maintaining its historic integrity. This alternative represents the environmentally superior option with respect to cultural resources because it avoids a substantial adverse change to a historical resource. Impacts to historical resources under this

alternative would be less than significant. Impacts to archaeological resources would remain less than significant with mitigation, consistent with the conclusions of **Section 3.3**.

5.4.4.3 Greenhouse Gas Emissions

Under Alternative 4, the Proposed Project would be modified to fully preserve Building 700/3000 and relocate construction of the aquatic center to an alternative location on the MHS campus. This alternative would avoid demolition of the historic building but would still involve construction and operation of a new aquatic facility.

Construction Emissions

Construction of Alternative 4 would generate GHG emissions from construction equipment, material transport, and worker vehicle trips, similar to the Proposed Project. Because this alternative would avoid demolition of Building 700/3000, it would eliminate demolition-related emissions and would reduce the need for disposal and replacement of building materials associated with the historic structure. As a result, Alternative 4 would reduce GHG emissions associated with demolition and material replacement compared to the Proposed Project and Alternatives 2 and 3.

However, the majority of construction-related GHG emissions for the Proposed Project, as described in **Section 3.4**, are associated with grading, construction of the aquatic facility, and installation of mechanical and support systems. These activities would still occur under Alternative 4. In addition, development of the aquatic center at a different location could require additional site preparation activities, such as clearing, utility relocation, or reconfiguration of existing campus features, which could increase construction duration or equipment usage. Therefore, while construction-related GHG emissions would be somewhat reduced due to avoidance of demolition, overall emissions would remain similar in magnitude to the Proposed Project.

Operational Emissions

Operation of the aquatic center under Alternative 4 would be similar to the Proposed Project in terms of facility size, capacity, and intensity of use. The alternative would continue to support swim meets, water polo competitions, P.E. classes, and community programming. As a result, operational GHG emissions associated with vehicle trips, energy use (including pool heating, pumping, and lighting), and building operations would be comparable to those of the Proposed Project.

Relocation of the aquatic center within the campus could result in minor changes to internal circulation, parking distribution, or access points; however, these changes would not be expected to substantially alter overall trip generation or regional vehicle miles traveled. Therefore, operational emissions would remain consistent with those identified for the Proposed Project.

As concluded in **Section 3.4**, the Proposed Project's GHG emissions would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Alternative 4 would similarly be consistent with applicable GHG reduction strategies and would not result in substantial additional emissions.

Conclusion

Alternative 4 would reduce construction-related GHG emissions by avoiding demolition of Building 700/3000; however, overall construction and operational emissions would remain similar to those of the Proposed Project. Consistent with the conclusions of **Section 3.4**, GHG impacts under Alternative 4 would be less than significant and would not represent a substantial reduction in impacts compared to the Proposed Project.

5.4.4.4 Noise and Vibration

Under Alternative 4, the Proposed Project would be modified to fully preserve Building 700/3000 and relocate construction of the aquatic center to an alternative location on the MHS campus. This alternative would avoid demolition-related activities at the existing building location but would still require construction of a new aquatic facility elsewhere on campus.

Construction Noise

Construction activities under Alternative 4 would generate noise from heavy equipment, haul trucks, and construction crews similar to those identified for the Proposed Project. Because demolition of Building 700/3000 would not occur, demolition-related noise would be eliminated. However, as described in the noise study, the highest construction noise levels are typically associated with grading and heavy equipment operations rather than demolition. These activities would still occur under Alternative 4.

In addition, depending on the selected alternative location, construction could occur closer to or farther from sensitive receptors (e.g., nearby classrooms or off-site residences), which could result in localized variations in noise exposure. Construction at a different campus location may also require additional site preparation activities, such as removal of existing improvements or utility relocation, which could extend the duration of construction noise. Overall, construction noise levels would be similar to those of the Proposed Project, although demolition-related noise would be reduced. Consistent with the noise study, construction noise impacts would remain less than significant with compliance with applicable regulations and standard construction practices.

Operational Noise

Operation of the aquatic center under Alternative 4 would be similar to the Proposed Project in terms of facility size, capacity, and intensity of use. Noise sources would include pool activities, spectator events, and mechanical equipment. As identified in the noise study, operational noise associated with the aquatic center would comply with applicable City of Long Beach noise standards and would result in less-than-significant impacts at nearby sensitive receptors.

Relocation of the aquatic center could shift the distribution of operational noise within the campus and in relation to nearby receptors. Depending on the alternative location, operational noise could be closer to or farther from certain receptors, potentially resulting in minor increases or decreases in localized noise levels. However, overall noise levels would remain within applicable standards, and impacts would remain less than significant.

Vibration

Construction-related vibration under Alternative 4 would be similar to the Proposed Project, as ground-disturbing activities and use of heavy equipment would still occur. The noise and vibration analysis determined that construction vibration levels would be below applicable thresholds and would not result in damage to nearby structures or disturbance to sensitive receptors. Avoidance of demolition would reduce some vibration associated with building removal; however, vibration generated by grading and construction equipment would still occur. Therefore, vibration impacts would remain less than significant.

Operational activities associated with the aquatic center would not generate substantial groundborne vibration.

Conclusion

Alternative 4 would eliminate demolition-related noise and associated vibration at Building 700/3000 but would otherwise result in construction and operational noise and vibration levels similar to those of the Proposed Project. Consistent with the conclusions of the noise study, impacts would remain less than significant and would not represent a substantial reduction in impacts compared to the Proposed Project.

5.4.4.5 Tribal Cultural Resources

Under Alternative 4, the Proposed Project would be modified to fully preserve Building 700/3000 and relocate construction of the aquatic center to an alternative location on the MHS campus. This alternative would avoid demolition of the historic building but would still require ground-disturbing activities at a different location on campus, including grading, excavation, and installation of utilities and new facilities.

As discussed in **Section 3.6**, implementation of the Proposed Project has the potential to impact previously unidentified TCRs during ground-disturbing activities. **Section 3.6** also describes the AB 52 consultation process undertaken for the Proposed Project and identifies mitigation measures, including tribal monitoring (as requested through consultation), inadvertent discovery procedures, and treatment protocols for any discovered resources. Implementation of these measures would reduce impacts to TCRs to a less-than-significant level.

Under Alternative 4, although demolition of Building 700/3000 would not occur, construction of the aquatic center at an alternative location would involve ground disturbance similar in extent and depth to the Proposed Project but occurring in a different portion of the campus. As a result, the potential to encounter previously unidentified TCRs would remain. In some cases, the alternative location could involve previously undisturbed areas, which may slightly increase the potential to encounter intact subsurface resources compared to the project site; however, this would depend on the specific location selected.

With implementation of the mitigation measures and compliance with AB 52 consultation requirements described in **Section 3.6**, impacts to TCRs under Alternative 4 would be reduced to a less-than-significant level.

Conclusion

Alternative 4 would not substantially reduce impacts to TCRs compared to the Proposed Project, as ground-disturbing activities would still occur, albeit in a different location. Consistent with **Section 3.6**, impacts would remain less than significant with mitigation.

5.4.4.6 Relationship to Project Objectives

Alternative 4 would meet the primary objectives of the Proposed Project by constructing a new aquatic center capable of supporting swim and water polo programs, P.E. classes, and community aquatic programming. The alternative would provide a competition-capable pool, spectator seating, and associated support facilities necessary for aquatic operations. Accordingly, this alternative would meet most of the Proposed Project objectives related to providing a modern aquatic facility at MHS.

However, Alternative 4 would not fully meet all project objectives. Relocation of the aquatic center to an alternative location on campus would not optimize the use of the project site, which was selected to efficiently integrate the aquatic facility with existing campus infrastructure and athletic facilities. Development at an alternative location could require reconfiguration or displacement of existing campus uses, such as athletic fields or parking areas, and could result in less efficient campus circulation.

In addition, this alternative may not meet objectives related to improving campus functionality and operational efficiency to the same extent as the Proposed Project. The Proposed Project and the project site allows for coordinated planning, access, and supervision, whereas an alternative location could introduce operational constraints depending on the site selected.

Overall, Alternative 4 would meet most of the Proposed Project objectives but would be less effective in achieving objectives related to site efficiency, integration with existing campus facilities, and overall campus functionality.

5.4.5 Environmentally Superior Alternative

5.4.5.1 Introduction

CEQA requires that an EIR identify the environmentally superior alternative among the alternatives evaluated (CEQA Guidelines § 15126.6(e)[174]). The environmentally superior alternative is the alternative that would result in the least overall environmental damage, taking into consideration the extent to which each alternative would reduce or avoid the significant environmental impacts of the Proposed Project, as well as any other environmental advantages or disadvantages. The comparative impacts of the Proposed Project and its alternatives are summarized in **Table 12**.

If the No Project Alternative is determined to be environmentally superior, CEQA requires that the EIR also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines

[174] CEQA Guidelines § 15126.6(e)

§ 15126.6(e)(2)). This requirement ensures that decision-makers are informed of a feasible alternative that could reduce environmental impacts while still achieving most of the project objectives.

5.4.5.2 Identification of the Environmentally Superior Alternative

As described in this EIR, the primary significant and unavoidable impact associated with the Proposed Project is the demolition of Building 700/3000, which would result in a substantial adverse change to a historical resource (**Section 3.3**). The No Project Alternative (Alternative 1) would avoid this impact by not implementing the Proposed Project; however, it would not meet any of the Proposed Project objectives and would not provide the intended educational, athletic, or community benefits.

Among the remaining alternatives, Alternative 4 (Historic Rehabilitation and Alternative Location) would avoid demolition of Building 700/3000 by preserving the historic resource in place while relocating the aquatic center to another location on campus. As discussed in **Section 3.3**, this alternative would avoid a substantial adverse change to a historical resource and would reduce the only significant and unavoidable impact identified for the Proposed Project to a less-than-significant level.

In addition to avoiding impacts to historical resources, Alternative 4 would result in environmental impacts that are generally similar to those of the Proposed Project for other resource areas, including air quality, GHG emissions, noise, and TCRs. While minor reductions in construction-related emissions may occur due to avoidance of demolition, overall impacts for these resource areas would remain less than significant and comparable to the Proposed Project.

Alternatives 2 (Partial Demolition) and 3 (Partial Historic Rehabilitation-Façade Preservation) would reduce the extent of demolition of Building 700/3000 but would not avoid a substantial adverse change to a historical resource. As discussed in **Section 3.3**, both alternatives would continue to result in significant and unavoidable impacts to historical resources, although the severity of impacts would be reduced compared to the Proposed Project.

Table 12. Comparative Impact Summary

Environmental Issue	Proposed Project	Alt 1: No Project	Alt 2: Partial Demolition	Alt 3: Façade Preservation	Alt 4: Relocation
Air Quality	Less than Significant	Less	Similar	Similar	Similar
Cultural Resources (Historical)	**Significant and Unavoidable**	**Avoided**	**Significant and Unavoidable (Reduced)**	**Significant and Unavoidable (Reduced)**	**Less than Significant**
Greenhouse Gas Emissions	Less than Significant	Less	Similar	Similar	Similar
Noise and Vibration	Less than Significant	Less	Similar	Similar	Similar
Tribal Cultural Resources	Less than Significant with Mitigation	Less	Similar	Similar	Similar

5.4.5.3 Conclusion

The No Project Alternative would result in the least environmental impact overall because it would avoid all Proposed Project -related impacts, including the significant and unavoidable impact to historical resources. However, because it would not meet any of the Proposed Project objectives, CEQA requires identification of an environmentally superior alternative among the remaining alternatives.

Among the build alternatives, Alternative 4 (Historic Rehabilitation and Alternative Location) is the environmentally superior alternative because it would avoid the significant and unavoidable impact to historical resources while meeting most of the Proposed Project objectives. This alternative provides the greatest overall reduction in environmental impacts compared to the Proposed Project and the other alternatives evaluated.

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6.4 VISTA ENVIRONMENTAL

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Appendix A. Notice of Preparation/Initial Study/Public Scoping Comments

Notice of Preparation

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Business Services Department
Facilities Development & Planning
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NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE MILLIKAN HIGH SCHOOL AQUATIC CENTER PROJECT

DATE: December 5, 2025

TO: State Clearinghouse, Agencies, and Interested Parties

FROM: Long Beach Unified School District, Lead Agency and Project Proponent

SUBJECT: Notice of Preparation of an Environmental Impact Report for the Millikan High School Aquatic Center Project

Pursuant to Public Resources Code Section 21165 and the Guidelines for the California Environmental Quality Act (CEQA) Section 15050, the Long Beach Unified School District (District) is the lead agency responsible for preparation of an environmental impact report (EIR) addressing potential impacts associated with the project identified herein.

Agencies

The purpose of this document is to serve as a Notice of Preparation (NOP) of an EIR pursuant to the CEQA Guidelines Section 15082 and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project. Specifically, the District requests input on the environmental information germane to your agency's statutory responsibility in connection with the proposed project. Your agency may rely on the EIR prepared by the District when considering permits or other approvals for this project.

Organizations and Interested Parties

The District requests your comments regarding the proposed scope and content of the EIR, including environmental issues associated with construction and operation of the proposed project.

Proposed Project Title

Millikan High School Aquatic Center Project

Proposed Project Location

The Proposed Project is located in the north-central portion of Millikan High School, 2800 Snowden Avenue, Long Beach, California 90815, within the City of Long Beach, Los Angeles County. The

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approximately 34.4-acre campus is bounded by East Belen Street to the north, Palo Verde Avenue to the east, East Barbanell Street to the south, and Snowden Avenue to the west. Land uses surrounding the campus include single-family residential neighborhoods to the east, west, and south, and commercial uses to the north along East Belen Street. The specific project site is localized to building 700/3000, adjacent portable classrooms, and associated landscaping and hardscape. Land uses immediately adjacent to the Proposed Project include the surrounding Millikan Campus, including adjacent school parking, and commercial land use north across East Belen Street (refer to Figure 1, Project Location).

Proposed Project Description

The District proposes to demolish Building 700/3000 and adjacent portable classrooms at Millikan High School and construct a new Aquatic Center within the existing developed campus footprint (refer to Figure 2, Site Plan).

The new facility would include:

- A Myrtha modular competition pool (approximately 51.5 meters × 22.9 meters) with a movable bulkhead;
- Inclusive locker rooms, boys' and girls' locker rooms, showers, and offices;
- Spectator bleachers with capacity for approximately 500 people;
- A snack bar/ticket booth, scoreboard, and shade structures;
- Sports LED lighting, integrated sound system, and security enhancements;
- Support buildings for the pool;
- Associated site improvements, including but not limited to perimeter walls, circulation, landscaping, and stormwater management features compliant with City of Long Beach Low Impact Development (LID) standards.

The Aquatic Center would support physical education classes, competitive swim and water polo programs, Special Olympics, and community swim activities. Construction is anticipated to occur over approximately 18 to 24 months, beginning with demolition and grading and followed by facility construction and site improvements.

Potential Environmental Effects

Based on the Initial Study prepared for the proposed project; the District has determined that an EIR is the appropriate level of environmental documentation. The EIR analysis will include the provision of alternatives, and topical areas will include air quality, cultural resources, greenhouse gas emissions, tribal cultural resources, and noise. The EIR will describe and evaluate project alternatives that may reduce or avoid any identified significant adverse impacts of the project. Topics that are found not to have significant impacts include aesthetics, agriculture and forestry, biological resources, energy,

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geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire; these topics were evaluated in the Initial Study.

Public Review Period

This NOP is available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). The NOP is available for a 30-day public review period beginning December 5th, 2025, and ending January 5th, 2025. Comments must be submitted within this 30-day public review period. The NOP and Initial Study are available online at:

https://www.lbschoolbonds.net/environmental-reviews

Hard copies may be viewed at the following libraries:

- Long Beach Main Library (101 Pacific Avenue, Long Beach, CA 90822)
- Signal Hill Library (1800 E Hill St, Signal Hill, CA 90755)
- Angelo M. Iacoboni Library (4990 Clark Avenue, Lakewood, CA)
- District Facilities Development and Planning Offices (2425 Webster Ave Long Beach, CA 90810)
- District Board of Education Offices (1515 Hughes Way, Long Beach, CA 90810)
- Millikan High School (2800 Snowden Ave, Long Beach, CA 90815)

Agency/Public Comments

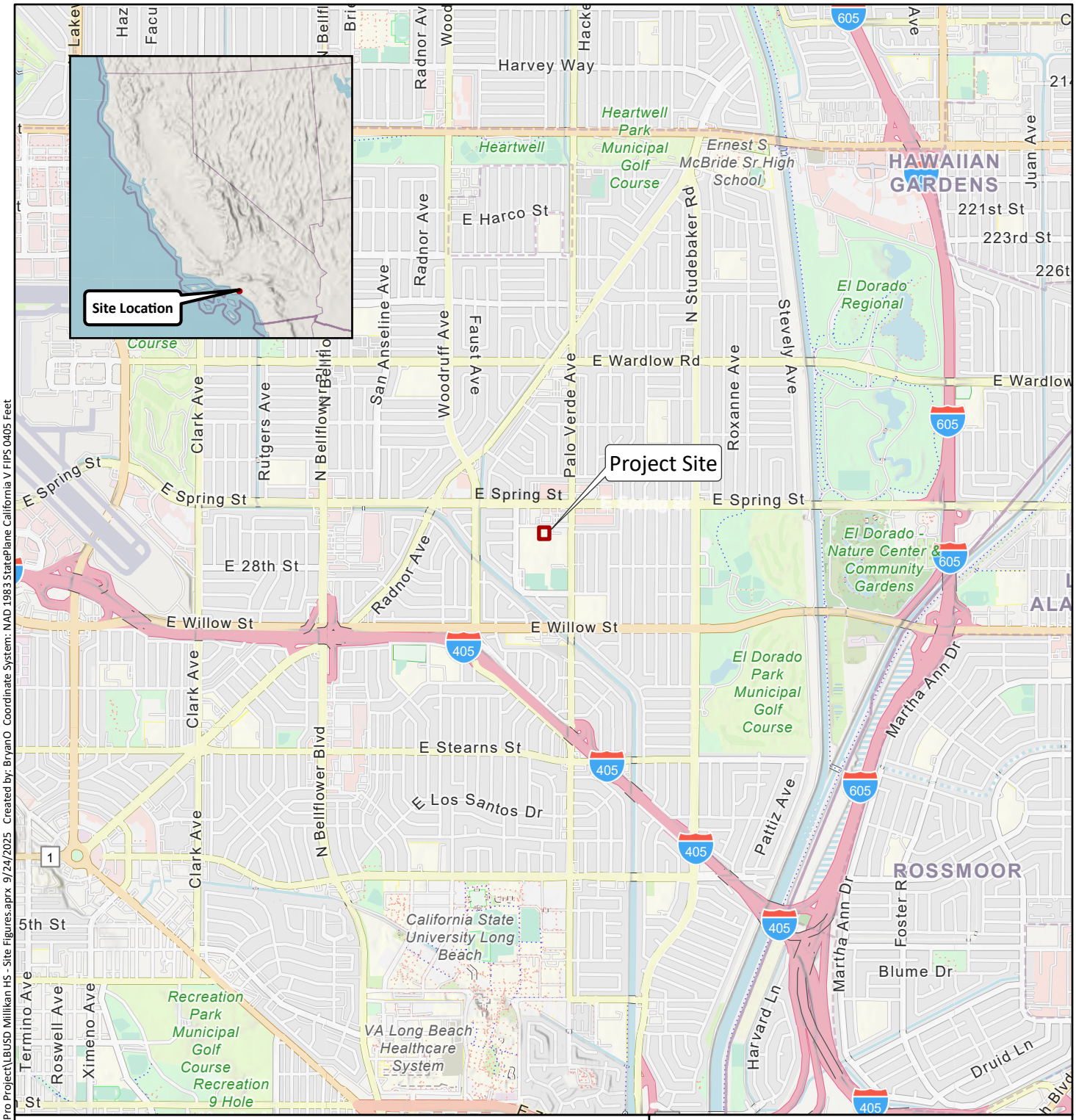
The District will accept written comments only during the 30-day public review period mentioned above ending January 5th, 2025. Please indicate a contact person for your agency or organization and send your responses and comments to the contact below. Your comments may also be sent to the contact e-mail below (Please include “Millikan Aquatic Center EIR” subject heading).

Attn: Dana Grudem, Senior Program Manager
Facilities Development and Planning Branch
2425 Webster Ave
Long Beach, CA 90810
ceqa@lbschools.net

Attachments:

Figure 1: Project Location

Figure 2: Site Plan



0 1,500 3,000 6,000 Feet

1 inch = 3,000 feet

N

Legend

Project Boundary

Base Map: Open Street Maps

SAFETY FIRST

terraphase engineering

CLIENT: LBUSD

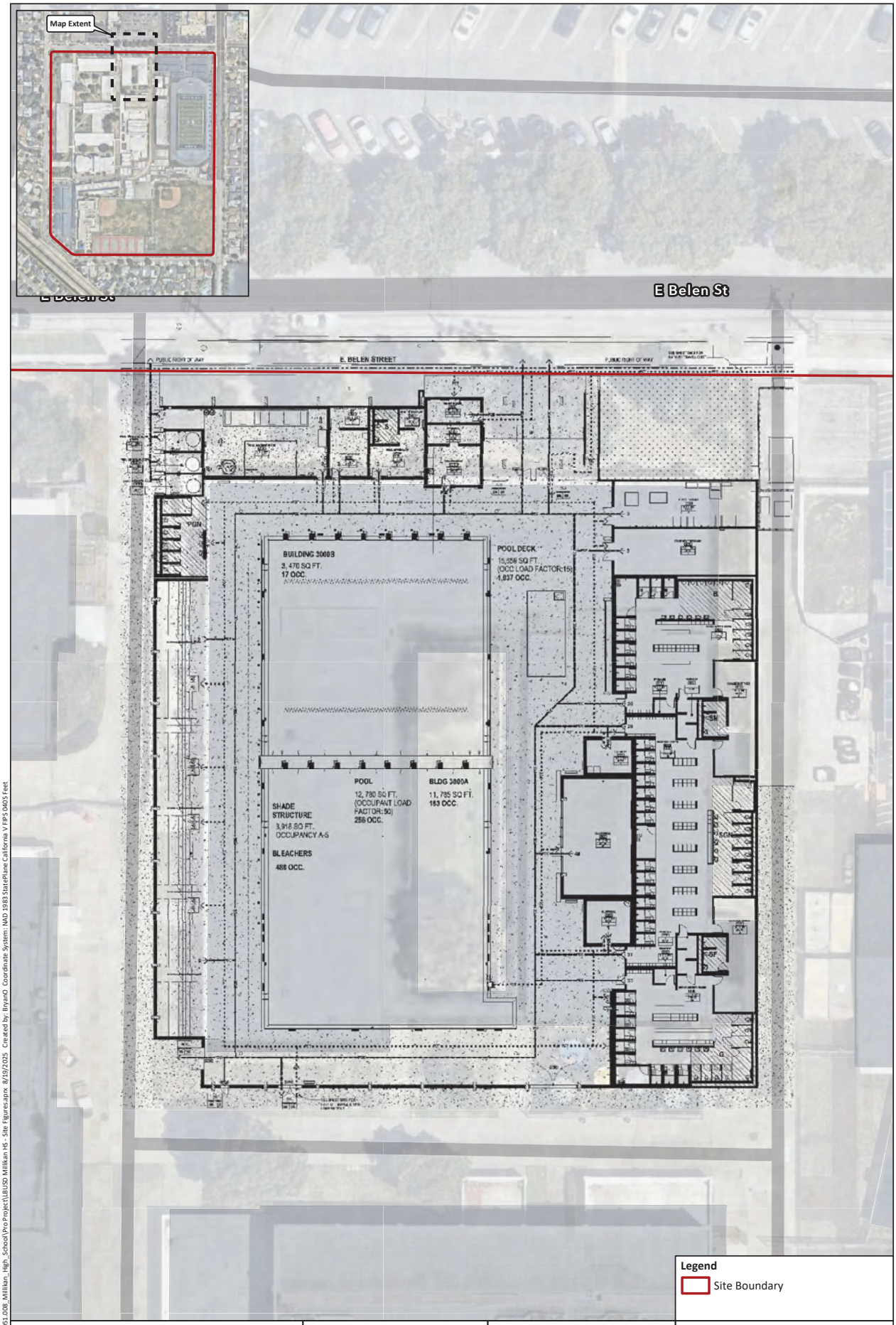
PROJECT: Millikan High School
2800 Snowden Ave. Long Beach, CA

PROJECT NUMBER: S051.008.C002

Project Location

FIGURE 1

File: N:\GIS\Prj\S051 LBUSD\S051.008_Millikan_High_School\Pro Project\LBUSD Millikan HS - Site Figures.aprx 9/24/2025 Created by: BryanO Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet



Legend

Site Boundary

N

0 15 30 60 Feet

1 inch = 30 feet

SAFETY FIRST

terraphase engineering

CLIENT:	LBUSD
PROJECT:	Millikan HS 2800 Snowden Ave, Long Beach, CA
PROJECT NUMBER:	S051.008.C002

Site Plan

FIGURE 2

File: N:\GIS\Prj\S051 LBUSD\S051.008_Millikan_High_School\Pro Project\LBUSD Millikan HS - Site Figures.aprx 8/19/2025 Created by: BryanO Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet

Initial Study

Initial Study

Millikan High School Aquatic Center Project

Prepared for

Long Beach Unified School District
Facilities Planning & Management
955 High Street
Oakland, California 94601

Prepared by

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November 2025

terraphase engineering

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Appendices

Appendix A Millikan High School Aquatic Center MUSCO Lighting Assessment
Appendix B Phase II Intensive Historic Resources Impact Assessment Report

Acronyms and Abbreviations

µg/m^3	micrograms per cubic meter
AB	Assembly Bill
ACM	asbestos-containing material
ALUCP	Airport Land Use Compatibility Plan
AQMP	Air Quality Management Plan
BLM	Bureau of Land Management
BMP	best management practice
BP	before present
CAA	Clean Air Act (federal)
CAAA	1990 CAA Amendments
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
Cal/OSHA	California Division of Occupational Safety and Health
CAP	criteria air pollutant
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
City	City of Long Beach
CNPS	California Native Plant Society
CO	carbon monoxide

CO_2e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CWA	Clean Water Act (federal)
dBA	a-weighted decibel
District	Long Beach Unified School District
DOC	Department of Conservation
DSA	California Division of the State Architect
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EV	electric vehicle
FEMA	Federal Emergency Management Agency
FESA	Endangered Species Act (federal)
FGC	California Fish and Game Code
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
GHG	greenhouse gas
GLO	General Land Office
HCD	California Department of Housing and Community Development
HS	High School
HSC	California Health and Safety Code
HVAC	heating/ventilation/air conditioning
I	Institutional
IPaC	USFWS Information, Planning, and Conservation
IS	Initial Study
kWh/m^2	kilowatt hours per square meter

LBFD	Long Beach Fire Department
LBP	lead-based paint
lbs/day	pounds per day
LGB	Long Beach Airport
LID	Low Impact Development
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act of 1918 (federal)
mg/m^3	milligrams per cubic meter
MLD	Most Likely Descendant
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MRZ	mineral resources zone
$MTCO_2e$	million tons of carbon dioxide equivalents
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
ND	Negative Declaration
NO_2	nitrogen dioxide
NOx	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OPR	Governor's Office of Planning and Research
PA	public address
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PM	particulate matter
PM_{10}	coarse particulate matter 10 micrometers or less in diameter
$PM_{2.5}$	fine particulate matter 2.5 micrometers or less in diameter
ppm	parts per million
PPV	peak particle velocity

PRC	Public Resources Code
Proposed Project	proposed Millikan High School Aquatic Center Project
RAW	Removal Action Workplan
RCRA	Resource Conservation and Recovery Act
RPS	Renewables Portfolio Standard
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SOx	sulfur oxides
SVE	soil vapor extraction
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCE	trichloroethene
TCR	tribal cultural resource
TSCA	Toxic Substances Control Act of 1976
U.S.C.	U.S. Code
UCMP	University of California Museum of Paleontology
USFWS	U.S. Fish & Wildlife Service
UW	universal waste
VMT	vehicle miles traveled
VOC	volatile organic compound

1 Introduction

The proposed Millikan High School (HS) Aquatic Center Project (Proposed Project) is a project as defined under the California Environmental Quality Act of 1970 (CEQA[1]; Public Resources Code [PRC] § 21000, et seq., as amended[2]). This Initial Study (IS) was prepared for the Long Beach Unified School District (District) pursuant to CEQA and the implementing CEQA Guidelines (Title 14, Chapter 3 of the California Code of Regulations [CCRs]; collectively, CEQA Guidelines).[3]

1.	**Project Title:**	Millikan High School Aquatic Center Project
2.	**Lead Agency Name and Address:**	Long Beach Unified School District Facilities Development and Planning Branch 2425 Webster Avenue Long Beach, CA 90810
3.	**Contact Person and Email Address:**	Dana Grudem, Senior Program Manager dgrudem@lbschools.net
4.	**Project Location:**	2800 Snowden Ave Long Beach, CA 90815
5.	**Project Sponsor's/Applicant's Name and Address:**	Long Beach Unified School District 2425 Webster Avenue Long Beach, CA 90810
6.	**General Plan Land Use Designation:**	Institutional
7.	**Zoning:**	Institutional (I) (City of Long Beach Zoning Code)
8.	**Surrounding Land Uses and Setting:**	The surrounding area includes single-family residential neighborhoods to the east along Palo Verde Avenue and to the northwest along Snowden Avenue. Commercial and community-serving uses are located to the north along East Spring Street, with additional residential neighborhoods to the south and west along East Barbanell Street and Snowden Avenue, respectively.

[1] 2025 CEQA Statute & Guidelines

[2] PRC § 21000, et seq.

[3] Guidelines for Implementation of the California Environmental Quality Act

9.	**Description of Project:**	The Proposed Project consists of demolition of Building 700/3000 and adjacent portable buildings at Millikan HS and construction of a new Aquatic Center. The Aquatic Center would include a competition pool, an inclusive locker room building with showers and lockers, boys and girls locker rooms, offices, bleachers with seating for approximately 500 spectators, and related site improvements including shade structures, lighting, scoreboard, and security features. The facility would serve physical education classes, competitive swim and water polo programs, Special Olympics, students with special needs, and community swim programs.
10.	**Project Entitlements:**	District Board Approval
11.	**California Native American Consultation Requests**	Pursuant to PRC § 21080.3.1, the District contacted the Native American Heritage Commission (NAHC) for a Sacred Lands File search and distribution of consultation notices to traditionally and culturally affiliated tribes. A reply was received on August 26, 2025 reporting that the SLF search was positive. On September 26, 2025 LBUSD sent consultation letters to the appropriate contacts.
12.	**Date Initial Study Completed:**	October 29, 2025

1.1 Purpose of the Study

This IS examines the potential effects of the Proposed Project on the environment. The Proposed Project assessed within this IS, described in Section 2, includes provisions to address known environmental concerns. The project description, including these provisions, provides the baseline for which environmental impacts are analyzed in Section 3.

This IS was prepared in accordance with CEQA and the CEQA Guidelines, as amended, to determine if the Project could have a significant impact on the environment. The purpose of this IS, as described in the CEQA Guidelines Section 15063(c)(1)[4] is to provide the lead agency with information to use as the basis for deciding whether to prepare an EIR or MND or ND.

This IS is organized into the following sections:

Section 1. Introduction: Provides an overview of the Proposed Project, location, sponsor, when the IS was completed, environmental resources potentially affected by the Proposed Project, and the significance determination of the Proposed Project on the environment by the Lead Agency (the District).

[4] 2025 CEQA Guidelines

Section 2. Project Description: Includes a detailed description of the Proposed Project and background information.

Section 3. Environmental Checklist and Discussion: Contains the Environmental Checklist form and a discussion of environmental issues.

Section 4. Preparers

Section 5. References

1.2 Environmental Factors Potentially Affected

Impacts to the resources listed below were evaluated using the Environmental Checklist included below However, only the environmental factors that are checked could be potentially affected by the Proposed Project and involve impacts that require mitigation to reduce the impacts to less-than-significant levels. The resource areas that are unchecked were determined to have a less-than-significant impact or no impact, even without mitigation.

- ☐ Aesthetics
- ☐ Agriculture and Forestry Resources
- ☒ Air Quality
- ☐ Biological Resources
- ☒ Cultural Resources
- ☐ Energy
- ☐ Geology and Soils
- ☒ Greenhouse Gas Emissions
- ☐ Hazards and Hazardous Materials
- ☐ Hydrology and Water Quality
- ☐ Land Use and Planning
- ☐ Mineral Resources
- ☒ Noise/Vibration
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation and Circulation
- ☒ Tribal Cultural Resources
- ☐ Utilities and Service Systems
- ☐ Wildfire
- ☒ Mandatory Findings of Significance

1.3 Significance Determination

On the basis of the environmental evaluation presented in Section 3, as the representative for the Lead Agency:

☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project design and project-specific mitigation measures described in Section 3 have been agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION is recommended to be adopted.

☒ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Signature	Date
Dana Grudem, Senior Project Manager	Long Beach Unified School District
Printed Name	Lead Agency

2 Project Description

The District proposes to construct a new Aquatic Center at Millikan HS to replace outdated facilities and expand aquatic program capacity (Proposed Project). The Proposed Project would involve demolition of Building 700/3000 and adjacent portable buildings and construction of a new Aquatic Center that includes a competition pool, an inclusive locker room building with showers and lockers, boys and girls locker rooms, offices, bleachers with seating for approximately 500 spectators, and related site improvements including, but not limited to: shade structures, lighting, scoreboard, and security features. The Proposed Project site (Project site) is located at 2800 Snowden Avenue in the City of Long Beach (City), Los Angeles County, California. The new Aquatic Center would serve Millikan HS's physical education program, competitive swim and water polo teams, students with special needs, Special Olympics, and community swim programs. The Proposed Project is required to undergo an environmental review pursuant to CEQA.

As the Lead Agency charged with approving and executing the Proposed Project, the District is required to consider the Proposed Project's potential environmental consequences and determine if its benefits outweigh any significant effects.

2.1 Location and Existing Setting

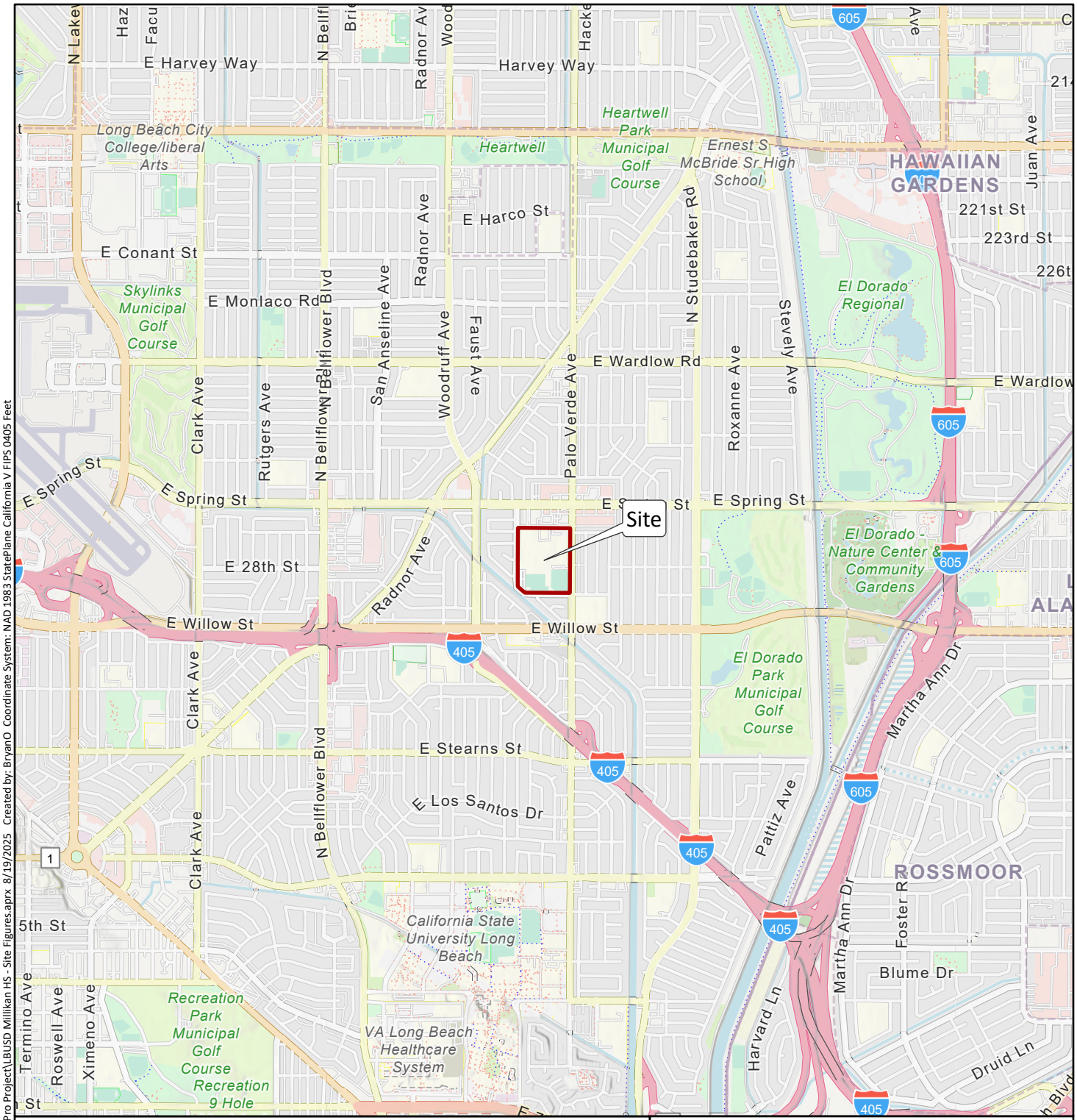
The Project site is located at 2800 Snowden Avenue in the City of Long Beach, Los Angeles County, California. The Millikan HS campus encompasses approximately 34.4 acres and includes 10 permanent buildings, 28 portable classrooms, one modular building, and associated athletic fields and facilities. The Project site includes the entire Millikan HS campus, parking areas, and athletic facilities, with the Aquatic Center improvements proposed within the existing developed campus footprint.

The Project site is bounded by East Belen Street to the north, Palo Verde Avenue to the east, East Barbanell Street to the south, and Snowden Avenue to the west. Surrounding land uses include residential neighborhoods to the east, west, and south, and commercial uses to the north along Spring Street. Regional access to the Project site is provided by Interstate 405, located approximately 0.5 miles south of the campus. **Figures 1** and **2** show the Project site in its regional and local contexts.

2.1.1 Existing Land Uses

Facilities

The District currently operates the Project site as Millikan HS, which serves grades 9 through 12 on a 34.4-acre campus. The campus includes 10 permanent buildings, 28 portable classrooms, one modular building, and associated athletic fields and facilities. Existing on-site facilities include classroom buildings, a gymnasium, administrative and support buildings, parking areas, and outdoor athletic facilities such as baseball and softball fields, football field and track, basketball courts, and tennis courts.



0 1,500 3,000 6,000 Feet

1 inch = 3,000 feet

N

Legend

Site Boundary

Base Map: Open Street Maps

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CLIENT: LBUSD

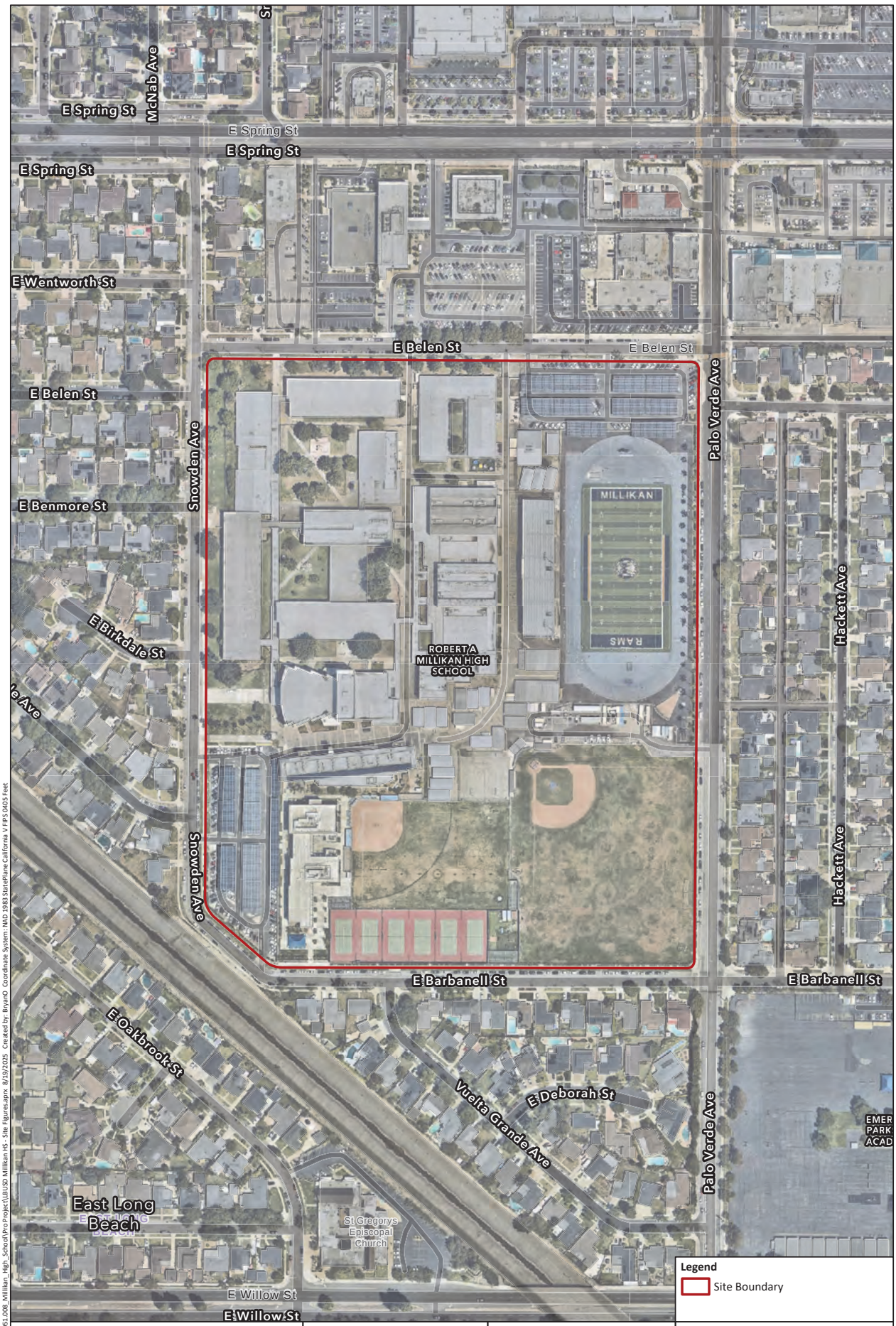
PROJECT: Millikan High School
2800 Snowden Ave. Long Beach, CA

PROJECT NUMBER: S051.008.C002

Site Location

FIGURE 1

File: N:\GIS\Prj\S051 LBUSD\S051.008_Millikan_High_School\Pro Project\LBUSD Millikan HS - Site Figures.aprx 8/19/2025 Created by: BryanO Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet


E Spring St
McNab Ave
E Spring St
E Spring St
E Spring St
E Wentworth St
E Belen St
E Belen St
E Belen St
Snowden Ave
E Benmore St
Palo Verde Ave
MILLIKAN
RAMS
ROBERT A MILLIKAN HIGH SCHOOL
Hackett Ave
E Birkdale St
Snowden Ave
Hackett Ave
E Barbanell St
E Barbanell St
E Oakbrook St
Vuelta Grande Ave
E Deborah St
Palo Verde Ave
EMER PARK ACAD
East Long Beach
St Gregorys Episcopal Church
E Willow St
E Willow St
Legend
Site Boundary
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1 inch = 200 feet
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CLIENT: LBUSD
PROJECT: Millikan HS
2800 Snowden Ave, Long Beach, CA
PROJECT NUMBER: S051.008.C002
Project Site
FIGURE 2
File: N:\GIS\Proj\S051 LBUSD\S051.008_Millikan_High_School\Pro Project\LBUSD Millikan HS - Site Figures.aprx 8/19/2025 Created by: BryanO Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet

The area proposed for redevelopment as part of the Proposed Project currently contains Building 700/3000 and adjacent portable buildings, which would be demolished to accommodate the new facility. The remainder of the campus would remain in use for educational and athletic purposes. **Figure 2** shows the existing site facilities from an aerial view.

Access and Parking

Access to Millikan HS is provided from Snowden Avenue, with additional perimeter access from adjacent streets including East Belen Street to the north, Palo Verde Avenue to the east, and East Barbanell Street to the south. On-site parking areas are located along the northeastern and southwestern portions of the campus and are accessible from East Belen Street and Snowden Avenue, respectively.

The campus does not have a designated pickup and drop-off area; however, curbside access and on-street parking are available along the surrounding roadway network. Parking lots and circulation routes would continue to operate as under existing conditions, and the Proposed Project would not substantially alter vehicle access or parking supply on the campus.

Operations

The District serves approximately 63,557 students in transitional kindergarten through grade 12 and operates 84 schools (15 high schools, 21 middle schools and K-8,46 elementary schools, 1 K-12 school, and 1 early learning school)[5]. Millikan HS begins at 8:25 a.m. Monday through Friday. Classes are dismissed at 1:45 p.m. on Wednesday and at 3:30 p.m. on Monday, Tuesday, Thursday, and Friday[6].

The total enrollment at Millikan HS is approximately 3,369 students[7]. The HS offers several specialized Small Learning Communities, including PEACE (Personal Success through Empowerment, Academic Achievement, Conflict Resolution, and Ethics), QUEST (Quality Education in Science and Technology), COMPASS (Community of Musicians, Performers, Artists, and Social Scientists), SEGA (Science, Engineering, and Green Academy), and the MBA (Millikan Business Academy)[8]. These academies provide thematic pathways that expand educational opportunities for students while preparing them for college, careers, and civic engagement.

In addition to its academic programs, Millikan HS regularly hosts Special Olympics events and supports community swim programs that serve students with special needs and local residents. The Proposed Project would expand Millikan HS's ability to provide modern facilities for physical education, competitive athletics, inclusive programs, and community partnerships (LBUSD Bond Program Fact Sheet).

[5] LBUSD - List of Schools

[6] Millikan High School Bell Schedule

[7] Ed Data - Millikan High

[8] Millikan High School - Pathways

2.1.2 Surrounding Land Uses

The Project site is in a residential community with primarily single-family neighborhoods and nearby commercial uses. It is surrounded by the land uses described below.

- North: East Belen Street, commercial buildings and single-family residences.
- East: Palo Verde Avenue, single-family residences.
- South: East Barbanell Street, single-family residences.
- West: Snowden Avenue, single-family residences, with the Los Cerritos Channel adjacent to the southwestern corner of the campus.

2.2 Existing Zoning and General Plan

A parcel search on the City of Long Beach Zoning Map indicates that the parcel, which includes the Project site, is zoned Institutional (I). The I zone is intended to accommodate public and private schools, colleges, hospitals, government facilities, and other community-serving uses[9]. Surrounding parcels to the north, south, east, and west are generally zoned for single-family residential (R-1-N and R-1-S) uses, with commercial zoning designations along major corridors such as Spring Street and Palo Verde Avenue[10].

"Permitted Primary Use" is a use allowed by right, subject to compliance with the regulations of the respective zoning district in which the use is located, including applicable site development standards. As a public-school facility, the District may exempt the Project site from local zoning under its authority pursuant to California Government Code § 53094[11]. The current use of the Project site as a high school would remain under the Proposed Project; thus, no rezoning would be required.

2.3 District Action Requested

The Initial Study (IS) evaluates the potential environmental effects associated with the Proposed Project and provides the basis for preparation of an Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA). The EIR will present a comprehensive analysis of the Project's potentially significant environmental impacts, feasible mitigation measures, and alternatives. Upon completion of the environmental review process, the Long Beach Unified School District (District) Board of Education, acting as the CEQA Lead Agency, will consider certification of the EIR prior to taking action to approve the Proposed Project. Certification of the EIR by the Board of Education will include adoption of a Mitigation Monitoring and Reporting Program (MMRP) to ensure implementation of all feasible mitigation measures identified in the EIR.

[9] Long Beach Municipal Code - Zoning

[10] City of Long Beach Zoning and Land Use Map

[11] Government Code Section 53094

2.4 Project Description

2.4.1 Proposed Project

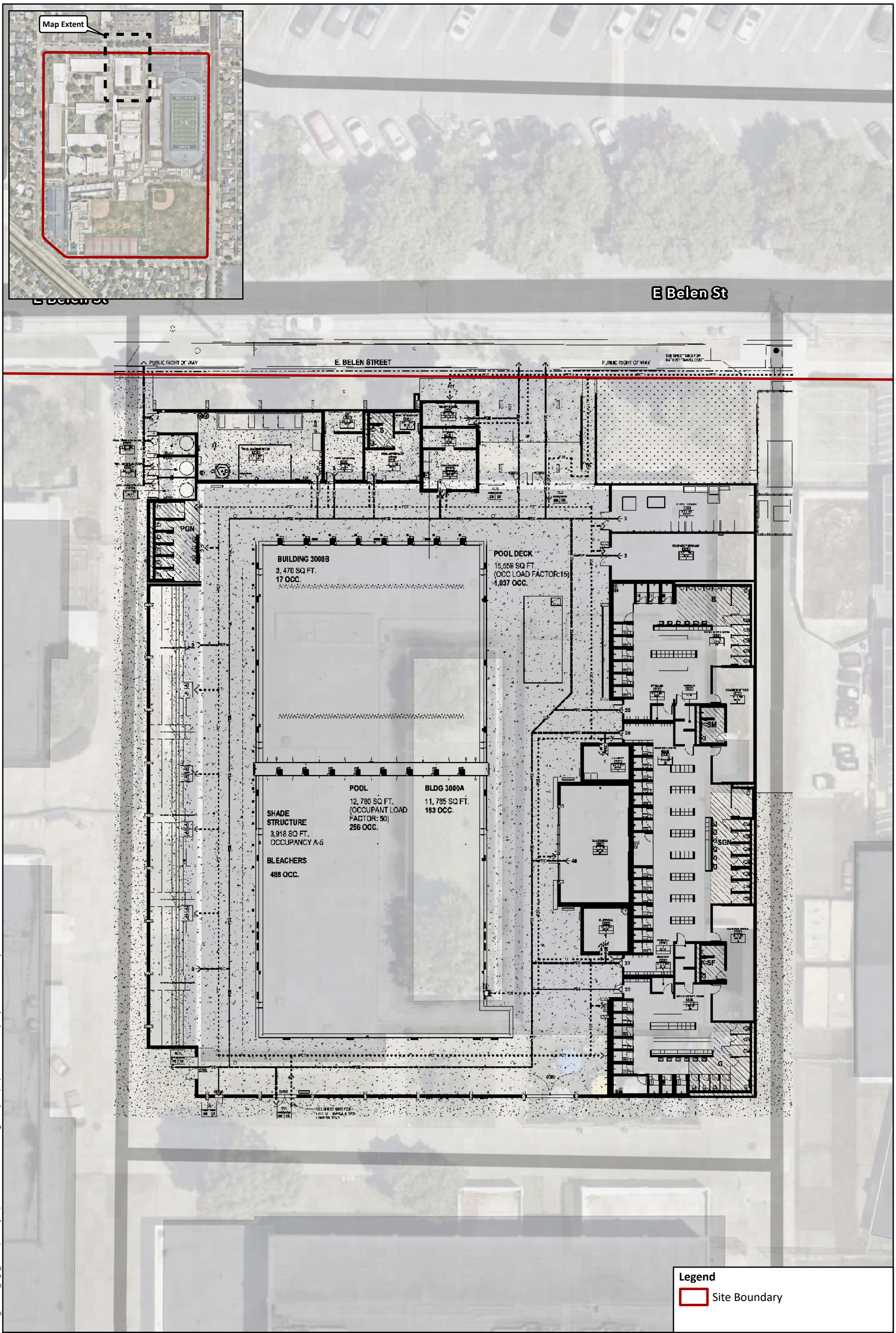
Millikan HS is located at 2800 Snowden Avenue in the City of Long Beach, Los Angeles County, California, on a campus of approximately 34.4 acres. The Proposed Project consists of the demolition of Building 700/3000 and adjacent portable buildings and construction of a new Aquatic Center within the existing developed campus footprint (**Figure 3**).

The Aquatic Center would feature a Myrtha modular competition pool measuring approximately 51.5 meters by 22.9 meters, equipped with a 1.5-meter-wide movable bulkhead to accommodate multiple program uses. The pool would be surrounded by a 30-foot-wide pool deck. A new single-story support building would include:

- An inclusive locker room facility (gender-neutral) with more than 15 changing stalls, 15 shower stalls, and approximately 236 lockers;
- A boys locker room with ten changing stalls, ten shower stalls and approximately 84 lockers;
- A girls locker room with ten changing stalls, ten shower stalls and approximately 84 lockers;
- A coach/administrative office area with four workspaces;
- Restrooms;
- A washer/dryer room;
- Secure chemical storage rooms;
- A mechanical room sized to accommodate a regenerative media filtration system;
- Electrical rooms;
- A pool attendant's office with restroom and shower
- Support buildings for the pool; and
- Equipment storage enclosures/rooms.

Ancillary site improvements would include bleachers with capacity for 500 spectators, shade structures over spectator seating, a 500-square-foot snack bar/ticket booth, Sports LED stadium lighting, an electronic LED scoreboard with integrated sound system, perimeter security walls, outdoor showers, and surveillance cameras.

The Proposed Project would support physical education classes of 54 to 100 students, competitive swim and water polo programs, Special Olympics events, students with special needs, and community swim programs. Construction would also include site preparation, grading, utility connections (storm drain, sewer, water, electrical), circulation improvements, and landscaping. The design of the new aquatic facilities will consider contextual compatibility with the surrounding campus in terms of materials, scale, and massing.



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CLIENT:	LBUSD
PROJECT:	Millikan HS 2800 Snowden Ave, Long Beach, CA
PROJECT NUMBER:	S051.008.C002

Site Plan

FIGURE 3

File: N:\GIS\Prj\S051 LBUSD\S051.008_Millikan_High_School\Pro Project\LBUSD Millikan HS - Site Figures.aprx 8/19/2025 Created by: BryanO Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet

Access, Circulation, and Parking

The existing access and circulation pattern at Millikan HS would remain unchanged under the Proposed Project. Vehicular access to the campus would continue to be provided primarily from Snowden Avenue, with perimeter access from E. Belen Street, Palo Verde Avenue, and E. Barbanell Street. Parking lots on the northeast and southwest sides of the campus would not be reconfigured as part of the Proposed Project. The northwestern parking lot would provide parking for events at the Aquatic Center.

Bicycle and pedestrian access to the campus would also remain unchanged, with students and visitors continuing to use existing sidewalks and designated crosswalks adjacent to the school.

Emergency vehicle access would be maintained through existing gated entrances along Snowden Avenue and other perimeter gates that provide access to the athletic fields. Construction staging and contractor access would be confined to designated areas within the campus, and emergency access would remain available throughout construction.

Perimeter and Security

The Proposed Project would incorporate perimeter and security improvements as part of the Aquatic Center design. A solid perimeter wall would be constructed around the Aquatic Center to provide privacy and restrict unauthorized access. Security enhancements would include installation of surveillance cameras, controlled access points, and site lighting. These measures are intended to ensure the safety of students, staff, and visitors while maintaining appropriate separation between the Aquatic Center and surrounding campus uses.

Stormwater

Stormwater improvements would comply with the City of Long Beach Low Impact Development (LID) standards, the State Construction General Permit (Order WQ 2022-0057-DWQ NPDES NO. CAS000002), and applicable National Pollutant Discharge Elimination System (NPDES) requirements. The site design incorporates a treatment train of Best Management Practices (BMPs) sized for the water quality design storm.

Runoff from the Aquatic Center building roof, pool deck, and surrounding hardscape would be directed to bioretention planters and landscaped swales to provide infiltration and pollutant removal through engineered soil media and vegetation. Pretreatment measures, including curb cuts, catch basin inserts (BMP-4), and a hydrodynamic separator, would capture trash, sediment, and gross pollutants before flows enter the bioretention areas.

Where infiltration capacity is limited, overflow would be routed to underground dry wells and storm drain connections designed to safely convey excess flows to the municipal storm drain system. These systems include inspection ports and cleanouts to facilitate long-term maintenance.

In addition, pool water management systems would isolate chlorinated pool water from the stormwater drainage network, with dedicated discharge pathways that prevent accidental releases to the storm drain.

Together, these BMPs would reduce runoff volumes, promote infiltration, improve water quality through filtration and sedimentation, and ensure compliance with both City of Long Beach LID requirements and the District's NPDES stormwater obligations.

Lighting

A comprehensive lighting system would support evening and early morning use of the Aquatic Center. Sports LED stadium lights would be mounted on poles strategically located around the pool deck and spectator seating, providing uniform illumination designed in accordance with standards set by the Illuminating Engineering Society of North America. Fixtures would be full cutoff and shielded, minimizing glare and spillover into adjacent properties (refer to **Appendix A**).

Additional pedestrian-scale LED fixtures would be installed along circulation pathways, building entrances, locker room areas, and the snack bar/ticket booth. These fixtures are designed to enhance safety and visibility while maintaining energy efficiency.

The lighting system is designed with programmable controls, allowing dimming, zoning, and time-based scheduling consistent with Title 24 requirements. Emergency egress lighting would be integrated into the support building to comply with California Building Code (CBC) and California Division of the State Architect (DSA) standards. Electrical conduits for lighting would be routed underground to reduce clutter and enhance site aesthetics.

The LED scoreboard would include integrated lighting and a sound system designed to meet City of Long Beach noise and illumination performance standards. Photometric analysis conducted for the design ensures that lighting levels are sufficient to accommodate California Interscholastic Federation regulations for swim and water polo events, community programming, and instructional use, while avoiding excessive skyglow or off-site light trespass.

2.4.2 Student Relocation

Construction of the Proposed Project would occur entirely within the Millikan HS campus, limited to the area currently occupied by Building 700/3000 and adjacent portable buildings. The construction zone would be secured with perimeter fencing to restrict access and ensure student and staff safety.

During construction, students would continue to attend classes on campus, and all instructional activities would be accommodated within existing facilities outside the construction area. The District would phase construction activities as necessary to minimize disruption to academic and athletic programs.

Consistent with other aquatic center projects completed by the District, no off-site relocation of students or installation of temporary portable classrooms would be required. Regular campus operations, including classroom instruction and extracurricular activities, would continue without interruption, with construction activities isolated from educational spaces.

2.4.3 Construction

Construction of the Proposed Project would occur over an estimated 18 to 24 months, beginning with the demolition of Building 700/3000 and adjacent portable buildings. Work would be phased to include demolition, site preparation, grading, utility installation, building and pool construction, and final finishes/landscaping. Demolition would include removal of Building 700/3000 and adjacent portable classrooms, utility connections, pavement, and associated hardscape. Work would be scheduled to occur during normal construction hours, generally 7:00 a.m. to 7:00 p.m. Monday through Friday, consistent with the City of Long Beach Noise Ordinance. No nighttime or weekend construction is anticipated.

All construction activities would be confined to the Millikan HS campus. The construction area would be secured with perimeter fencing to restrict access and ensure the safety of students, staff, and visitors. Construction staging and material laydown would occur within designated areas of the campus near the project footprint. Haul routes for construction vehicles would use Snowden Avenue and arterial roadways such as Palo Verde Avenue and Spring Street to minimize disruption to surrounding residential neighborhoods.

Construction activities would include demolition, site grading, utility connections, building construction, pool installation, and installation of site improvements including lighting, perimeter walls, and landscaping. Standard construction equipment such as excavators, backhoes, loaders, cranes, haul trucks, pavers, and concrete mixers would be used. Construction would generate a temporary increase in truck trips for soil export, demolition debris removal, and delivery of building materials.

Site Preparation and Grading

Grading would include excavation for the pool, underground utilities, and bioretention facilities. Excavated materials unsuitable for reuse would be exported, while imported engineered fill would be compacted to meet geotechnical recommendations (90–95% relative compaction). All grading and excavation activities would comply with California Division of Occupational Safety and Health (Cal/OSHA) trench safety standards for excavations greater than 5 feet.

Utility Installation

New utility connections for sewer, storm drain, domestic water, fire service, natural gas, telecommunications, and power would be extended underground from existing campus connections. Utility tie-ins would be field verified by potholing and coordinated with the City of Long Beach.

Construction Best Management Practices

Construction activities would be subject to the NPDES Construction General Permit (ORDER WQ 2022-0057-DWQ NPDES NO. CAS000002) and would implement a Stormwater Pollution Prevention Plan (SWPPP). BMPs would include:

- Perimeter silt fencing, fiber rolls, and inlet protection;
- Stabilized construction entrances and designated haul routes;

- Covered stockpiles and dust suppression by water trucks;
- Concrete washout areas; and
- Spill prevention and hazardous materials containment.

Noise, Dust, and Traffic Controls

Contractors would be required to comply with the City of Long Beach noise ordinance, which restricts higher-intensity construction activities to permitted daytime hours. Construction traffic would be staged within fenced laydown areas on campus, with contractor parking confined to designated zones. Emergency vehicle access would always remain available through perimeter gates. The Proposed Project will comply with all applicable South Coast Air Quality Management District (SCAQMD) rules, including Rule 403 (Fugitive Dust). Accordingly, the following BMPs will be implemented during construction:

- Dust suppression: All demolition and construction areas will be watered periodically to minimize fugitive dust.
- Track-out control: All visible mud or dirt tracked onto adjacent public roads will be removed using wet power vacuum sweepers as needed; dry sweeping will be prohibited.
- Vehicle speed limits: Vehicle speeds on unpaved areas will be limited to 15 miles per hour.
- Surface stabilization: Building pads will be paved, seeded, or stabilized as soon as possible after grading.
- Truck management: Haul trucks transporting soil, sand, or other loose materials will be covered or will maintain adequate freeboard to prevent spillage.
- Completion of paving: All roadways, driveways, and sidewalks will be completed or stabilized as soon as feasible to minimize exposed surfaces.

Worker and Campus Safety

The contractor would provide fencing, signage, and security measures to separate construction zones from active campus operations. Regular safety coordination meetings would be conducted with District staff. Emergency access to the campus and surrounding streets would be maintained at all times.

2.5 Comparison with Land Use Policy

2.5.1 General Plan Consistency

Because the existing HS use would remain, the Proposed Project is consistent with the City of Long Beach General Plan Land Use Element, which designates the Project site as Institutional (I). The Aquatic Center represents an enhancement of an existing educational and community-serving facility, consistent with the General Plan designation.

2.5.2 Airport Influence Area

The Project site is outside of an airport influence area as designated by the Long Beach Airport Land Use Compatibility Plan. The nearest airport, Long Beach Airport, is located approximately 2.5 miles northwest of the Project site.

2.5.3 Zoning and Development Code Consistency

The Project site is zoned as I under the City of Long Beach Zoning Regulations. No change in zoning would be required to implement the Proposed Project. As a public-school facility, the District may also exercise its authority under California Government Code § 53094 to exempt school facilities from local zoning ordinances.

2.6 Regulatory Requirements, Permits, and Approvals

The Proposed Project may include agency review and approvals from the following entities:

- **California Department of Education (CDE)** – Review for compliance with school site safety, circulation, and environmental health requirements under Title 5 of the California Code of Regulations.
- **Division of the State Architect (DSA)** – Review and approval of building design and construction plans for structural, fire/life safety, accessibility, and energy compliance pursuant to Title 24 of the California Code of Regulations.
- **California Regional Water Quality Control Board, Los Angeles Region (RWQCB)** – Review and issuance of coverage under the Construction General Permit (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) for stormwater discharges associated with construction activities; potential review of pool drainage under the Municipal Separate Storm Sewer System (MS4) Permit.
- **South Coast Air Quality Management District (SCAQMD)** – Review of construction emissions under CEQA and enforcement of applicable air quality regulations, including Rule 403 (Fugitive Dust Control) and Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities).
- **City of Long Beach Department of Public Works** – Review of utility connections, sidewalk/curb improvements, right-of-way encroachments, and grading/drainage coordination within city-owned infrastructure.
- **City of Long Beach Department of Development Services** – Coordination regarding consistency with the City of Long Beach General Plan, zoning, and local development standards (advisory role only, since school districts are exempt from local land use permitting under Government Code §53094).
- **California State Water Resources Control Board (SWRCB)** – Enrollment and compliance reporting under the Stormwater Multiple Application and Report Tracking System (SMARTS) for Construction General Permit coverage.

- **California Office of Historic Preservation (OHP)** – Consultation as part of CEQA review for demolition of a structure determined eligible for the California Register of Historical Resources.
- **Native American Tribes** – Consultation pursuant to Assembly Bill 52 (AB 52) and Public Resources Code §21080.3.1 et seq. regarding potential impacts to tribal cultural resources.
- **California Department of Toxic Substances Control (DTSC)** – Potential review under the School Site Cleanup Program or confirmation of environmental due diligence consistent with Education Code §17210 et seq., if soil disturbance exceeds thresholds or hazardous materials are encountered.

3 Environmental Checklist

Pursuant to 14 CCR § 15063[12], an IS should provide the lead agency with sufficient information to determine whether to prepare an Environmental Impact Report (EIR), Negative Declaration (ND), or MND for a proposed project. The CEQA Guidelines state that an IS may identify environmental impacts by using a checklist, matrix, or other method, provided that conclusions are briefly explained and supported by relevant evidence. If it is determined that a particular physical impact to the environment could occur, then the checklist must indicate whether the impact is "Potentially Significant" and requires further analysis within the EIR or "Less Than Significant" and no further analysis in the EIR is required. Findings of "No Impact" for issues that can be demonstrated not to apply to a proposed project do not require further discussion in the EIR.

This IS was prepared to assess the potential environmental impacts of the Proposed Project in accordance with CEQA to provide California permitting agencies with sufficient information to determine whether to prepare an NOE, ND, MND, or EIR for the Proposed Project.

12

3.1 Aesthetics

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage points). If the Proposed Project is in an urbanized area, would the Proposed Project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

3.1.1 Regulatory Setting

CEQA provides thresholds for evaluating aesthetic impacts, including scenic vistas, scenic resources, visual character, and light/glare. California Streets and Highways Code Section 260 et seq.[13] establishes the State Scenic Highway System to protect scenic resources along designated routes.

The California Energy Code (Title 24, Part 6)[14] establishes statewide requirements for outdoor lighting, including shielding, maximum power allowances, and automatic control measures to limit light trespass and reduce energy use.

3.1.2 Environmental Setting

The Project site is located within the existing Millikan High School campus at 2800 Snowden Avenue in the City of Long Beach. The approximately 34.4-acre campus occupies a developed parcel within an established urban neighborhood characterized by institutional, residential, and commercial uses. The

[13] California Streets and Highways Code Section 260

[14] 2022 Building Energy Efficiency Standards, Title 24, Part 6

surrounding land uses include single-family residences to the east, west, and south, and commercial developments to the north along East Belen Street.

The Project site currently supports Building 700/3000, multiple portable classrooms, paved pedestrian walkways, and perimeter fencing typical of public-school facilities. The site is visually consistent with the surrounding campus setting, which includes one- to two-story classroom buildings, athletic fields, and hardscaped parking and pedestrian circulation areas.

Topographically, the Project site and surrounding area are flat and fully urbanized, with minimal topographic relief. The Project site is not located within or adjacent to a designated scenic vista, state scenic highway, or other officially designated scenic resource, as defined by the California Department of Transportation (Caltrans) State Scenic Highway Program (Caltrans 2025). The nearest eligible state scenic highway, State Route 1 (Pacific Coast Highway), is located more than 2 miles south of the campus and is not visible from the Project site.

3.1.3 Impact Discussion

a) Have a substantial adverse effect on a scenic vista?

As described in Section 3.1.2, the Project site is located within a fully developed portion of the Millikan High School campus in an urbanized area of Long Beach and the closest (eligible) scenic highway is over 2 miles from the Project site. The site and surrounding area are flat and contain no natural landforms or open spaces that provide scenic views. The Project would not substantially alter the visual character of any public viewing areas or block views of recognized scenic resources. Therefore, the Project would not have a substantial adverse effect on a scenic vista, and no impact would occur. No further analysis is required.

Impact Designation: No Impact.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Project site is not adjacent to a State-designated or eligible scenic highway, and no officially designated scenic corridors occur within the vicinity of the campus (Caltrans 2025). The surrounding environment is fully urbanized and does not contain notable natural landscape features such as prominent ridgelines, coastal views, or other scenic resources visible from public vantage points. No impact would occur to scenic natural resources or historic buildings within a state scenic highway. No further analysis is required.

Impact Designation: No Impact.

c) In nonurbanized 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 Proposed Project is in an

urbanized area, would the Proposed Project conflict with applicable zoning and other regulations governing scenic quality?

The Proposed Project is located within a fully urbanized portion of the City of Long Beach and is currently developed with school facilities and associated hardscape. The Proposed Project would replace the existing Building 700/3000 and adjacent portable buildings with a new Aquatic Center designed to serve the high school and community programs. The new facilities would be consistent with the overall architectural style, height, and massing of existing campus buildings and would not introduce visual elements that are incompatible with the surrounding residential or commercial uses. The Proposed Project is not located within or adjacent to a designated scenic corridor or vista, and no scenic resources are visible from the site.

During construction, temporary visual changes such as the presence of equipment, construction fencing, and staging areas would be visible from adjacent streets and properties. These effects would be short-term and typical of construction activity in an urban school environment. Upon completion, the new Aquatic Center would improve the visual quality of the site through modernized design, updated landscaping, and coordinated materials consistent with the Institutional land use designation and the City's zoning standards.

Because the Proposed Project would occur in a developed urban setting, would not affect any scenic resources, and would be compatible with the existing visual character of the campus and surrounding area, the Project would not substantially degrade the existing visual character or quality of public views. Therefore, impacts related to visual character and scenic quality would be less than significant, and no further analysis is required.

Impact Designation: Less-than-Significant Impact.

d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

The proposed Aquatic Center would introduce new outdoor lighting for the pool, surrounding deck, and an LED scoreboard. The project design incorporates applicable building, electrical, and lighting design standards (e.g. shielding, cutoff fixtures, aiming controls) to ensure that light spill, glare, and skyward emission remain within acceptable levels. A detailed lighting design prepared by Musco Sports Lighting, LLC (**Appendix A**) demonstrates that illumination levels would be contained within the facility and would not result in substantial off-site light spill or glare.

According to the Musco report, the lighting system includes four 60-foot poles with twelve fully shielded TLC-LED-1200 fixtures. During active use, the system would provide an average maintained illumination of approximately 56 foot-candles (fc) across the pool and 35 fc across the deck. A reduced "egress mode," used after hours for safety lighting, would average 12 fc with only four fixtures operating. The modeling shows that light spill beyond the facility boundary would average only 0.015 fc at 3 feet above ground and reach a maximum of 0.14 fc at 5 feet—levels comparable to natural moonlight and well below commonly recognized thresholds for light trespass.

The fixtures are precision-aimed, fully shielded, and downward-directed to eliminate upward and outward light. As a result, illumination is confined to the athletic and spectator areas, with no measurable glare or skyglow visible from nearby roadways, commercial properties, or residences.

Based on the Musco lighting results presented in **Appendix A**, the project's lighting design would not create a new source of substantial light or glare that would adversely affect day- or nighttime views in the surrounding area. Therefore, a less-than-significant impact would occur, and no further analysis is required.

Impact Designation: Less-than-Significant Impact.

3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 Department of Conservation (DOC) 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 (CAL FIRE) regarding the state's inventory of forest land, including the Forest Range Assessment Project and Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB). Would the Proposed 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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.2.1 Environmental Setting

The Project site is located in the City of Long Beach in a fully urbanized environment. The site itself is developed with permanent school buildings, portable classrooms, paved parking areas, and associated landscaping.

According to the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP), the Project site and its surroundings are designated as Urban and Built-Up Land (DOC 2025). No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance occurs on or adjacent to the site. City of Long Beach zoning (City of Long Beach 2025a) does not designate any lands within or near the Project site for agricultural production.

Similarly, the Project site is not zoned for agricultural use or timberland production. The City of Long Beach zoning map identifies the site as an institutional/educational use (City of Long Beach 2025a), consistent with its long-standing operation as a high school. The site does not support forest land, timberland, or Timberland Production and no forest resources occur within the surrounding urban area.

3.2.2 Impact Discussion

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?

The Proposed Project is on the existing Millikan HS campus and located within a completely urbanized environment. The Proposed Project would replace an existing historic-era classroom building and portable schoolrooms with an Aquatic Center. The Project site has no agricultural or farm use on it, nor is there agricultural or farm use in its immediate proximity, no farmland conversion would occur and no further analysis is required.

Impact Designation: No Impact.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The Project site is zoned Institutional, which is a designation for existing school sites (City of Long Beach 2025a). The Proposed Project would not conflict with agricultural zoning or a Williamson Act contract as it is not zoned for agricultural use. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?

Development of the Proposed Project would not conflict with existing zoning for forest land, timberland, or Timberland Production as no forest or timberland is present on the Project site. Forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under

natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits" (PRC § 12220(g)).[15] Timberland is defined as "land…which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees" (PRC § 4526).[16] The Project site is zoned as I (Institutional). Upgrading a portion of the existing Millikan HS with the Aquatic Center would not impact forest land. No further analysis is required.

Impact Designation: No Impact.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

On-site vegetation is limited to scattered ornamental trees and shrubs. Construction of the Proposed Project would not result in the loss or conversion of forest land and development would not cause a loss of forest land. No impact would occur, and no further analysis is required.

Impact Designation: 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?

Maps from the California Important Farmland Finder (DOC 2025) indicate that there is no important farmland or forest land on or within the surrounding vicinity of the Project site.[17] No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

[15] PRC § 12220(g), Definition of Forest Land

[16] PRC § 4526, Definition of Timberland

[17] DOC, California Important Farmland Finder

3.3 Air Quality

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 Proposed Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐	☐

3.3.1 Regulatory Setting

Federal and State

Air quality in the area is a function of the criteria air pollutants (CAPs) emitted locally, the existing regional ambient air quality, and the meteorological and topographic factors that influence the intrusion of pollutants into the area from sources outside the immediate vicinity. The Project site's air quality is based on the CAPs meeting the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). The 1977 federal Clean Air Act (CAA) required the U.S. Environmental Protection Agency (EPA) to identify NAAQS to protect public health and welfare. NAAQS have been established for the six "criteria" air pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter (PM), and lead. PM is designated into two size classes, coarse (10 micrometers or less in diameter [PM_{10}]) and fine (2.5 micrometers or less in diameter [$PM_{2.5}$]). The smaller size of $PM_{2.5}$ allows particle to enter the cardiovascular system and cause more serious health problems. For this reason, the NAAQS sets a more stringent standard on $PM_{2.5}$ in ambient air quality. Pursuant to the 1990 CAA Amendments (CAAA), the EPA has classified air basins (or

portions thereof) as either “attainment” or “nonattainment” for each CAP, based on whether the NAAQS have been achieved.

California has adopted ambient standards that are more stringent than the federal standards for the CAPs. Under the California Clean Air Act, patterned after the federal CAA, areas have been designated as attainment or nonattainment with respect to CAAQS.

Local

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) regulates air emissions in the South Coast Air Basin, including Long Beach. SCAQMD’s Air Quality Management Plan (AQMP) sets forth strategies to achieve NAAQS and CAAQS. SCAQMD Rule 403 requires fugitive dust control during construction, and Rule 402 prohibits nuisance emissions that could cause injury or discomfort. The City of Long Beach implements SCAQMD requirements through its project review and permitting processes.

3.3.2 Environmental Setting

The primary factors that determine air quality are the locations of air pollutant sources and the amounts of pollutants emitted. Meteorological and topographical conditions, however, are equally important. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants.

Two types of air pollutants affect air quality in Long Beach: CAPs and Toxic Air Contaminants. Heavy commute patterns have resulted in poor regional air quality levels and nonattainment for ozone, $PM_{2.5}$, and PM_{10} under both federal and state standards for the South Coast Air Basin. Current emissions are typical for a large high school campus and include vehicle exhaust from staff, students, and visitors; natural gas combustion for heating; and maintenance equipment. Interstate 405 is located approximately 0.4 miles south of the Project site, State Highway 605 is located approximately 1.5 miles east of the Project site, and the Long Beach Airport is approximately 1.45 miles to the west. The region’s attainment status for the NAAQS is listed in **Table 1**. SCAQMD is an area in nonattainment for ozone, $PM_{2.5}$, and PM_{10}.

Table 1. Regional Attainment Status for CAAQS and NAAQS

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone (O_3)	8 Hour	0.070 ppm	Nonattainment	0.070 ppm Primary same as secondary	Nonattainment
	1 Hour	0.09 ppm (180 µg/m^3)	Nonattainment	N/A	N/A
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Attainment
	1 Hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Attainment

Table 1. Regional Attainment Status for CAAQS and NAAQS

Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)	Attainment	0.100 ppm	Unclassified
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Attainment
Sulfur Dioxide (SO_2)	24 Hour	0.04 ppm (105 µg/m^3)	Attainment	0.014	Attainment
	1 Hour	0.25 ppm (655 µg/m^3)	Attainment	0.075 ppm (196 µg/m^3)	Attainment
Coarse Particulate Matter 10 Micrometers or Less in Diameter (PM_{10})	Annual	20 µg/m^3	Nonattainment	N/A	N/A
	24 Hour	50 µg/m^3	Nonattainment	150 µg/m^3	Nonattainment
Fine Particulate Matter 2.5 Micrometers or Less in Diameter ($PM_{2.5}$)	Annual	12 µg/m^3	Nonattainment	12 µg/m^3	Unclassified
	24 Hour	N/A	N/A	35 µg/m^3	Nonattainment
Lead	30-day Average	1.5 µg/m^3	Attainment	N/A	N/A
	Calendar Quarter	N/A	N/A	0.15 µg/m^3	Attainment

Source: EPA 2025

Note:; µg/m^3= micrograms per cubic meter; mg/m^3= milligrams per cubic meter; N/A = not applicable; ppm = parts per million;

The SCAQMD (2023) published CEQA thresholds of significance for projects, shown in **Table 2**. These thresholds are for nitrogen oxides [NOx]), PM_{10}, and $PM_{2.5}$, and apply to both construction and operation impacts. If the daily average or annual emissions of operation-related CAPs or precursors exceeds any of these thresholds, the Proposed Project would result in a cumulatively significant impact.[18]

Table 2. SCAQMD Air Quality Significance Thresholds

Pollutant	**Construction Related Emissions**	**Operations Emissions**
	Average Daily Emissions (lbs/day)	**Average Daily Emissions (lbs/day)**
Nitrogen Oxides (NOx)	100	55

[18] SCAQMD's 2023 CEQA Air Quality Significance Thresholds

Table 2. SCAQMD Air Quality Significance Thresholds

Volatile Organic Compound (VOC)	75	55
Particulate Matter-Coarse (PM_{10})	150	150
Particulate Matter-Fine ($PM_{2.5}$)	55	55
Sulfur Oxides (SOx)	150	150
Lead	3	3
Carbon Monoxide (CO)	550	550

Source:[18]

Note: lbs/day = pounds per day

Additionally, the SCAQMD's Air Quality Significance thresholds reference SCAQMD's Rule 402, which prohibits discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.[18]

Sensitive Receptors

Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors.

Several sensitive receptors in the vicinity of the Project site, including Millikan HS itself and the residences lining the streets around the school, the closest being approximately 100-150 feet from the Project site. The Suncoast Senior Living at Long Beach senior retirement community is located approximately 1,000 feet southwest of the HS, and there are a group of medical centers and hospitals located approximately 4.3 miles to the west.

3.3.3 Impact Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

The SCAQMD's Air Quality Management Plan (AQMP 2022) is based on growth projections and regional emissions estimates prepared by the Southern California Association of Governments (SCAG). Although the Proposed Project would not increase student enrollment, it would introduce new and more energy-intensive facilities, including a large, heated pool, mechanical filtration and ventilation systems, and evening athletic operations with lighting and spectator use. These elements could increase the project's operational energy and mobile source emissions beyond those assumed for existing conditions and for regional forecasts used in the AQMP.

Additionally, construction activities—particularly demolition of existing buildings, excavation for the pool, and grading—would generate short-term emissions of nitrogen oxides (NO_x), particulate matter (PM_{10} and $PM_{2.5}$), and volatile organic compounds (VOCs) that could exceed SCAQMD thresholds. These emissions may not have been fully represented in regional inventories, and further detailed modeling is required to determine whether the project would be consistent with the AQMP.

Accordingly, because the Proposed Project could result in emissions that exceed regional thresholds or conflict with the assumptions of the AQMP, this impact is considered potentially significant and will be evaluated further in an EIR.

Impact Designation: Potentially Significant Impact

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

The South Coast Air Basin is currently in nonattainment for ozone, PM_{10}, and $PM_{2.5}$ (SCAQMD 2022) Construction of the Proposed Project would generate short-term emissions from demolition, excavation, and operation of heavy-duty equipment. While previous LBUSD projects such as the Lakewood High School Aquatic Center demonstrated emissions below SCAQMD thresholds, that facility did not include demolition of large buildings or excavation to the same depth required for the proposed competition pool. These activities could substantially increase both exhaust and fugitive dust emissions.

Preliminary screening indicates that peak daily emissions of NO_x, PM_{10}, and $PM_{2.5}$ could exceed SCAQMD regional significance thresholds, particularly during demolition and grading phases. Because these pollutants contribute to regional nonattainment conditions, any exceedance would be cumulatively considerable.

Operational emissions associated with pool heating, lighting, filtration, and additional vehicular trips for competitive and community events could also incrementally increase criteria pollutant emissions relative to existing conditions.

Given these factors, the Proposed Project could result in a cumulatively considerable net increase of criteria pollutants, and this impact is therefore considered potentially significant pending detailed quantitative modeling in the EIR.

Impact Designation: Potentially Significant Impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors near the Project site include single-family residences along Palo Verde Avenue (approximately 100–150 feet east of the proposed Aquatic Center footprint), residences along Snowden Avenue to the west, and the Millikan High School student body itself. Construction activities such as demolition, excavation, and material hauling would generate diesel exhaust and fugitive dust in close proximity to these receptors.

Although implementation of SCAQMD Rule 403 (fugitive dust control) and CARB idling restrictions would reduce emissions, the potential for localized exceedances of SCAQMD Localized Significance Thresholds (LSTs) and short-term exposure to diesel particulate matter (DPM) from off-road equipment cannot be ruled out without detailed dispersion modeling.

Operationally, the project's increased energy use and event traffic may generate localized pollutant concentrations near residential areas, particularly during evening or weekend events.

Therefore, the Proposed Project could expose nearby sensitive receptors to substantial pollutant concentrations, representing a potentially significant impact that requires further quantitative analysis in an EIR.

Impact Designation: Potentially Significant Impact.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

During construction, use of paving materials, asphalt, and coatings could produce temporary odors perceptible to nearby residences. While such odors are expected to be intermittent, their potential frequency and intensity warrant further evaluation. During operation, the storage and use of pool chemicals such as chlorine and acids could generate odors or vapor releases if not properly contained or ventilated.

Although the facility would comply with state and local hazardous materials regulations, the potential for odors affecting nearby residences during both construction and operation cannot be dismissed without detailed evaluation of storage systems, ventilation design, and event frequency.

As such, the potential for odor emissions to affect a substantial number of people is considered potentially significant and will be evaluated further in the EIR.

Impact Designation: Potentially Significant Impact.

3.4 Biological Resources

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed 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 (CDFW) or the U.S. Fish & Wildlife Service (USFWS)?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the federal Clean Water Act (CWA; including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.4.1 Regulatory Setting

Federal

Federal Endangered Species Act

Under FESA, the Secretary of the Interior and the Secretary of Commerce have the joint authority to list a species as threatened or endangered (16 U.S.C. § 1533c)[19]. The purposes of FESA are to provide a means to conserve the ecosystems that endangered and threatened species depend on and to provide a program for conservation and recovery of the species with the intent of removing the species from a listed, protected status. Regulatory protection is given to any species listed as endangered or threatened.

The USFWS and the National Marine Fisheries Service are the federal agencies that enforce FESA. Pursuant to the requirements of FESA, it is unlawful for any person to take (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [16 U.S.C. § 1532 (19)])[20] any such species within the U.S. or territorial sea or violate any regulation pertaining to such species or to any threatened species of fish or wildlife (16 U.S.C. § 1538);[21] endangered species (50 Code of Federal Regulations [CFR] § 17.21 (c));[22] or threatened species (50 CFR § 17.31 (a)).[23]

Migratory Bird Treaty Act

Migratory birds are protected under the federal MBTA. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR §§ 10.1-10.22,[24] including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR §§ 21.4-21.183).[25] The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. As such, project-related disturbances must be reduced or eliminated during the nesting season.

[19] 116 U.S.C § 1533c, Lists,

[20] 16 U.S.C. § 1532(19), Definition of "Take"

[21] 16 U.S.C. § 1538, Prohibited acts

[22] 50 CFR § 17.21(c), Prohibitions

[23] 50 CFR § 17.31(a), Prohibitions

[24] USFWS, Wildlife and Fisheries

[25] 50 CFR §§ 21.4-21.183, Part 21-Migratory Bird Permits

State

California Department of Fish and Wildlife

California FGC §§ 3503 and 3503.5[26] provide protection of birds and their nests by prohibiting the take of birds, their nests, or their eggs. California FGC § 1600 et seq.,[27] requires notification to CDFW for proposed projects that may: divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake; use material from a streambed; or result in the disposal or deposition of debris, waste, or other material where it may pass into any river, stream, or lake.

The CDFW also is the lead agency under CESA (FGC §§ 2050–2115.5)[28] with similar provisions to FESA as referenced earlier. Should the take of a State-listed species through direct take be anticipated or likely to occur, then a consultation with CDFW is required. CDFW may issue an incidental take permit (FGC § 2081[29]) to authorize such a potential limited take and the permit would identify any mandatory avoidance measures which the CDFW believes would reduce the likelihood of such a take; the permit must be adhered to by the applicant if potential take or adverse impact cannot be avoided. The issuance of such an incidental take permit must be requested by the applicant and CDFW is now required to post all such take permits online for public viewing. Should a species be listed under both FESA and CESA, then a consistency determination (FGC § 2080.1[30]) is also required. Applicable fees may also be collected under CESA.

CEQA Guidelines

Several federal and State statutes protect rare, threatened, and endangered species. Article 20, § 15380 of the CEQA Guidelines[31] provides that a species not listed on the federal or state lists of protected species may be considered rare, threatened, or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions of endangered, rare, or threatened provided in FESA and CESA. This section of the CEQA Guidelines gives public agencies the ability to protect a species from any potential impacts of proposed projects until the respective government agency has the opportunity to designate (list) a species as protected, if warranted.

The California Native Plant Society (CNPS) maintains an extensive list of plant species that it considers to be rare, threatened, or endangered, but have no designated status or protection under FESA or CESA. Impacts to CNPS-listed species (e.g., CNPS list 1B and 2) are considered during CEQA environmental review.

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[26] GC §§ 3503 and 3503.5, Taking or destroying nests or eggs; Taking, possessing, or destroying birds-of-prey or their eggs

[27] FGC § 1600 et seq., Chapter 6. Fish and Wildlife Protection and Conservation

[28] FGC §§ 2050-2115.5, Chapter 1.5 Endangered Species

[29] FGC § 2081, Article 3. Taking, Importation, Exportation, or Sale

[30] FGC § 2080.1, Article 3. Taking, Importation, Exportation, or Sale

[31] 2023 CEQA Statute & Guidelines

California Endangered Species Act

Under CESA, it is unlawful to take a State-listed endangered or threatened species. FGC § 86[32] defines take as "hunt, pursue, catch, capture or kill or attempt to hunt, pursue, catch, capture or kill." CDFW maintains authorization over CESA if there is potential for take of a State-listed plant or wildlife species.

The City of Long Beach General Plan Open Space and Recreation Element contains policies for the preservation of open space and natural resources (City of Long Beach 2002). The City also regulates the removal of certain trees through its street tree ordinance.

3.4.2 Environmental Setting

The Project site is entirely developed with buildings, paved surfaces, and ornamental landscaping. No natural habitats, riparian areas, or designated critical habitats occur onsite. The landscaping consists of non-native, ornamental plantings with limited habitat value. Sensitive biological resources have not been identified on the Project site or immediately adjacent areas.

Critical Habitat

The USFWS map (USFWS 2025a) was consulted for areas marked as critical habitat for listed species. No designated critical habitat occurs on or adjacent to the Project site.

Special-Status Species

For the purposes of this assessment, special-status species have been defined to include those species that are:

- Listed as endangered or threatened under FESA (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under CESA (or proposed for listing);
- Designated as endangered or rare, pursuant FGC § 1901;[33]
- Designated as fully protected, pursuant to FGC § 3511,[34] § 4700,[35] or § 5050[36]);
- Designated as species of concern to the CDFW;
- Covered under the MBTA; or
- Defined as rare or endangered under CEQA.

[32] FGC, Division 0.5. General Provisions and Definitions [1-99.5], Chapter 1 General Definitions [1.89.5]

[33] FGC § 1901, Chapter 10. Native Plant Protection

[34] FGC § 3511, Chapter 1. General Provisions

[35] FGC § 4700, Chapter 8. Fully Protected Mammals

[36] FGC § 5050, Chapter 2. Fully Protected Reptiles and Amphibians

A Special-Status Species List was generated from the USFWS Information for Planning and Consultation (IPaC)[37] project planning tool. The list identifies 10 special-status plant, animal, and insect species with the potential to occur in the region of the Project site that are proposed, candidate, threatened, or endangered under federal status (USFWS 2025b). However, there is no habitat for any of the species on or near the Project site. Millikan is an existing high school campus and will remain so; there will be no change in land use.

3.4.3 Impact Discussion

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 CDFW or USFWS?

The Project site is currently developed with a school and is within an urbanized portion of the City and surrounded by residential and commercial uses on all sides. There are threatened and endangered species located within the region, however no habitat exists (USFWS 2025a). If any onsite ornamental trees need to be removed during nesting bird season, the District will conduct nesting bird surveys to ensure avoidance as a standard condition of construction. Impacts would be less than significant, and no further analysis is required.

Impact Designation: Less than Significant 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 CDFW or USFWS?

The Project site is currently developed as a school. No riparian habitats were identified onsite (USFWS 2025b). As such, no impacts would occur, and no further analysis is required.

Impact Designation: 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?

The Project site is currently developed as a school; no wetland or drainage areas have been identified on the National Wetlands Inventory (USFWS 2025c). Therefore, no impacts would occur to wetlands or drainage areas, and no further analysis is required.

Impact Designation: No Impact.

[37] USFWS, Information for Planning and Consultation

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?

Wildlife movement corridors facilitate movement of species between large patches of natural habitat. The Project site receives heavy use and is in an urbanized area. No wildlife corridors exist on the Project site. Millikan is an existing high school campus and will remain so; there will be no change in land use. If any onsite ornamental trees need to be removed during nesting bird season, the District will conduct nesting bird surveys to ensure avoidance as a standard condition of construction. Impacts would be less than significant, and no further analysis is required.

Impact Designation: Less-than-Significant Impact.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The City's Public Works Department Tree Maintenance Policy contains guidance regarding maintenance, planting, and removal guidelines (City of Long Beach 2006) and the City has enacted protective measures for MBTA-protected bird species within the Coastal Zone, however the Project site is not within the Coastal Zone. Therefore, the Proposed Project does not conflict with any local biological resource policies. No further analysis is required.

Impact Designation: 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?

The Project site is currently developed, and the Project site is not covered by any adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur, and no further analysis is required.

Impact Designation: No Impact.

3.5 Cultural Resources

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in 14 CCR § 15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in 14 CCR § 15064.5?	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

3.5.1 Regulatory Setting

Federal

The Secretary of the Interior's Standards for the Treatment of Historic Properties (SOIS) establishes principles for the preservation, rehabilitation, restoration, and reconstruction of historic buildings and districts (36 CFR Part 67). Of these, Rehabilitation is the most flexible approach and allows for compatible new uses and alterations while retaining the property's historic character. CEQA Guidelines §15064.5(b)(3) state that projects consistent with the SOIS are generally considered to have a less-than-significant impact on historical resources. The Standards include ten criteria that guide how new construction, alterations, or demolition should be evaluated in relation to a historic property.

State

CEQA requires that public agencies having authority to finance or approve public or private projects assess the effects of those projects on cultural resources. Cultural resources include buildings, sites, structures, objects, or districts, each of which may have historical, architectural, archaeological, cultural, or scientific significance. CEQA states that if a proposed project would result in an effect that may cause a substantial adverse change in the significance of a significant cultural resource (termed a "historical resource"), alternative plans or mitigation measures must be considered. Because only significant cultural resources need to be addressed, the significance of cultural resources must be determined before mitigation measures are developed.

PRC § 5024.1[38] and CEQA Guidelines § 21084.1[39] define a historical resource as "a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources." A historical resource may be eligible for inclusion in the California Register of Historical Resources if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important to our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction represents the work of an important creative individual; or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important to prehistory or history.

In addition, CEQA also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of a historical resource, and "unique archaeological resources." An archaeological resource is considered unique if it:

- Is associated with an event or person of recognized significance in California or American history or of recognized scientific importance in prehistory;
- Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
- Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind;
- Is at least 100 years old and possesses substantial stratigraphic integrity; or
- Involves important research questions that historical research has shown can be answered only with archaeological methods (PRC § 21083.2).[40]

According to the CEQA Guidelines, a project with an effect that may cause a substantial adverse change in the significance of a historical resource, or a unique archaeological resource is a project that may have a significant effect on the environment (14 CCR § 15064.5[b]).[41] CEQA further states that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

The City of Long Beach Historic Preservation Element and Municipal Code Title 16 (Historic Preservation) provide policies and procedures for identifying and protecting historic resources.

[38] PRC § 5024.1

[39] 2023 CEQA Statute & Guidelines

[40] PRC § 21083.2, Chapter 2.6. General

[41] 14 CCR § 15064.5[b], Determining the Significance of Impacts to Archaeological and Historical Resources

3.5.2 Environmental Setting

Existing Environment

The District commissioned a Cultural Resources Assessment (PCR 2017) for the District's schools including Millikan HS. An updated assessment was recently commissioned and is titled District-Wide Cultural Resources Assessment Report Update for Long Beach Unified School District, Los Angeles County, California, in May 2025 (Kleinfelder 2025). Both studies identified Millikan HS as eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) as an excellent example of a Post-War Modern style school campus designed by prolific architect C. Hugh Gibbs with landscaping by Eckbo, Royston and Williams. The 2025 study additionally identifies the school site plan as a contributing historic element.

In addition to the District-wide assessment, the District commissioned a Phase II Intensive Historic Resources Impact Assessment Report (HRAR, **Appendix B**). This memo evaluated whether demolition of the Industrial Arts Building (Building 700/3000) and construction of the new Aquatic Center would be consistent with the SOIS.

Archaeological Setting

The Long Beach area is situated within the Los Angeles Basin, a region with evidence of continuous human occupation for at least the last 7,000 years. Archaeological research in southern California has identified multiple cultural horizons, including:

- Paleocoastal period (>7000 years before present [BP] characterized by an emphasis on larger game;
- Millingstone Horizon (7000 – 4000 BP), characterized by manos, metates, and shell middens;
- Intermediate Period (4000 – 1500 BP), marked by more intensive exploitation of marine resources and trade networks; and
- Late Prehistoric/Gabrielino Period (1500 BP – AD 1542), associated with bow and arrow technology, steatite vessels, and expanded regional exchange (PCR 2017a).

Ethnographic Setting

At European contact, the Long Beach region was occupied by the Gabrielino-Tongva people, speakers of a Takic language of the Uto-Aztecan family. The Tongva occupied permanent villages along rivers, estuaries, and the coastline, with semi-subterranean dwellings, ceremonial enclosures, and tule reed boats for nearshore fishing. Important villages such as Puvungna, located on the modern campus of California State University-Long Beach, are central to Tongva history and mythology and are considered sacred landscapes. The Tongva maintained extensive trade networks stretching from the Channel Islands inland to the Mojave Desert, exchanging steatite, shell beads, and food resources (Bean and Smith 1978).

Historic Period Setting

In the 1500s, Spanish explorer Juan Rodriguez Cabrillo called Long Beach the "Bay of the Smokes", who observed the native peoples' ancient communication method of sending smoke signals from Signal Hill. In the late 1700s, the Spanish-owned land was rewarded to two Spanish soldiers and divided to become Rancho Los Cerritos and Rancho Los Alamitos. The first homes and school were built by developer William Wilmore in the 1880s, who named the area Wilmore City. Soon after, the growing population voted to incorporate the city and rename it the City of Long Beach (City of Long Beach 2025).

The discovery of oil in Long Beach and Signal Hill in 1921 triggered a rapid growth, with a million-dollar-per-month construction boom in downtown. It also helped establish the town as a popular seaside resort and port city, with a boardwalk entertainment area. A 6.4-magnitude earthquake in 1933 hit the downtown area, taking 120 lives and costing $50 million in damage. This tragedy gave birth to the California Field Act of 1933, which requires earthquake-resistant design and construction for all public schools (City of Long Beach 2025).

California Historical Resources Information System Records Search

A record search request was submitted to the South Central Coastal Information Center of the California Historical Resources Information System (Records Search File No.: 27504.13493) and results received on October 10, 2025. Five archaeological surveys have been completed within 0.5 miles of the Project site but none are noted within the Millikan High School campus. Only one, for a 2008 cell tower location immediately north of Millikan HS, is adjacent to the school. The only archaeological site noted within the search radius consists of P-19-000831, located approximately 0.45 miles to the southwest. P-19-000831 includes a shell midden with burials that was disturbed in the 1950s and partially re-recorded in the 1970s.

Additional Research

In 2017, the District commissioned a facility-wide archaeological study (PCR 2017a) which provided background information regarding cultural resources and did not report any archaeological site locations near Millikan HS.

Starting in the early 1850s, the General Land Office (GLO) started conducting widespread mapping of lands within California, as well as throughout the western U.S. These "plat" maps, ranges, and sections typically depicted major landforms, waterways, historic-era developments such as ranches, farms, and associated buildings, and occasionally provided assessments of the suitability of land for livestock grazing, agriculture, or timber harvesting. However, the GLO typically did not survey Spanish/Mexican West land grant areas, including the Los Alamitos land grant, where the Project site is located.

Field Surveys

A qualified architectural historian conducted a field survey of Millikan High School as part of the District-wide reconnaissance and intensive survey update (Kleinfelder 2025). The site visit documented the existing conditions of the campus and confirmed that Millikan retains sufficient integrity to be considered eligible for listing in the NRHP and CRHR.

3.5.3 Impact Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to 14 CCR § 15064.5?

As previously documented (Kleinfelder 2025, PCR 2017), Millikan High School is considered eligible for listing in both the NRHP and the CRHR as an excellent example of Post–War Modern school design by architect C. Hugh Gibbs with site planning by Eckbo, Royston, and Williams. The campus retains a high degree of integrity in layout, materials, and design, with multiple buildings—including Building 700/3000 (Industrial Arts Building)—identified as contributors to the overall historic character of the campus.

The Proposed Project would demolish Building 700/3000 and adjacent portable classrooms to construct a new Aquatic Center. While the new facility would modernize campus functions, the demolition of a contributor to a CRHR-eligible historical resource represents a substantial adverse physical change under CEQA Guidelines §15064.5(b). The HRAR concluded that the demolition of Building 700/3000 is not consistent with various Secretary of the Interior's Standards, and the Proposed Project would result in alterations to the historic resource that would affect its ability to convey the historic significance that led to the determination that the resource is eligible for listing in the CRHR. This impact is therefore considered potentially significant and will be evaluated in detail in the EIR.

Impact Designation: Potentially Significant Impact.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 14 CCR § 15064.5?

While previous surveys have not identified recorded archaeological sites within the Millikan High School campus, the project area is located within the Los Angeles Basin, an area known for extensive prehistoric occupation by the Gabrielino–Tongva people. The region contains known archaeological sites and sacred landscapes (e.g., Puvungna, located approximately 2 miles west), and there remains a potential for subsurface archaeological materials to exist within previously disturbed soils.

Project construction would include deep excavation for the competition pool, utilities, and bioretention systems, extending into native soils that may not have been disturbed during prior construction. Ground disturbance at these depths could uncover previously unrecorded prehistoric or historic-period archaeological deposits. Therefore, impacts to archaeological resources are considered potentially significant and will require further evaluation and consultation in the EIR.

Impact Designation: Potentially Significant Impact.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

No human remains are known to occur within the Millikan High School campus; however, given the project's proximity to areas of known prehistoric occupation and its potential to disturb previously unexcavated soils, there remains the possibility that human remains or associated funerary artifacts could be encountered during grading or excavation.

While compliance with Health and Safety Code §7050.5 and PRC §5097.98 would govern the treatment of any discovery, the potential to disturb previously unknown human remains constitutes a potentially significant impact under CEQA pending confirmation through additional research and tribal consultation.

Further analysis in the EIR will evaluate whether additional avoidance or monitoring measures are warranted to reduce this impact.

Impact Designation: Potentially Significant Impact.

3.6 Energy

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Proposed Project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

3.6.1 Regulatory Setting

State

California's electricity grid is transitioning to renewable energy under the Renewables Portfolio Standard (RPS) program.[42] Renewable sources of electricity include biomass, geothermal, hydroelectric, solar, and wind. Electricity production from renewable sources is generally considered carbon neutral.

State Executive Order (EO) S-14-08,[43] signed in November 2008, required retail sellers of electricity to serve 33 percent of their load with renewable power by the year 2020. Senate Bill (SB) 350 was signed into law in 2015 and mandated a 50 percent RPS by 2030. In 2018, SB 100 was signed, raising California's renewable resources target to 60 percent by December 31, 2030, and requiring 100 percent of the state's electricity be generated by carbon-free resources by 2045. Under SB 100, California cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free resource target.[44]

California Green Building Standards Code

CALGreen (Title 24, Part 11 of the CCRs) was developed by the California Energy Commission (CEC) and applies to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential, commercial, and public-school buildings. CALGreen is updated every 3 years, with the 2022 update becoming effective January 1, 2023. The purpose of CALGreen is to improve public health,

[42] California Energy Commission, Renewable Portfolios Standard

[43] California, Office of the Governor, EO S-14-08

[44] California SB 100, California Renewables Portfolio Standard Program: emissions of greenhouse gases

safety, and general welfare by enhancing the design and construction of buildings utilizing building concepts that have a positive environmental impact and encourage sustainable construction practices in the following categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) environmental quality. The CEC's long-term vision is that future updates to the California Energy Code will support zero-net energy for all new single-family and low-rise residential buildings by 2020 and new high-rise residential and non-residential buildings by 2030.

The 2022 CALGreen update includes numerous revisions to Chapter 5 (Nonresidential Mandatory Measures). Section 5.106.5.3[45] pertains to electric vehicle (EV) charging and provides standards for the number of EV spaces that must be provided based on the total number of actual parking spaces. Additional technical requirements regarding the electrical load capacity, connection types, and other details are also provided in this section. Section 5.106.12.1[46] provides a new exception for surface parking areas to be covered with either photovoltaic shade structures or shade structures with specific roofing materials in lieu of shade tree plantings in whole or in part; a similar exception applies to hardscape areas in Section 5.106.12.3[47]. A new subsection, 5.504.4.7.1[48], has been added to provide compliance verification requirements for all thermal insulation materials meeting the pollutant emission limits.

3.6.2 Environmental Setting

The Project site is served by Southern California Edison and Southern California Gas Company. Current buildings use electricity and gas typical of educational facilities. Natural gas service in the City of Long Beach is primarily provided by the Southern California Gas Company, which maintains an extensive service area that includes Long Beach.

3.6.3 Impact Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The Proposed Project would use high-efficiency equipment and comply with Title 24 and CALGreen, avoiding wasteful energy use.

Short-Term Impacts During Construction

Electrical Energy. Construction of the Proposed Project would not require electricity to power most equipment. The electricity used during construction would vary based on the phase of construction;

[45] CALGreen, Section 5.106.5.3, Electric Vehicle (EV) Charging [N]

[46] CALGreen, Section 5.106.12.1, Surface Parking Areas

[47] CALGreen, Section 5.106.12.3, Hardscape Areas

[48] CALGreen, Section 5.504.4.7.1, Verification of compliance

however, the majority of equipment during demolition, site preparation, trenching, and grading would be powered by diesel or gasoline. Some construction activities later in the process could require electric-powered equipment such as hand tools (e.g., drills, saws, compressors) and task lighting, which would result in minimal electricity usage. Overall, the use of electricity would be temporary in nature and would fluctuate according to the particular construction activity. Therefore, as electricity consumption during construction would be minimal and would occur only when necessary to construct the Proposed Project, related construction activities would not result in wasteful or unnecessary electricity demands, and impacts would be less than significant. No further analysis is required.

Natural Gas Energy. It is not anticipated that any natural gas-powered equipment would be used during construction of the Proposed Project. Therefore, impacts would be less than significant with respect to natural gas usage. No further analysis is required.

Transportation Energy. Transportation energy use depends on the mode of travel, type and number of trips, vehicle miles traveled, and the fuel efficiency of vehicles. Transportation energy used during construction would result from the transportation of construction equipment and materials to the Project site, the use of construction equipment, delivery vehicles, and vehicles operated by construction workers traveling to the Project site that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the construction activity and would be temporary in nature. Once construction is complete, the use of construction equipment would cease. Furthermore, construction contractors are anticipated to minimize non-essential idling of construction equipment during construction in accordance with 13 CCR § 2449[49] which limits the non-essential idling of diesel-powered off-road equipment to 5 minutes. Such required practices would limit wasteful and unnecessary energy consumption.

There are no unusual characteristics that would directly or indirectly cause construction activities to be any less efficient than at other construction sites. The proposed utility infrastructure would connect to the existing water, sewer, storm drain system, and electricity network in the area because the land use would remain the same. Therefore, it is expected that energy used during construction of the Proposed Project would not differ significantly from similar projects and impacts would be less than significant. No further analysis is required.

Long-Term Impacts During Operation

The Proposed Project would have various energy needs during operation such as heating, cooling, and ventilation of buildings; however, these would largely be the same needs that currently exist. Therefore, the Proposed Project would not create increased demands on energy infrastructure during operation. No further analysis is required.

Electrical Energy. It can be assumed that the electrical energy needed to run resources at the Aquatic Center other than the pool would be approximately equivalent to what is needed to operate the existing classroom buildings that would be demolished for the new construction. Heating the pool itself would require more electricity, though the quantity needed would vary depending on whether the pool is

[49] 13 CCR § 2449, General Requirements for In-Use Off-Road Diesel-Fueled Fleets

indoors, outdoors, left uncovered, or is covered when not in use. The pool proposed by the District is a Myrtha Pool, measuring approximately 51.5 meters x 22.9 meters, giving a surface area of 1,177 square meters.

Outdoor pool energy demand in Southern California typically ranges 1,500 kilowatt hours per square meter (kWh/m²) per year uncovered and 600 kWh/m² per year covered (CEC 2025). Electricity demand is reduced by a factor of ~4 when using a heat pump with COP 4.0 (ASHRAE Handbook 2019). As a result, it is anticipated that heating the Myrtha Pool would require approximately:

- Uncovered pool: ~ 441,000 kilowatt hours/year
- With pool cover: ~ 177,000 kilowatt hours/year

By comparison, the remaining Aquatic Center building uses would amount to approximately 32,000 kilowatt hours/year for space heating.

While the Proposed Project would increase energy use at Millikan HS, use of high-efficiency equipment and compliance with Title 24 and CALGreen would avoid wasteful energy use. No further analysis is required.

Impact Designation: Less-than-Significant Impact.

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

The Proposed Project would not conflict with any adopted renewable energy or efficiency programs. Implementation of the Proposed Project would encompass only all-electric buildings, which would generally have greater energy efficiency than existing buildings and must comply with the latest Building Energy Efficiency Standards and CALGreen. Therefore, implementation of the Proposed Project would not conflict or obstruct plans for renewable energy or energy efficiency, and impacts would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

3.7 Geology and Soils

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed 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 in 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 & Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) Be located on expansive soils, as defined in Table 181-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternate wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

3.7.1 Regulatory Setting

Federal

The Federal Emergency Management Agency (FEMA) has established seismic building codes to control seismic hazards in the event of an earthquake to save lives and reduce losses. Building codes "specify the minimum requirements to adequately safeguard the health, safety and welfare of building occupants" by regulating the design, construction, alteration, and maintenance of structures (FEMA 2023). Code enforcement is largely the "responsibility of local building officials who review design plans, inspect construction work, and issue building and occupancy permits" (FEMA 2023).

State

The Alquist-Priolo Earthquake Fault Zoning Act of 1972[50] established earthquake fault zones that are regulatory zones surrounding the surface traces of active faults in California. Structures for human occupancy cannot be built over a fault and must be a minimum distance from fault lines. For regulatory purposes, the California Geological Survey defines an active fault as one that has ruptured during the Holocene epoch, or within approximately the last 11,000 years.

The Seismic Hazards Mapping Act of 1990[51] requires the DOC and California Geological Survey (CGS) to identify and map areas that are susceptible to liquefaction, earthquake-induced landslides, and amplified ground shaking. This act requires the State Geologist to establish "Zones of Requires Investigation" and "Seismic Hazard Zone" maps that cities, counties, and state agencies can use for planning, construction, and development.

These two acts were implemented to establish regulatory "Zones of Required Investigation" to reduce the threat to public health and safety and to minimize the loss of life and property that can be caused by earthquake-triggered ground failures. Property sellers in California are required to disclose at the time of sale if a property is within a mapped hazard zone (DOC 2024).

Local

The Seismic Safety Element of the City's General Plan (City of Long Beach 1988) acknowledges the potential for seismic events and has approved a number of policies focused on the reduction of seismic hazards to the degree possible, requiring site-specific geological studies within specific locales, stormwater management, erosion control, compliance with CBC and Uniform Building Code standards, and utility system upgrades.

3.7.2 Environmental Setting

Soils on the Project site consist of Urban land-Biscailuz-Hueneme, drained complex, 0 to 2 percent slopes. These soils can be prime farmland if irrigated and drained and consist of somewhat poorly

[50] Alquist-Priolo Earthquake Fault Zoning Act of 1972

[51] DOC, California Seismic Hazard Zones

drained discontinuous human-transported material over mixed alluvium derived from granite and/or sedimentary rock (Natural Resources Conservation Service [NRCS] 2019).

Millikan HS is currently developed and located within a residential neighborhood in the City. It is not located in an Alquist-Priolo Earthquake Fault Zone and there are no fault lines that traverse the Project site (DOC 2024). The Reservoir Hill Fault is located approximately 2 miles to the southwest and the Cherry Hill Fault is located approximately 3.5 miles to the west; both are within the Newport-Inglewood-Rose Canyon Fault Zone; however, the Project site is not located within a Seismic Hazard Zone (DOC 2025a). Despite the lack of fault lines within the Project site, the region is seismically active, and seismic shaking must be considered as part of project planning.

The Project site is located within a State-Designated Liquefaction Hazard Zone. Because the Project site is level and developed, landslides and erosion are not a significant consideration for development on the Project site (DOC 2015).

3.7.3 Impact Discussion

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.

The Project site is not in an Alquist-Priolo Earthquake Fault Zone and no fault lines traverse the Project site (DOC 2025a). No active or potentially active faults are known to traverse the site, and the nearest Alquist-Priolo Fault Zone is several miles away. Therefore, the potential for surface fault rupture at the site is considered low. No further analysis is required.

Impact Designation: No Impact.

ii) Strong seismic ground shaking?

As stated above, the Project site is not within a known fault or Alquist–Priolo Earthquake Fault Zone. However, the site is located in a seismically active region of Southern California, and strong ground shaking from regional fault systems such as the Newport–Inglewood and Los Alamitos faults could occur. All new construction is required to comply with the California Building Code (CBC, Title 24), which incorporates seismic design criteria appropriate to the site's seismic zone and soil conditions. Adherence to these mandatory regulations ensures that the Project would be designed to withstand expected ground shaking, and potential impacts related to seismic ground shaking would be less than significant. No further analysis is required.

Impact Designation: Less-than-Significant Impact

iii) Seismic-related ground failure, including liquefaction?

Liquefaction refers to loose, saturated sand or gravel deposits that lose their load-supporting capability when subjected to intense shaking. The Division of the State Architect (DSA) oversees design and construction of K–12 schools and community colleges in California. California law requires public school facilities to meet rigorous seismic safety standards under the Field Act. That means any new construction, modernization, or addition reviewed by DSA must demonstrate structural safety against earthquakes.

If a site is within a mapped Seismic Hazard Zone for Liquefaction, as the Project site is, California law (Seismic Hazards Mapping Act) requires a site-specific geotechnical investigation. That report must evaluate soil profile, groundwater depth, potential for liquefaction, settlement, and lateral spreading. The report must provide recommendations for foundation design, ground improvement, or other mitigation. DSA reviewers would incorporate the results of the investigation in order to complete a design that addresses the potential for liquefaction. Therefore, impacts resulting from seismic-related ground failure including liquefaction would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

iv) Landslides?

No landslides have been mapped on the Project site (DOC 2015), and the site is generally flat, eliminating the potential for landslide hazards. In addition, all new construction must comply with the 2024 CBC or most recent version, which establishes design and construction standards to address site-specific geotechnical conditions. Accordingly, the Project would not be subject to landslide risk, and no impact would occur. No further analysis is required

Impact Designation: No Impact.

b) Result in substantial soil erosion or the loss of topsoil?

Erosion is a normal and inevitable geologic process whereby earthen materials are loosened, worn away, decomposed, or dissolved, and removed from one place and transported to another. The Project site is an existing school with paved and impervious surfaces (parking lots, buildings) as well as pervious surfaces (turf field, vegetation). The Project site would implement structural and non-structural BMPs before and during construction in accordance with the Construction General Permit (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) to retain sediment on the Project site. Once the Proposed Project is constructed, soil erosion would be controlled with improvements installed on the Project site. Therefore, a less-than-significant impact would occur, and no further analysis is required.

Impact Designation: 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?

Subsidence of basins attributed to overdraft of groundwater aquifers or over pumping of petroleum reserves has been reported in various parts of California. Collapsible soils may appear strong and stable in their natural (dry) state, but they rapidly consolidate under wetting, generating large and often unexpected settlements. Seismically induced settlement consists of dynamic settlement of unsaturated soil (above groundwater) and liquefaction-induced settlement (below groundwater). These settlements occur primarily in low-density sandy soil due to the reduction in volume during and shortly after an earthquake.

As discussed in Section 3.7.2, the Project site is located within a mapped liquefaction zone in a seismically active area. Although the level topography of the site eliminates potential for landslides or substantial erosion, the potential for liquefaction must be addressed in project design. All school construction is subject to DSA review, which includes geotechnical investigation and structural design requirements for sites in liquefaction zones. Compliance with DSA requirements ensures that the Project would be designed and constructed to withstand soil movement associated with liquefaction. Therefore, impacts would be less than significant and no further analysis is required.

Impact Designation: 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?

Expansive soils can swell when they become wet and shrink as they dry, potentially causing damage such as cracking or differential settlement in building foundations and slabs. However, according to the Natural Resources Conservation Service (NRCS, 2019), the Biscailuz–Hueneme complex soils underlying the project site are not classified as expansive. These soils exhibit stable characteristics with low shrink–swell potential, reducing the likelihood of soil movement that could affect structural integrity. Therefore, the project site is not expected to be subject to hazards associated with expansive soils, and no impact would occur. No further analysis is required.

Impact Designation: No Impact.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The Proposed Project would not require the installation of a septic tank or alternative wastewater disposal system as it would utilize the existing sewer system. Therefore, no impacts would result from soil conditions in relation to septic tanks or other on-site water disposal systems. No further analysis is required.

Impact Designation: No Impact.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The Project site is currently developed. The Proposed Project would require grading and excavation as well as other ground-disturbing construction activities to accommodate construction and utility requirements. The District commissioned a facility-wide assessment of the potential for paleontological resources to occur (PCR 2017b); none of the results indicated finds at or near Millikan HS. Due to the ground disturbance associated with construction, there is potential that natural landforms beneath the Project site would be encountered during construction and that subsurface resources and/or paleontological resources could be discovered. However, the District would comply with the recommendations included within the PCR (2017b) assessment and therefore impacts to paleontological resources discovered during ground-disturbing activities would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant effect on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	☒	☐	☐	☐

3.8.1 Regulatory Setting

State

The State of California has passed many regulations intended to reduce greenhouse gas (GHG) emissions from the transportation sector, commercial and industrial facilities, and the general public. Governors have also signed EOs, with which State entities must comply but which remain goals and recommendations for other jurisdictions until and unless they are signed into law.

Senate Bill 97

In August 2007, SB 97[52] was adopted to recognize the need to address climate change under CEQA. The Governor's Office of Planning and Research (OPR) was directed to prepare guidelines for mitigation of GHG emissions, including guidelines for public agencies in analyzing and mitigating GHG emissions. Particularly, it recognized the need to address cumulative contribution of emissions for a development project. It also required that lead agencies make a good-faith effort to calculate and describe GHG emissions potentially resulting from a project. SB 97 allowed on- and off-site mitigation, including project design features to reduce emissions, as well as sequestration. Following SB 97, the California Air Pollution Control Officers Association provided guidance on integrating analysis of climate change in its 2008 white paper *CEQA & Climate Change-+*.

[52] SB 97 CEQA: greenhouse gas emissions

Senate Bill 375

SB 375, the Sustainable Communities and Climate Protection Act,[53] was adopted in September 2008. Building on AB 32, SB 375 directed CARB to develop regional GHG emission reduction targets to be achieved by metropolitan planning organizations. These organizations became required to align their regional transportation, housing, and land use plans and prepare sustainable community strategies to reduce vehicular travel and GHG emissions.

Through SB 375, the State encouraged alternative transportation planning in regional plans. CARB determines whether the sustainable community strategies will achieve the region's GHG emissions reduction goals. Under SB 375, certain qualifying in-fill residential and mixed-use projects are eligible for streamlined CEQA review.

California Code of Regulations Title 20: Appliance Efficiency Regulations

California's Appliance Efficiency Regulations, CCR Title 20,[54] contain standards for both federally regulated appliances and non-federally regulated appliances. The regulations are updated regularly to allow consideration of new energy efficiency technologies and methods. The current standards were adopted by the CEC in 2018. The standards outlined in the regulations apply to appliances that are sold or offered for sale in California. More than 23 different categories of appliances are regulated, including refrigerators, freezers, water heaters, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings.

California Code of Regulations Title 24, Part 6: California Energy Efficiency Standards

California regulates energy consumption under California Building Standards Code, Title 24, Part 6 of the CCR (also known as the California Energy Code). The *2025 Building Energy Efficiency Standards for Residential and Nonresidential Building* were developed by the CEC and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings.[55] The California Energy Code is updated every 3 years, with the most recent iteration (2022) effective January 1, 2023, and the next version (2025) planned to go into effect on January 1, 2026. The CEC's long-term vision is that future updates to the California Energy Code will support zero-net energy for all new single-family and low-rise residential buildings by 2020 and new high-rise residential and non-residential buildings by 2030.

California Code of Regulations Title 24, Part 11: California Green Building Standards Code

The purpose of California Green Building Standards Code (CALGreen) is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in

[53] SB 375 Transportation planning: travel demand models: sustainable community strategy: environmental review

[54] CCR Title 20, Public Utilities and Energy

[55] California Energy Commission, 2025 Building Energy Efficiency Standards for Residential and Nonresidential Buildings

the following categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) environmental air quality.

Local

South Coast Air Quality Management District Climate Change Guidelines

At the regional level, the SCAQMD (2023) published CEQA thresholds of significance for projects establishing a threshold of 10,000 metric tons per year (MT/Yr) of CO_2 equivalent emissions for industrial facilities. No general screening threshold is provided for non-industrial land-use projects. In 2011, SCAQMD adopted its Air Quality–Related Energy Policy[56], which encourages energy efficiency, electrification, and deployment of near-zero emission technologies. More recently, the Final 2022 AQMP[57] integrates climate change strategies into air quality planning, emphasizing the co-benefits of reducing fossil fuel consumption for both GHG and criteria pollutant reductions.

At the local level, the City of Long Beach Climate Action and Adaptation Plan sets forth goals for reducing municipal and community-wide GHG emissions through measures such as electrification of buildings, renewable energy procurement, and sustainable transportation (City of Long Beach 2022).

3.8.2 Environmental Setting

The Project site currently generates GHG emissions associated with electricity and natural gas consumption, mobile sources (student, staff, and visitor vehicles), and landscape maintenance.

3.8.3 Impact Discussion

a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction of the Proposed Project would result in temporary GHG emissions from demolition of existing buildings, excavation for the new competition pool, on-site use of heavy construction equipment, material hauling, and worker commute trips. While construction emissions are often amortized over the life of a project, the Proposed Project's site work—including excavation, concrete placement, and pool installation—could generate notable short-term emissions of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O).

In addition, operation of the new Aquatic Center would require continuous pool heating, water filtration, and circulation systems, which are energy-intensive and could lead to increased natural gas and electricity consumption compared to existing campus facilities. The project would also result in periodic spectator and community events that would increase vehicle trips and associated GHG emissions beyond baseline levels. Given these factors, the Proposed Project may generate GHG

[56] SCAQMD Air Quality-Related Energy Policy

[57] SCAQMD 2022 AQMP

emissions that could have a significant impact on the environment, and this impact is therefore considered potentially significant pending detailed analysis in the EIR.

Impact Designation: Potentially Significant Impact.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

The Proposed Project would be designed to comply with CALGreen and the California Energy Code (Title 24, Part 6); however, its new aquatic facilities would introduce substantial new sources of energy consumption and fossil fuel use, particularly for pool heating and mechanical filtration systems. While the facility would incorporate LED lighting and modern controls, the combined construction, operation, and event activity could increase total energy use and GHG emissions relative to existing conditions. The project's potential conflicts with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions will be assessed in the EIR.

Impact Designation: Potentially Significant Impact.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) 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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or to the environment?	☐	☐	☐	☒
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 a public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

3.9.1 Regulatory Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material, per Title 22 of the CCRs,[58] is defined by California HSC § 25501(n)[59] as follows.

> "Hazardous material" means a material listed in paragraph (2) that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment, or a material specified in an ordinance adopted pursuant to paragraph (3).

Paragraph 2 of the HSC clarifies hazardous materials to include all of the following:

A. A substance or product for which the manufacturer or producer is required to prepare a material safety data sheet pursuant to the Hazardous Substances Information and Training Act (Chapter 2.5 [commencing with § 6360] of Part 1 of Division 5 of the Labor Code) or pursuant to any applicable federal law or regulation.

B. A substance listed as a radioactive material in Appendix B of Part 30 (commencing with Section 30.1) of Title 10 of the CFR, as maintained and updated by the Nuclear Regulatory Commission.

C. A substance listed pursuant to Title 49 of the CFR.

D. A substance listed in Section 339 of Title 8 of the CCR.

E. A material listed as a hazardous waste, as defined by Sections 25115, 25117, and 25316.

Federal

The EPA provides leadership for environmental science, research education, and assessment across the United States. The EPA works with state and local agencies, Native American tribes, and other federal agencies including the U.S. Department of Transportation, the U.S. Department of Labor's Occupational Safety and Health Administration, and the National Institute of Health to develop and enforce regulations related to hazards.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA)[60] was enacted in 1976 as an amendment to the Solid Waste Disposal Act. The purpose of RCRA is to address municipal and industrial waste across the U.S. that is currently being disposed of, and includes the following goals:

[58] CCR § 66260.10, Definitions

[59] California HSC § 25501(n), "Hazardous material"

[60] RCRA Orientation Manual 2014, Resource Conservation and Recovery Act

- To protect human health and the environment from the potential hazards of waste disposal;
- To conserve energy and natural resources;
- To reduce the amount of waste generated; and
- To ensure that wastes are managed in an environmentally sound manner.

RCRA enables the EPA to develop criteria for identifying hazardous waste and provides the EPA with the authority to regulate underground storage tanks. The EPA develops guidance documents advising how to comply with various hazardous waste regulations and provides an interpretation of RCRA requirements. The EPA is also charged with making policy statements that serve to provide standard operating procedures for how to implement RCRA programs.

Subtitle C of RCRA established a cradle to grave process for managing hazardous waste. These regulations were developed by EPA to specify the way hazardous waste is generated, transported, treated, stored, and disposed of. The EPA requires individual states to develop their own permitting program and ensure the program meets the minimum federal criteria under Subtitle C. If the state's program is at least as stringent as the federal program, the EPA will grant authority to the state to implement their own program in lieu of the federal program.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was enacted by the U.S. Congress in 1980. CERCLA, most often referred to as the Superfund, created a tax on the chemical and petroleum industries but also gave the federal government the authority to directly respond to potential or actual releases that could endanger human health or the environment. Importantly, CERCLA "established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified". [61]

CERCLA enables the federal government to respond with both short- and long-term actions; short-term removals are implemented when a potential or actual release requires a swift response. Long-term actions are those that respond to situations that, while serious, are not immediately life threatening. Long-term actions require responses that provide permanent results to significantly reduce the related dangers caused by hazardous materials. Regardless of the type of response, CERCLA also provides both the funds and the authority for the EPA to respond to and clean up contaminated sites, particularly when no responsible party can be identified.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 (TSCA) became effective January 1, 1977, and grants the EPA the authority to require reporting, record keeping, and testing requirements as well as restrictions related to chemical substances and mixtures. TSCA excludes some items including food, drugs,

[61] EPA, Superfund: CERCLA Overview

cosmetics, and pesticides but does address polychlorinated biphenyls, asbestos, radon, and lead-based paint [62]

Federal Insecticide, Fungicide, and Rodenticide Act

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) regulates the registration, distribution, sale, use, and disposal of pesticides across the U.S. Most pesticides must be registered with the EPA which requires the pesticide to conform with specifications that ensure the product will not generally cause adverse effects to the environment. FIFRA is administered by the U.S. Food and Drug Administration and specifies labeling and packaging requirements as well as protection standards for workers who are exposed to pesticides in the workplace. Standards for commercial pesticide applicators are also established by the EPA. [63]

State

Cortese List

California Government Code § 65962.5[64] requires that the Department of Toxic Substances Control (DTSC), a division of the California Environmental Protection Agency, compile and update, at least annually, a list detailing important information about hazardous waste facilities and lands designated as or bordering hazardous waste properties. This inventory, commonly referred to as the Cortese List, provides detailed information about the locations and provides a method for various parties to comply with CEQA (DTSC 2023).

Envirostor

EnviroStor[65] is an online database maintained by DTSC for the purpose of tracking hazardous material incidents in California. The database lists facilities that process or transfer hazardous waste, have known contamination, or have possible contamination that warrants further investigation, including sites found on the Cortese List. The database includes federally designated, state response, military, school, and voluntary cleanup sites. Each entry in the database contains a report that includes information on the location and site type; site information such as the cleanup status, acreage, assessor's parcel number, agencies providing cleanup oversight, and other information about the location; a regulatory profile that lists past uses that caused contamination, potential contaminants of concern, and potential media affected; and a site history. EnviroStor also provides a running log of completed cleanup activities at a particular site including the date the activity concluded and any comments on the activity. Related documents are also easily accessible within the database as well as information regarding related sites. The California Office of Environmental Health Hazard Assessment also provides a mapping tool (CalEnviroScreen) via EnviroStor. CalEnviroScreen provides detailed information about air quality,

[62] Toxic Substances Control Act

[63] Federal Insecticide, Fungicide, and Rodenticide Act

[64] California Government Code § 65962.5, Article 6. Development Permits for Classes of Projects

[65] California Department of Toxic Substances Control, EnviroStor

drinking water contaminants, lead risk, and other indicators related to sensitive populations or socioeconomic factors.

GeoTracker

The State Water Resources Control Board (SWRCB) maintains an online database (GeoTracker)[66] to track sites that impact or have the potential to impact water quality in California. GeoTracker provides records about a variety of sites that require cleanup such as leaking underground storage tank (LUST) sites, U.S. Department of Defense sites, and Cleanup Program sites. Records are also kept for unregulated projects related to irrigated lands, oil and gas production, operating permitted underground storage tanks, and land disposal sites).[66]

GeoTracker allows a user to query a particular address and locate information about a site's regulatory profile and history. This includes the cleanup status, facility type, potential contaminants of concern, potential media of concern, designated groundwater beneficial uses, the respective Department of Water Resources groundwater sub-basin, and the California Water Service watershed name. Cleanup action reports, a log of regulatory activities with related notes and documentation, environmental data, site maps and documents, community involvement information and environmental justice statistics are all posted on GeoTracker as well as information about related cases near a particular site.

Local

At the local level, the City of Long Beach Fire Department administers hazardous materials business plans and inspections. The City also enforces demolition permitting procedures that include asbestos and lead-based paint (LBP) surveys.

3.9.2 Environmental Setting

The Project site includes Building 700/3000 and portable classrooms, which may include asbestos-containing materials (ACM) and LBP. Background research included an evaluation of the GeoTracker and EnviroStor websites, operated by the State Water Resources Control Board (SWRCB) and the DTSC, respectively. No contaminated sites were listed on or adjacent to the Project site.

3.9.3 Impact Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

As noted above, because of the date of construction for Building 700/3000, it could contain ACM or LBP, however the District conducts hazardous materials surveys ahead of work to ensure that abatement workplans are adequate and provides oversight of abatement as well as disposal of hazardous materials. Routine construction practices involving certified professionals would reduce the potential for significant release during demolition of these materials. Routine construction activities would not involve a

[66] SWRCB, GeoTracker

significant amount of hazardous materials and the use of such items would be temporary. Construction workers would be trained in the proper handling, use, storage, and disposal of hazardous materials. Furthermore, supplies would be maintained onsite for containing and cleaning small spills of hazardous materials and workers would be trained in how to respond to hazardous material releases. The Project site would continue to be operated as a school and would not warrant use of hazardous materials in quantities that could result in a significant impact. Therefore, there would be a less-than- significant impact. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

b) 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?

Demolition activities may include stockpiling materials before transfer to an off-site disposal location or stockpiling soil and construction materials. The District complies with Cal/OSHA regulations, DTSC regulations, and Certified Unified Program Agency (CUPA) and NPDES requirements, which would include preparation of a SWPPP and adherence to BMPs to reduce or eliminate pollutants in stormwater discharges. Therefore, there would be a less than significant impact. No further analysis is required.

Operation of the Aquatic Center would require regular chemical treatment of the pool and associated facilities. Based on the assumption that pool maintenance would be performed by the District, storage of potentially hazardous chemicals would be required. Adherence to BMPs would reduce potential impacts related to storage to a less-than-significant level. Because the Proposed Project would continue to operate as a high school, routine maintenance could require the use of cleaners, solvents, and other custodial products, as well as pesticides, that are potentially hazardous. These materials would be used in small quantities, clearly labeled, and stored in compliance with State and federal requirements. With these routine practices, the Proposed Project would not create substantial hazards to the public or the environment.

Compliance with the regulations and mitigation measure below would ensure that risks resulting from the routine transportation, use, storage, and/or disposal of hazardous materials or hazardous wastes associated with the Proposed Project and the potential for an accidental release is less than significant and no further analysis is required.

Impact Designation: Less-Than-Significant Impact.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The Project site would continue to operate as a high school and would not emit hazardous emissions or handle hazardous materials or substances beyond minor custodial supplies and pool chemicals, and the District will comply with local CUPA requirements including the preparation of a hazardous material business plan for submittal to the CUPA, when required. Therefore, a less-than-significant impact would occur. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The Project site is not listed on Hazardous material sites compiled pursuant to Government Code Section 65862.5. Therefore, no impact would occur, and no further analysis is required.

Impact Designation: No Impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The Project site is not within 2 miles of a public use airport; the Project site is approximately 2.5 miles southeast of Long Beach Airport (LGB). The Los Angeles County Airport Land Use Commission has adopted an Airport Land Use Compatibility Plan (ALUCP) for LGB that defines compatibility zones extending outward from the airport (LA County 1991). These zones generally extend less than 2 miles in most directions. Based on the City's maps and the LGB ALUCP, Millikan HS is outside both the 2-mile radius and the ALUCP influence area for LGB. There would be no change in land use and an increase in noise resulting from airports is not anticipated. Therefore, no impacts would occur, and no further analysis is required.

Impact Designation: No Impact.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Proposed Project would not conflict with adopted emergency response or evacuation plans, as nothing at the Project site would change other than converting an extant building and portable classrooms into an Aquatic Center at the same location within the campus. The surrounding public roadways would continue to provide emergency access to the Project site and surrounding properties during both construction and operation in the same manner as existing conditions. No impact would occur, and no further analysis is required..

Impact Designation: No Impact.

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

The Project site is not located in a fire hazard zone of any severity level per the CAL FIRE fire hazard severity zones map.[67] The Project site is located in an urbanized portion of Long Beach on a site that is currently developed as a high school. The Proposed Project would be required to comply with the 2022 California Fire Code[68] and applicable building standards, such as the 2022 CBC.[69] Therefore, no impact would occur, and no further analysis is required.

Impact Designation: No Impact.

[67] CAL FIRE, Fire Hazard Severity Zones

[68] California Fire Code 2022

[69] 2022 California Building Code, Title 24, Part 2

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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 offsite;	☐	☐	☒	☐
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; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

3.10.1 Regulatory Setting

Federal

The Federal CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. It operates on the principle that all pollutant discharges

into the nation's waters are unlawful unless specifically authorized by a permit. The CWA authorizes the USEPA to protect and maintain the quality and integrity of the nation's waters. Part of the CWA provides for the National Pollutant Discharge Elimination System (NPDES), in which discharges into navigational waters are prohibited except in compliance with specified requirements and authorizations.

The Federal Emergency Management Agency (FEMA) is responsible for predicting the potential for flooding in most areas. FEMA routinely performs this function through the update and issuance of Flood Insurance Rate Maps (FIRMs), which depict various levels of predicted inundation.

State

At the state level, hydrology and water quality are primarily regulated under the California Porter-Cologne Water Quality Control Act (Water Code, Division 7), which establishes the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs). The Project is under the jurisdiction of the Los Angeles RWQCB, which adopts and implements the Water Quality Control Plan for the Los Angeles Region (Basin Plan). The Basin Plan designates beneficial uses for surface and groundwater bodies and sets water quality objectives to protect those uses.

Construction projects in California are also regulated under the Statewide National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit ORDER WQ 2022-0057-DWQ NPDES NO. CAS000002). This permit applies to construction activities that disturb one acre or more of soil and requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP), including best management practices (BMPs) to control erosion, sedimentation, and the discharge of construction-related pollutants to stormwater. The permit also requires inspection, monitoring, and reporting.

In addition, California's Municipal Separate Storm Sewer System (MS4) Permit for the City of Long Beach regulates stormwater discharges from municipal storm drain systems into receiving waters. The MS4 permit requires the City to implement a Stormwater Management Program to reduce pollutants to the maximum extent practicable, and project applicants must comply with local ordinances implementing those requirements.

Finally, the California Water Code requires that discharges to waters of the State that could affect water quality adhere to Waste Discharge Requirements (WDRs) from the appropriate RWQCB unless they are already covered under a general permit such as the Construction General Permit (ORDER WQ 2022-0057-DWQ NPDES NO. CAS000002).

3.10.2 Environmental Setting

The Project site is fully developed and drains to the municipal storm drain system, ultimately discharging to the San Gabriel River and Pacific Ocean. No natural streams, floodplains, or wetlands occur onsite. The Project site is located within FEMA Zone A, however that has been reduced to a Flood Zone X rating due to the presence of a river levee and therefore deemed to have minimal flood potential (FEMA 2008).

3.10.3 Impact Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Pursuant to Section 402 of the CWA,[70] the EPA has established regulations under the NPDES program to control direct stormwater discharges. In California, the SWRCB administers the NPDES permitting program and is responsible for developing permitting requirements. The NPDES Construction General Permit regulates stormwater discharges from construction activity that disturbs 1 acre or more of soil, or is part of a larger common plan of development. Because the Proposed Project would disturb more than 1 acre, coverage under the Construction General Permit is required. The District will prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) in compliance with the Permit. The SWPPP will include required site-specific best management practices such as erosion and sediment controls, dust suppression, and good housekeeping measures to minimize the potential for construction-related pollutants, including sediment, to leave the site and to prevent violations of water quality standards.

Construction

Clearing, grading, excavation, and construction activities associated with the Proposed Project have the potential to impact water quality through soil erosion and increase 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. To address these potential impacts, the Proposed Project is required to obtain coverage under the Construction General Permit and prepare and implement a SWPPP. Compliance with the Construction General Permit ensures that site-specific best management practices are implemented to control erosion, manage runoff, and prevent pollutants from leaving the site. With compliance, potential impacts would be less than significant and no further analysis is required.

Operation

During operation, the pool system is designed so pool water is physically isolated from the stormwater network. The civil plans include a dedicated surge tank and sump pump coordination for pool systems; these features provide controlled containment and routing of pool water, rather than allowing overflows or backwash to enter on-site storm drains. In short, pool water does not commingle with stormwater and would be managed through dedicated pathways in accordance with City standards (e.g., sanitary discharge or other agency-approved methods). No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

[70] EPA, Clean Water Act, Section 402: National Pollutant Discharge Elimination System

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The Project site is currently developed with buildings and pavement. The Aquatic Center would not substantially increase impervious surface area compared to existing conditions and would incorporate LID features to promote infiltration. Bioretention planters, landscaped swales, and underground dry wells would capture and infiltrate stormwater onsite, thereby supporting groundwater recharge. The Proposed Project would not directly withdraw groundwater and would rely on municipal water supplies provided by the City of Long Beach. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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 offsite?

The Aquatic Center would be constructed on the existing Millikan HS campus within a developed portion of the Project site. No natural streams or rivers occur on the Project site, and no alterations or diversions of any surface water features are proposed. Site grading would follow the recommendations of the geotechnical report and civil plans, directing stormwater to on-site drains and the existing campus storm drain system. The Proposed Project would not alter any natural drainage courses or create conditions likely to result in erosion or siltation beyond standard construction-phase effects, which are addressed through BMPs under the Construction General Permit (ORDER WQ 2022-0057-DWQ NPDES NO. CAS000002). No further analysis is required.

Impact Designation: 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?

The Proposed Project replaces Building 700/3000 and associated portable classrooms with a pool, pool deck, and support facilities. The net increase in impervious surface is minimal compared to the existing developed condition. Drainage design directs runoff to on-site inlets and sump pumps tied into the existing storm drain system. Because the Project site is already developed, the Proposed Project would not substantially increase runoff volumes or rates such that downstream flooding would occur. No further analysis is required.

Impact Designation: 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?

The drainage system is designed to retain and convey runoff in compliance with City of Long Beach and Los Angeles County standards. Stormwater would be captured and conveyed via graded pool decks and

drains to prevent uncontrolled flow. Importantly, pool water is separated from the stormwater system—surge tanks, sump pits, and backwash systems are included in the design, preventing the co-mingling of chlorinated pool water with stormwater. Any discharge of pool water would be subject to applicable NPDES and City requirements. With these design features and compliance with MS4 permit requirements, the Proposed Project would not exceed storm drain capacity or introduce polluted runoff. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

iv) Impede or redirect flood flows?

The Project site does not contain a mapped floodway. The Aquatic Center would be constructed on level ground within an already developed campus. Project grading would be limited to the Project site footprint and designed to maintain positive drainage toward existing storm drain connections. The Proposed Project would not introduce barriers that impede or redirect flood flows. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dams, or other artificial body of water. There are no large water tanks in the area that could impact the Project site, and there are no dams or similar bodies of water in proximity to the Project site that are likely to experience seiche wave effects in the region that could create flooding impacts. Given the distance from likely seiche impact areas (contained bodies of water), no seiche impact would occur.

A tsunami is earthquake-induced flooding that is created from a large displacement of the ocean floor. The Project site is identified as being outside of a tsunami zone (DOC 2025b); therefore, the likelihood of a tsunami impacting the Project site is low. No tsunami impact would occur.

A mudflow is a landslide event in which debris, land mass, and soil are saturated during their displacement. The Project site is relatively flat, with no slopes near the Project site that could generate mudflow. No mudflow impact would occur.

No further analysis is required.

Impact Designation: No Impact.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Proposed Project would comply with the Los Angeles Regional Water Quality Control Board Basin Plan, the Construction General Permit (ORDER WQ 2022-0057-DWQ NPDES NO. CAS000002), City of

Long Beach LID standards, and municipal code requirements. While the Project site is located within the Central Basin Groundwater Management Area, the Proposed Project does not involve direct groundwater extraction and would not interfere with groundwater management and therefore there would be a less-than-significant impact. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

3.11 Land Use and Planning

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.11.1 Regulatory Setting

Local

The City of Long Beach General Plan Land Use Element (City of Long Beach 2019) designates the Project site as Zone I (Institutional) for institutional/school use.

3.11.2 Environmental Setting

Millikan HS has operated at this location since 1956. Surrounding uses include residential neighborhoods and commercial development.

3.11.3 Impact Discussion

a) Physically divide an established community?

The Proposed Project would be located entirely within the boundaries of the existing Millikan High School campus, which is surrounded by established single-family residential neighborhoods to the east and northwest and by commercial and community-serving development directly north of the Project site. The Proposed Project consists of replacing one campus building (Building 700/3000) and adjacent portable classrooms with a new aquatic center, including a swimming pool, bleachers, and supporting facilities. All improvements would be confined to the school property and would not introduce new roadways, barriers, or other physical features that could bisect or disrupt surrounding residential neighborhoods or community patterns.

The project would not change the campus's overall function as a high school, would not expand the school boundaries, and would not alter the connectivity of the surrounding street network. Access to

adjacent residential areas and nearby community uses would remain the same, and no new barriers to circulation or community interaction would be created.

Accordingly, the Proposed Project would not physically divide an established community. No further analysis is required.

Impact Designation: 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?

The Project site is currently zoned as industrial by the City. The changes contained within the Proposed Project would involve the reconfiguration of an existing high school. No impact would occur as a result of the Proposed Project. No further analysis is required.

Impact Designation: No Impact.

3.12 Mineral Resources

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

3.12.1 Regulatory Setting

State

California Department of Conservation

The DOC is charged with protecting energy, land, and mineral resources within California. The agency notes that the primary mineral hazards of concern in the State are mercury, naturally occurring asbestos, and radon (DOC 2025c).

California Geological Survey

The CGS is an agency within the DOC that is charged with providing geological expertise and information about non-fuel mineral resources (metals, industrial minerals, and construction aggregate) within the State.

Division of Mines and Geology

The Division of Mines and Geology also falls within the DOC. This agency is responsible for setting guidelines and creating protections for mineral resources within the State.

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA)[71] was enacted by the California Legislature in 1975 and provides for the reclamation of mined lands. SMARA also directs the State Geologist to identify and map minerals within the State to indicate where "economically significant mineral deposits occur"[71].

3.12.2 Environmental Setting

The Project site is fully developed for educational use. No significant mineral resources are identified on or near the Project site (DOC 2010).

3.12.3 Impact Discussion

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?

The areas surrounding the Project site are developed with residences and commercial uses and are not developed for any type of mineral extraction or mining activity, and there is no mining activity on the Project site. Therefore, no loss of known resources would result from implementation of the Proposed Project. No impact would occur, and no further analysis is required.

Impact Designation: 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?

Because the Project site has been developed as a high school since the mid-1950s and no mining or extraction activities occur onsite, the Proposed Project would not result in a loss of availability of a mining site. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

[71] SMARA Statutes and Regulations (ca.gov)

3.13 Noise

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Generation of a substantial temporary or periodic increase in ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) For a project located within the vicinity of a private airstrip or within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing in or working in the project area to excessive noise levels?	☐	☐	☐	☒

3.13.1 Regulatory Setting

State

California Code of Regulations Title 5, Section 14040(q): California Department of Education Standards for School Site Selection

Under 5 CCR 14040,[72] California Department of Education (CDE) regulations require school districts to consider noise in the site selection process. As recommended by CDE guidance, if a school district is considering a school site near a freeway or other source of noise, it should hire an acoustical engineer to determine the level of sound that the site is exposed to and to assist in designing the school should that site be chosen.

California Building Code

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a general plan that includes a noise

[72] 5 CCR 14040, Determining Specific Allowable Operational Direct Costs

element which is to be prepared according to guidelines adopted by OPR. The purpose of the noise element is to "limit the exposure of the community to excessive noise levels."

CALGreen has requirements for insulation that affect exterior interior noise transmission for non-residential structures. Pursuant to CALGreen Section 5.507.4.1, "Exterior Noise Transmission," an architectural acoustics study may be required when a Project site is within a 65 a-weighted decibels (dBA) community noise equivalent level or day-night average sound level noise contour of an airport, freeway or expressway, railroad, industrial source, or fixed-guideway source. Where noise contours are not readily available, if buildings are exposed to a noise level of 65 dBA equivalent continuous sound pressure level during any hour of operation, specific wall and ceiling assembly and sound-rated windows may be necessary to reduce interior noise to acceptable levels.

Local

City of Long Beach Noise Ordinance

Construction. The City's noise ordinance states that construction in a residential district may only occur from Monday through Friday from 7 a.m. to 7 p.m. and on Saturdays from 9:00 a.m. to 6:00 p.m. Work on Sundays requires a permit from the Noise Control Officer and is limited between 9:00 a.m. to 6:00 p.m (City of Long Beach 2025b).

Exterior Noise Standards. The City's municipal code (Section 8.80.130[73]) prohibits daytime noise levels over 50 dBA and nighttime noise limit at 45 dBA, though variances can be obtained from the Noise Control Officer.

3.13.2 Environmental Setting

The Project site is located in a residential neighborhood of East Long Beach. Ambient noise levels are dominated by school-related activities, local traffic, and neighborhood uses. Sensitive receptors include students and staff at the school as well as residences near the Project site to the east across Palo Verde Avenue and to the northwest along Snowden Avenue. Residences further south along East Barbanell Street are separated from the Project site by intervening school facilities and athletic fields.

3.13.3 Impact Discussion

a) 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?

Construction activities such as demolition of Building 700/3000, grading, pool excavation, and building construction would generate temporary noise from heavy-duty equipment and haul trucks. The Proposed Project is required to comply with the City of Long Beach Municipal Code, which restricts

[73] Long Beach Municipal Code Section 8.80.130

construction activities to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and 9:00 a.m. to 6:00 p.m. on Saturdays, with no construction permitted on Sundays or holidays. Equipment used on-site must also comply with applicable state and local noise requirements, including the City's performance standards for construction equipment.

Operation of the Aquatic Center may generate noise from pool mechanical systems, public address announcements, spectator events, and increased vehicle activity during meets or community programs. These operational sources could increase ambient noise levels relative to existing on-campus conditions.

The project's potential to result in significant construction or operational noise impacts will be assessed in the EIR.

Impact Designation: Potentially Significant Impact.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Construction activities such as demolition of Building 700/3000, site preparation, grading, and building construction would generate temporary groundborne vibration from heavy-duty equipment. The nearest sensitive receptors are residential uses approximately 450 feet east of the project site. While construction vibration levels are expected to be well below thresholds for building damage, temporary perceptible vibration could occur during periods of heavy equipment use.

Operation of the Aquatic Center would not include substantial vibration-generating activities, though occasional event-related activity and mechanical equipment could contribute minor sources of groundborne noise.

The project's potential to result in significant construction or minor operational vibration impacts will be assessed in the EIR.

Impact Designation: Potentially Significant Impact.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The nearest airport, Long Beach Airport, is located approximately 2.5 miles northwest of the project site. The site is outside the airport's established Airport Influence Area and well beyond the 65 dBA CNEL noise contour identified in the Long Beach Airport Land Use Compatibility Plan. No private airstrips are located within 2 miles of the site. Therefore, the project would not expose students, staff, or visitors to excessive noise levels associated with airport operations and no further analysis is required.

Impact Designation: No Impact.

3.14 Population and Housing

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Induce substantial population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.14.1 Regulatory Setting

State

Statewide Housing Plan

The California Department of Housing and Community Development (HCD) is charged with preparing the *Statewide Housing Plan*. The most recent plan was published in March 2022, and has three objectives:

- Keep Californians in their homes;
- Produce more affordable and climate-smart housing; and
- Continue to act with urgency to address homelessness and housing need.

The *Statewide Housing Plan* is meant to guide housing policy at the local level and is pursuant to California HSC § 50423.[74]

3.14.2 Environmental Setting

The Project site is within an established residential community in an urban setting within the City limits in Los Angeles County. The Project site has been developed as a high school since the mid-1950s and is surrounded by established residences and commercial establishments. Because of the urban setting of the Project site and the large workforce in the region, workers who would serve the construction phase of the Proposed Project are likely to be local to the area.

[74] California HSC § 50423, Chapter 1.5. Statewide Housing Plan

3.14.3 Impact Discussion

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)?

The Proposed Project would not increase the capacity of Millikan HS; student capacity would remain the same. Therefore, the Proposed Project would not directly increase population growth in the area. No construction of new homes or businesses is proposed, nor is the extension of roads or other infrastructure. No impact would occur as a result of implementing the Proposed Project. No further analysis is required.

Impact Designation: No Impact.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The Proposed Project is the demolition of a school building and construction of an Aquatic Center within the existing school footprint. None of these actions would create a need for any additional housing. Therefore, no impact would occur, and no further analysis is required.

Impact Designation: No Impact.

3.15 Public Services

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

3.15.1 Environmental Setting

The Project site is located in a fully urbanized area of Long Beach and is surrounded by established residential neighborhoods to the east and northwest and commercial and community-serving uses along major corridors such as East Spring Street and Palo Verde Avenue. As an existing comprehensive high school campus, the Project site (Project site) is already served by the full range of urban public services.

Law enforcement services are provided by the Long Beach Police Department, with patrol and response activities coordinated through nearby precincts that already serve the Millikan High School campus and its surrounding community. Fire protection and emergency medical services are provided by the Long Beach Fire Department, which maintains stations in proximity to the campus and responds to both on-campus incidents and surrounding neighborhood calls.

The Project site itself is a school facility, and educational services are provided by the Long Beach Unified School District. No new schools would be required to serve the Project. Parks and recreation facilities in the vicinity are provided by the City of Long Beach Department of Parks, Recreation and Marine, which manages multiple public parks within a short distance of the campus. Library services are provided by the Long Beach Public Library system, with several branches serving nearby neighborhoods.

Because the campus is located in a fully built-out urban environment with established service providers, all public services are currently available to the Project site and surrounding community.

3.15.2 Impact Discussion

a) Fire protection?

The Project site would continue to be served by the Long Beach Fire Department (LBFD). The Proposed Project would not change the number of students or buildings or significantly alter the configuration of the campus; therefore, no change would occur to the type of firefighting activities that could be required in the event of an emergency. The closest fire station, LBFD Station 18 at 3361 Palo Verde Avenue (approximately 0.62 miles north of the Project site), would be the primary response unit. The proposed demolition and building construction at Millikan HS would not require the LBFD to acquire any additional equipment. The Proposed Project would not increase the number of students or staff onsite, and the Project site would continue to operate as a high school. Therefore, implementation of the Proposed Project would not affect LBFD's response times or require expansion of fire protection services such that new or physically altered fire stations would be required. Impacts would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

b) Police protection?

Law enforcement services for the project site are provided by the Long Beach Police Department. The Proposed Project would replace one existing building with an aquatic center but would not increase overall student enrollment or staff capacity at Millikan High School. Because the campus population would remain unchanged, the Project would not generate additional demand for police protection services during regular school hours.

The new aquatic center would be used for physical education, athletic practices and competitions, and occasional community programs, similar to existing after-hours uses of other campus facilities such as the gymnasium and athletic fields. These types of events are already accommodated within the Long Beach Police Department's service patterns for Millikan High School. Therefore, the Project would not result in a substantial increase in after-hours police service needs beyond existing conditions. Accordingly, the Project would not necessitate the construction of new or expanded police facilities, the absence of which could have an environmental impact. No further analysis is required.

Impact Designation: No Impact.

c) Schools?

School service needs are related to the size of a residential population, geographic area served, and community characteristics. The Proposed Project would address new facilities at Millikan HS. Once constructed, the new school facilities would continue to serve the existing Millikan HS population and students in the District's attendance area. No impact on school facilities or services would occur. No further analysis is required.

Impact Designation: No Impact.

d) Parks?

The Proposed Project would not generate a demand for park space, which is typically caused by population and/or employment growth. The Proposed Project would improve the recreational facilities at Millikan HS. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

e) Other public facilities?

The need for public services and facilities (e.g., libraries, hospitals, childcare, and teen or senior centers) is typically caused by residential uses. As the Project site is currently developed as a high school and would continue to operate as such, no new or expanded public facilities would be required. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

3.16 Recreation

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) 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?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

3.16.1 Environmental Setting

The Project site is within an established residential community in an urban setting within the City limits in Los Angeles County. The Project site has been developed as a high school since the mid-1950s and is surrounded by established residences, commercial development, and road systems. The Project site includes athletic fields and is located approximately 1 mile west of El Dorado Park.

3.16.2 Impact Discussion

a) Would the Proposed 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?

Operation of the Proposed Project would not require students to use existing neighborhood or regional parks to any greater or lesser extent. The Proposed Project would provide new recreational facilities. The student capacity would remain unchanged upon implementation of the Proposed Project and no impact on off-site recreational facilities would result. No further analysis is required.

Impact Designation: No Impact.

b) Does the Proposed Project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

The Proposed Project would include demolition of existing classrooms to create an Aquatic Center. No changes in the student population would occur and construction personnel would be drawn from

existing residents; therefore, no additional demand for recreational facilities would result. A less-than-significant impact would occur, and no further analysis is required.

Impact Designation: Less-than-Significant Impact.

3.17 Transportation and Circulation

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☐	☒
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

3.17.1 Regulatory Setting

State

Senate Bill 375

SB 375,[75] the Sustainable Communities and Climate Protection Act, was adopted in September 2008. Building on AB 32 (Global Warming Solutions Act of 2006),[76] SB 375 directed CARB to develop regional GHG emission reduction targets by using a regional transportation planning process. SB 375 also required city and county involvement in regional transportation, housing, and land use planning.

Local governments retain authority over land use decisions under SB 375 but are expected to coordinate their regional housing needs with regional transportation. Furthermore, SB 375 offers CEQA incentives for projects that are consistent with a regional plan that reduces GHGs. These incentives are offered if a project is consistent with the local Sustainable Communities Strategy, a component of the regional transportation plan that demonstrates how GHG targets will be met (Institute for Local Government 2025).

[75] SB 375 Transportation planning: travel demand models: sustainable communities strategy: environmental review

[76] AB 32 Air pollution: greenhouse gases: California Global Warming Solutions Act of 2006

Senate Bill 743

SB 743[77] was signed into law in 2013 and changed how public agencies must evaluate project-related transportation impacts. The bill required the CEQA Guidelines to be updated to establish new criteria for determining the significance of a project's transportation impacts that more appropriately balances the needs of congestion management with State-wide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions.

As required under SB 743, OPR developed potential metrics to measure transportation impacts that may include, but are not limited to, VMT, VMT per capita, automobile trip generation rates, or automobile trips generated. The new metrics would replace the use of auto delay (measured by "level of service") as the metric to analyze transportation impacts under CEQA. OPR recommends different thresholds of significance for projects depending on land use.

3.17.2 Environmental Setting

The Project site is located within an entirely urbanized area, bound by East Belen Street to the north, Snowden Avenue to the west, East Barbanell Street to the south, and Palo Verde Avenue to the east. Vehicle traffic enters from multiple locations including parking on the north and west. Major nearby travel corridors include Woodruff Avenue, Spring Street, and Interstate 405.

3.17.3 Impact Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The Proposed Project would not change student enrollment or attendance boundaries at Millikan HS. As a result, the number of daily trips associated with student, parent, and staff travel to campus would remain consistent with existing conditions. Vehicular access to the Project site would continue from Snowden Avenue, Palo Verde Avenue, East Belen Street, and East Barbanell Street, and no reconfiguration of existing parking lots is proposed. Parking for the aquatic center would be provided by the existing adjacent parking lot, consistent with existing operations for events within the campus. Bicycle and pedestrian access would also remain unchanged, with continued use of existing sidewalks, crosswalks, and designated bicycle routes. The Proposed Project would not conflict with adopted circulation system plans or policies. No further analysis is required.

Impact Designation: No Impact.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Under CEQA Guidelines § 15064.3, transportation impacts are assessed based on Vehicle Miles Traveled (VMT), not Level of Service (LOS). The Proposed Project would not increase student enrollment or

[77] CEQA: Transportation Impacts (SB 743) - Office of Planning and Research (ca.gov)

introduce a new trip-generating land use; it merely replaces existing athletic uses with a similarly sized aquatic facility. Accordingly, it would not substantially increase daily VMT.

Although community swim programs and spectator events may generate trips during evenings and weekends, these events fall within the campus' established athletic usage pattern and would occur intermittently, not permanently increasing VMT.

Per the OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (2018[78]), projects of this type—locally serving community institutions—can typically be presumed to have a less-than-significant VMT impact, especially when there is no net increase in users or trips. Therefore, the Proposed Project would not exceed OPR-recommended thresholds for school facilities. No further analysis is required.

Impact Designation: No Impact.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Proposed Project would be located within an existing high school campus and would not alter roadway geometry, add new driveways, or change circulation patterns. Internal circulation would continue to use existing campus access points and the adjacent parking lot for school events. The Proposed Project would not introduce incompatible uses such as farm equipment, and no new hazardous design features would be created. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

d) Result in inadequate emergency access?

Emergency vehicle access to the Project site would continue to be provided through existing gated entrances along Snowden Avenue and other perimeter gates serving the athletic fields. No reconfiguration of access points or circulation routes is proposed. During construction, staging and contractor parking would be confined to designated areas within the campus, and emergency access would remain available. The completed Proposed Project would maintain adequate emergency access consistent with LBFD standards. No further analysis is required.

Impact Designation: No Impact.

[78] OPR Technical Advisory on Evaluating Transportation Impacts in CEQA

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project cause a substantial adverse change in the significance of a tribal cultural resource (TCR), defined in PRC § 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) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC § 5020.1(k)?	☒	☐	☐	☐
b) 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 PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☒	☐	☐	☐

3.18.1 Regulatory Setting

State

AB 52 mandates early tribal consultation prior to and during CEQA review for those tribes that have formally requested, in writing, notification on projects subject to AB 52, i.e., projects that have published Notices of Preparation for EIRs or Notices of Intent to adopt NDs or MNDs since July 1, 2015. AB 52 establishes a new category of TCRs for which only tribes are experts; these resources may not necessarily be visible or archaeological but could be religious or spiritual in nature. Significant impacts to a TCR are considered significant effects on the environment.

3.18.2 Environmental Setting

A letter requesting a search of the Sacred Lands File (SLF) was sent to the NAHC on August 19, 2025 and a reply was received on August 26, 2025, reporting that the SLF search was positive. On September 26, 2025, LBUSD sent consultation letters to:

- Michael Mirelez, Cultural Resource Coordinator, Torres Martinez Desert Cahuilla Indians;

- Andrew Salas, Chairman, Gabrieleño Band of Mission Indians – Kizh Nation; and
- Anthony Morales, Chief, San Gabriel Band of Mission Indians.

As the Lead Agency, the District provided formal AB 52 consultation notices pursuant to Public Resources Code Section 21080.3.1. Of the tribes notified, the Gabrieleño Band of Mission Indians – Kizh Nation submitted a timely request for consultation. The District has initiated consultation with this Tribe.

3.18.3 Impact Discussion

a) Would the Proposed Project cause a substantial adverse change in the significance of a TCR, defined in PRC § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC § 5020.1(k)?

The Project site is located within the existing Millikan High School campus, originally constructed in the mid-1950s. Construction activities would occur entirely within the existing developed campus. Consultation with California Native American tribes pursuant to Assembly Bill 52 (AB 52) has been initiated. The project's potential to impact Tribal Cultural Resources will be assessed in the EIR.

Impact Designation: Potentially Significant Impact

b) Would the Proposed Project cause a substantial adverse change in the significance of a TCR, defined in PRC § 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 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 PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Consultation with California Native American tribes pursuant to AB 52 has been initiated. The project's potential to impact Tribal Cultural Resources will be assessed in the EIR.

Impact Designation: Potentially Significant Impact

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the Proposed Project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the Proposed Project that it has adequate capacity to serve the Proposed Project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

3.19.1 Environmental Setting

Utilities and service systems include potable water and wastewater treatment. The quantity of water consumed and wastewater generated by a project is determined by several factors including the size, type, and characteristics of the project. The need for construction of new or replacement water and wastewater treatment facilities (e.g., reservoirs, storage tanks, water mains, filtration plants, pumps, wells, and other connections or distribution facilities) would depend on the existing capacity and anticipated demand for the project area.

3.19.2 Impact Discussion

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The Proposed Project involves the demolition of a classroom building and portable classrooms and construction of an Aquatic Center; student capacity would not increase. Under the Proposed Project, the Project site would be reconfigured, requiring minor reconfiguration of utility connections. As such, the Proposed Project would remove existing utilities onsite and provide new utilities in addition to replacing existing connections. These connections and updates have been incorporated into project site design and specifications. No utility expansions are necessary to meet the needs of the Proposed Project. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

b) Have sufficient water supplies available to serve the Proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The Proposed Project involves the construction of an aquatic facility, which would require a draw on the local water supply for initial filling but only require periodic top-offs thereafter. Pool filters would recycle water; however, water levels in the pool would be lost daily due to evaporation. The pool building would be designed using Title 24 regulations. All fixtures, faucets, shower heads, and toilets would meet federal and California State Requirements including CALGreen. Lastly, the pool filtration system is a regenerative media filtration system utilizing a technology that significantly reduces water use (20,000 gallons annually compared to sand's 500,000 to 1 million gallons), resulting in 97% annual water saving) and is more energy efficient (21% annul electrical saving) than the traditional sand filtration devices. This would ensure water use is greatly minimized.

Overall, while the Proposed Project would result in long-term use of water supplies, it is considered a nominal increase compared to the overall water consumption of such an urban area. The Proposed Project is considered to have sufficient water supplies available and is not expected to significantly contribute to any water shortages during normal, dry, and multiple dry years. Impacts would be less than significant, and no further analysis is required.

Impact Designation: Less-Than-Significant Impact.

c) Result in a determination by the wastewater treatment provider, which serves or may serve the Proposed Project that it has adequate capacity to serve the Proposed Project's projected demand in addition to the provider's existing commitments?

Wastewater from the campus is treated at the Long Beach Water Reclamation Plant, which has a capacity of approximately 25 million gallons per day (Los Angeles County Sanitation Districts 2025). Because the Proposed Project does not increase student enrollment and only replaces existing facilities,

wastewater generation would remain consistent with current levels. Therefore, the provider has adequate capacity to serve the Proposed Project and any impact would be less than significant. No further analysis is required.

Impact Designation: 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?

The Proposed Project would produce a significant volume of waste during the demolition of Building 700/3000. The EPA (1998) estimates that non-residential demolition averages 155 pounds/square foot, or 0.0775 tons/square foot. Therefore, the weight of 1,000 square feet would be 77.5 tons, and volume conversion is approximately 0.25-0.5 tons/cubic yard. An approximate calculation is that between 155 and 320 cubic yards would be generated by the demolition.

The closest landfill is Scholl Canyon Landfill in Pasadena, located at 7721 North Figueroa Street. According to the Solid Waste Facility Permit issued in 2011 (City of Los Angeles 2011), Scholl Canyon has a permitted maximum daily tonnage of 3,400 tons per day, a remaining capacity of 9,900,000 cubic yards, and an estimated closure date of 2030. As such, the landfill has the capacity to accept the demolition debris from Proposed Project construction. Once operational, it is assumed that solid waste generation would be at a similar level to that generated currently; therefore, no impacts from operation would occur.

To ensure optimal diversion of solid waste resources by the Proposed Project, the District would require contractors to recycle or salvage non-hazardous waste materials generated during demolition and/or construction, to foster material recovery and reuse, and to minimize disposal in landfills. Therefore, Proposed Project impacts on landfill capacity would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Construction of the Proposed Project would generate routine solid waste and, therefore, would require the consideration of waste reduction and recycling measures. The Proposed Project would be required to adhere to AB 939, which requires specific waste diversion goals. The Proposed Project would reuse and recycle construction material to the maximum extent feasible. The Proposed Project would not cause an increase in student and staff population that would result in the permanent and significant increase of solid waste during operation, only during demolition of the existing classroom building. Therefore, the Proposed Project is consistent with AB 939 and would result in a less-than-significant impact. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

3.20 Wildfire

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Proposed Project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

3.20.1 Environmental Setting

CAL FIRE identifies State Responsibility Area Fire Hazard Severity Zones. The existing setting is a school site within an urban setting and is not located in a Fire Hazard Severity Zone (CAL FIRE 2025).

3.20.2 Impact Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The Proposed Project would not conflict with adopted emergency response or evacuation plans. The surrounding roadways would continue to provide emergency access to the Project site and surrounding properties during construction and operation. The Proposed Project would fully implement all existing fire safety codes and requirements. Impacts would be less than significant, and no further analysis is required.

Impact Designation: Less-Than-Significant 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?

The Project site is within an existing urbanized setting and is in a relatively flat area. No change in use or prevailing conditions would occur. The Project site is not prone to wildland fires today and the risk would not increase if the Proposed Project were implemented. No impact would occur, and no further analysis is required.

Impact Designation: 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?

Due to the existing location and no change in use, the Proposed Project would not increase the fire risk to the Project site. Demolition and construction on the Project site would comply with existing fire codes, including full domestic water replacement and modifications to HVAC, electrical, and sprinkler systems. The Proposed Project may require limited changes to utility connections such as electricity, water, and sewer which would be installed to meet service requirements. The construction of infrastructure improvements for the Proposed Project would not increase fire risk. Impacts would be less than significant, and no further analysis is required.

Impact Designation: Less-Than-Significant 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?

The Project site is relatively flat and is not within a mapped landslide hazard area (DOC 2015). Additionally, the Project site is located within FEMA Zone X. As stated previously, no change is anticipated in fire risk and no impact to increased runoff or flooding from such risks would occur. Construction activities related to the Proposed Project would be subject to compliance with the CBC and would include BMPs. Therefore, with implementation of BMPs and compliance with the CBC, impacts would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Does the Proposed Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the Proposed Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☐	☐	☐
c) Does the Proposed Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

a) Does the Proposed Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The Proposed Project would include demolition of an existing school building and removal of portable buildings, then replacement with an Aquatic Center within the Millikan HS campus boundaries. The Project site is entirely landscaped, and no biological resources or critical habitat has been identified. The Proposed Project would comply with the MBTA bird nesting season restrictions and would not result in impacts to nesting regulatory birds protected by the MBTA. No sensitive animal or plant species would be impacted.

Preliminary review indicates that demolition of the Industrial Arts Building (Building 700/3000), a contributor to the CRHR-eligible Millikan High School campus, could incrementally contribute to cumulative impacts on historical resources in the District. Removal of a contributing element has the potential to reduce the integrity of the campus and, in combination with other projects that affect historic schools, could result in a cumulatively considerable significant impact. Accordingly, implementation of the Proposed Project could eliminate important examples of the major periods of California history or prehistory.

Impact Designation: Potentially Significant Impact.

b) Does the Proposed Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Cumulatively considerable impacts for Air Quality, Cultural Resources, Greenhouse Gas Emissions, Noise, and Tribal Cultural Resources will be addressed in the EIR.

Impact Designation: Potentially Significant Impact.

c) Does the Proposed Project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Environmental effects associated with Air Quality and Noise will be assessed in the EIR.

Impact Designation: Potentially Significant Impact.

4 Preparers

4.1 Lead Agency

Long Beach Unified School District, Facilities Planning & Management

4.2 Terraphase Engineering, Inc.

Trent Wilson, Principal Scientist

Charlane Gross, Senior Associate

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Appendix A

Millikan High School Aquatic Center MUSCO Lighting Assessment

MILLIKAN HIGH SCHOOL AQUATIC CENTER
LONG BEACH, CA

Lighting System

Pole/Fixture Summary

Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
P1-P4	60'	60'	1	TLC-LED-1200	1.17 kW	B
		60'	2	TLC-LED-1200	2.34 kW	A
4			**12**		**14.04 kW**	

Circuit Summary

Circuit	Description	Load	Fixture Qty
A	Pool	9.36 kW	8
B	Pool Egress	4.68 kW	4

Fixture Type Summary

Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1200	LED 5700K - 75 CRI	1170W	150,000	>120,000	>120,000	>120,000	12

Single Luminaire Amperage Draw Chart

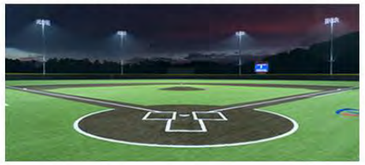
Driver Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0

Light Level Summary

Calculation Grid Summary

Grid Name	Calculation Metric	Illumination Ave					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Egress	Horizontal Illuminance	12.43	2	23	10.39	5.50	B	4
Pool	Horizontal Illuminance	56.07	43	72	1.67	1.30	A,B	12
Pool Deck	Horizontal Illuminance	34.83	17	54	3.24	2.09	A,B	12
Spill @ 3ft	Horizontal Illuminance	0.0151	0.00	0.05	-	-	A,B	12
Spill @ 5ft	Max Candela Metric	1506.7423	0.00	5172.91	-	-	A,B	12
Spill @ 5ft	Max Vert Illuminance (by Light Bank)	0.0430	0.00	0.14	-	-	A,B	12

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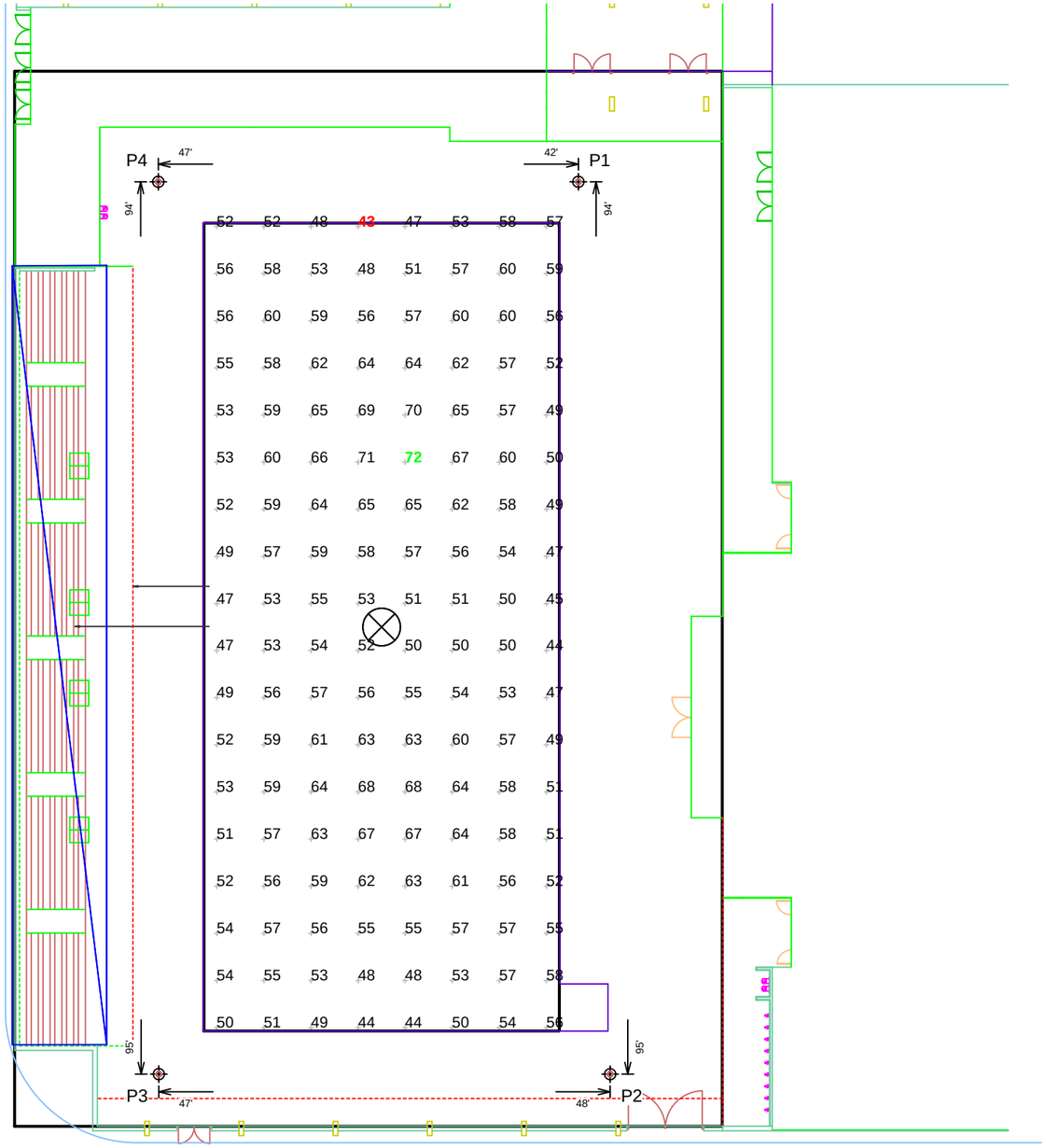
MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	3	0
4	Totals					12	12	0

*Above Grade level relative to the field



Grid Summary

Name	**Pool**
Size	75' x 171'
Spacing	10.0' x 10.0'
Height	3.0' above grade

Illumination Summary

	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average	**50**
Scan Average	56.07
Maximum	72
Minimum	43
Avg/Min	1.30
Guaranteed Max/Min	**2**
Max/Min	1.67
UG (adjacent pts)	1.19
CU	0.46
No. of Points	144
LUMINAIRE INFORMATION	
Applied Circuits	A,B
No. of Luminaires	**12**
Total Load	14.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 30

0' 30' 60'

ENGINEERED DESIGN By: E.Fox • File #241863A • 20-Jan-25

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊠

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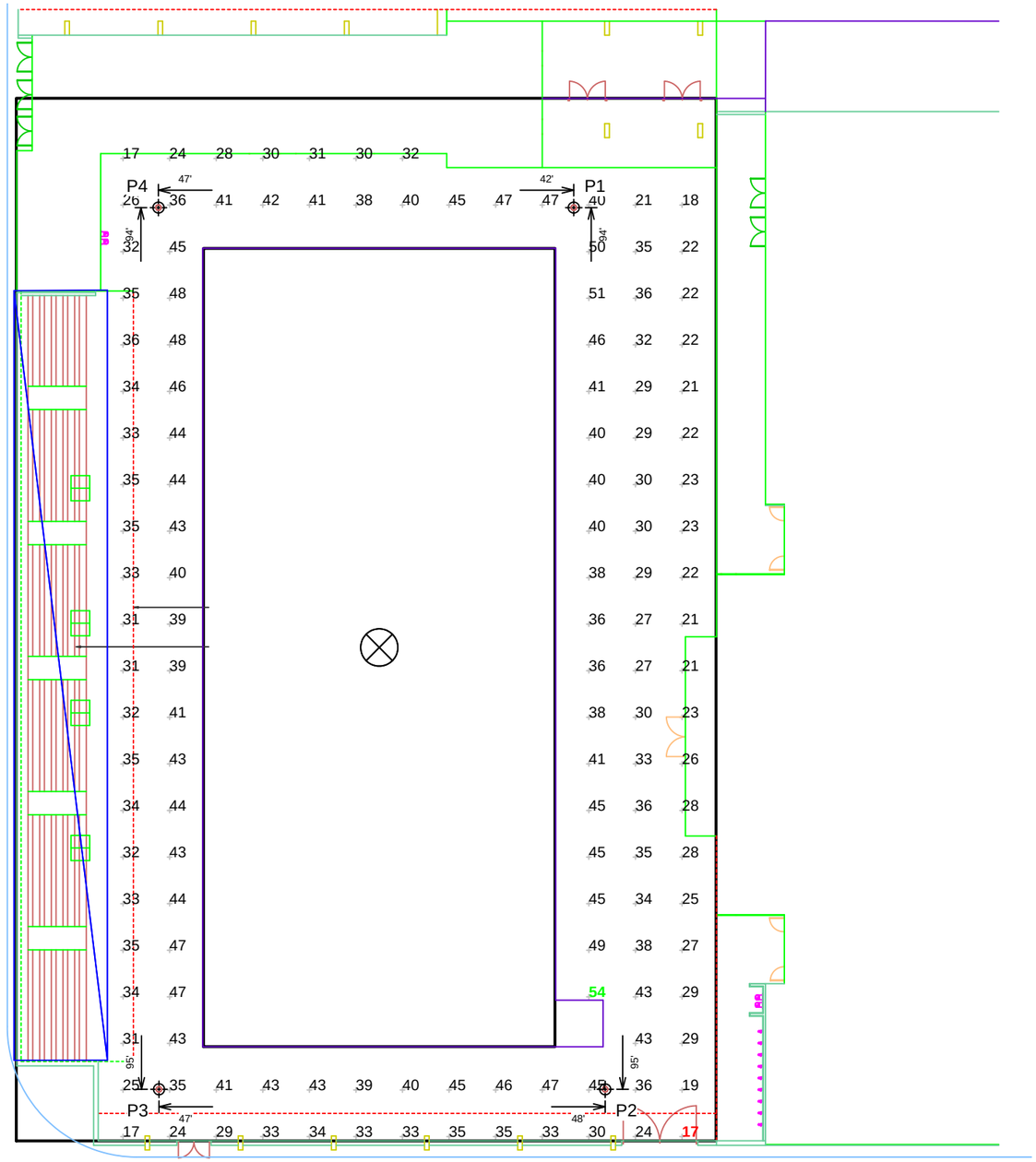
MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	3	0
4	Totals					12	12	0

*Above Grade level relative to the field



Grid Summary

Name	**Pool Deck**
Size	75' x 171'
Spacing	10.0' x 10.0'
Height	3.0' above grade

Illumination Summary

	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average	**25**
Scan Average	34.83
Maximum	54
Minimum	17
Avg/Min	2.09
Max/Min	**3.24**
UG (adjacent pts)	1.92
CU	0.27
No. of Points	135
LUMINAIRE INFORMATION	
Applied Circuits	A,B
No. of Luminaires	**12**
Total Load	14.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 30

0' 30' 60'

ENGINEERED DESIGN By: E.Fox • File #241863A • 20-Jan-25

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊠

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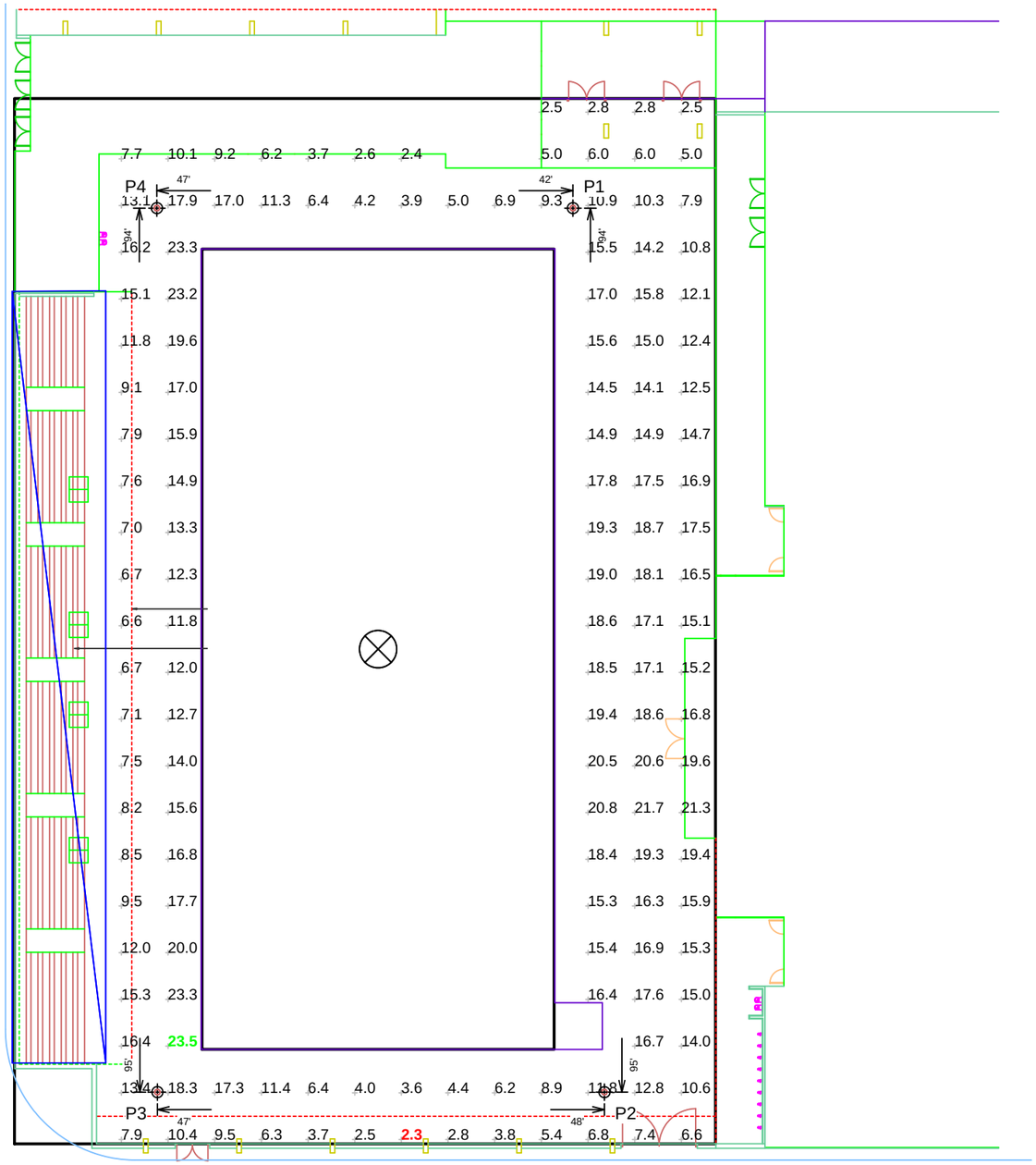
MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	1	2
4	Totals					12	4	8

*Above Grade level relative to the field



Grid Summary

Name	**Egress**
Size	150' x 224'
Spacing	10.0' x 10.0'
Height	3.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average	**12.43**
Maximum	23
Minimum	2
Avg/Min	5.50
Max/Min	**10.39**
UG (adjacent pts)	2.13
CU	0.30
No. of Points	143
LUMINAIRE INFORMATION	
Applied Circuits	B
No. of Luminaires	**4**
Total Load	4.68 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 30

0' 30' 60'

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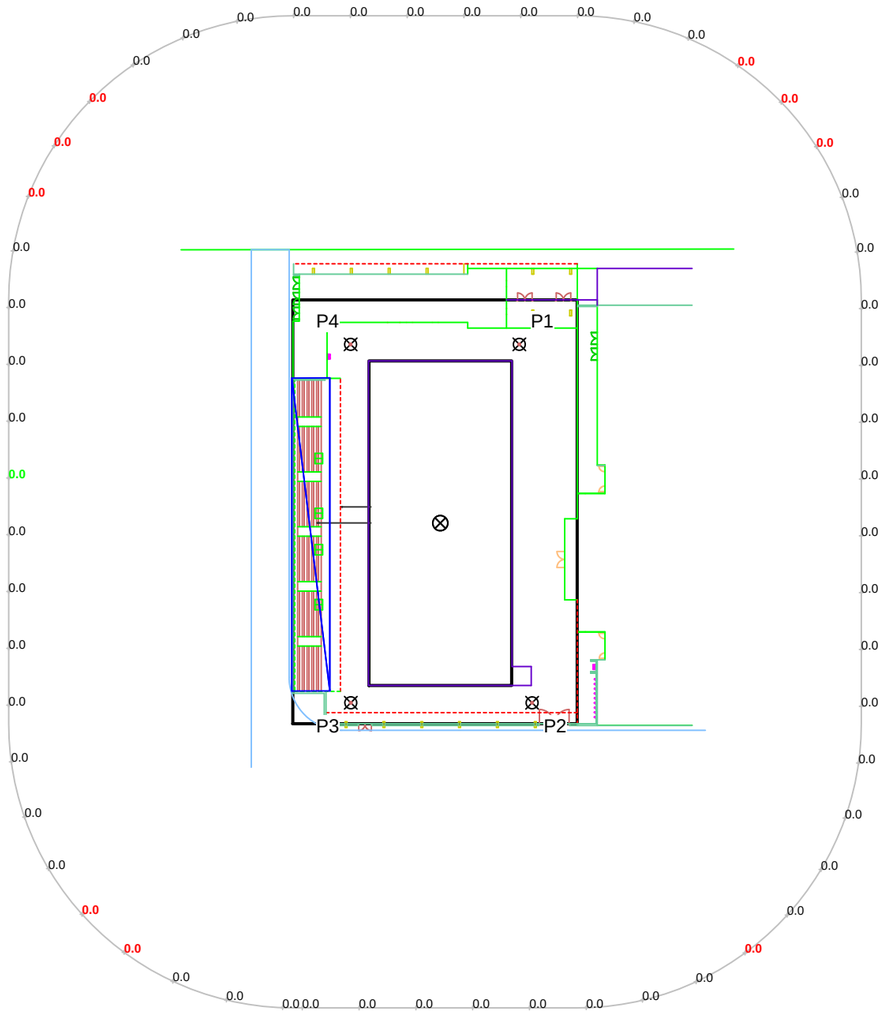
MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	3	0
4	Totals					12	12	0

*Above Grade level relative to the field



Grid Summary

Name	**Spill @ 3ft**
Spacing	30.0'
Height	3.0' above grade

Illumination Summary

	INITIAL HORIZONTAL FOOTCANDLES
	Entire Grid
Scan Average	**0.0151**
Maximum	0.05
Minimum	0.00
CU	0.00
No. of Points	57
LUMINAIRE INFORMATION	
Applied Circuits	A,B
No. of Luminaires	**12**
Total Load	14.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 80

0' 80' 160'

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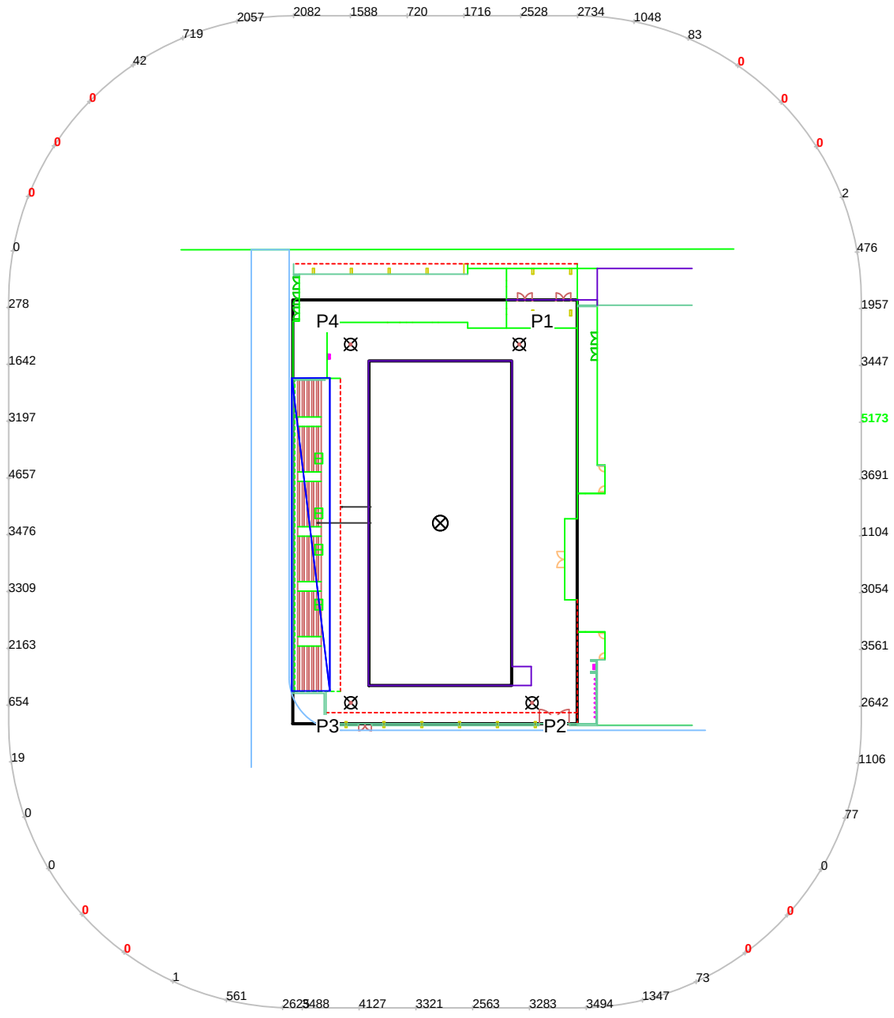
MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	3	0
4	Totals					12	12	0

*Above Grade level relative to the field



Grid Summary

Name	**Spill @ 5ft**
Spacing	30.0'
Height	5.0' above grade

Illumination Summary

	INITIAL CANDELA (PER FIXTURE)
	Entire Grid
Scan Average	**1506.7423**
Maximum	5172.91
Minimum	0.00
CU	0.00
No. of Points	57
LUMINAIRE INFORMATION	
Applied Circuits	A,B
No. of Luminaires	**12**
Total Load	14.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 80

0' 80' 160'

ENGINEERED DESIGN By: E.Fox • File #241863A • 20-Jan-25

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊠

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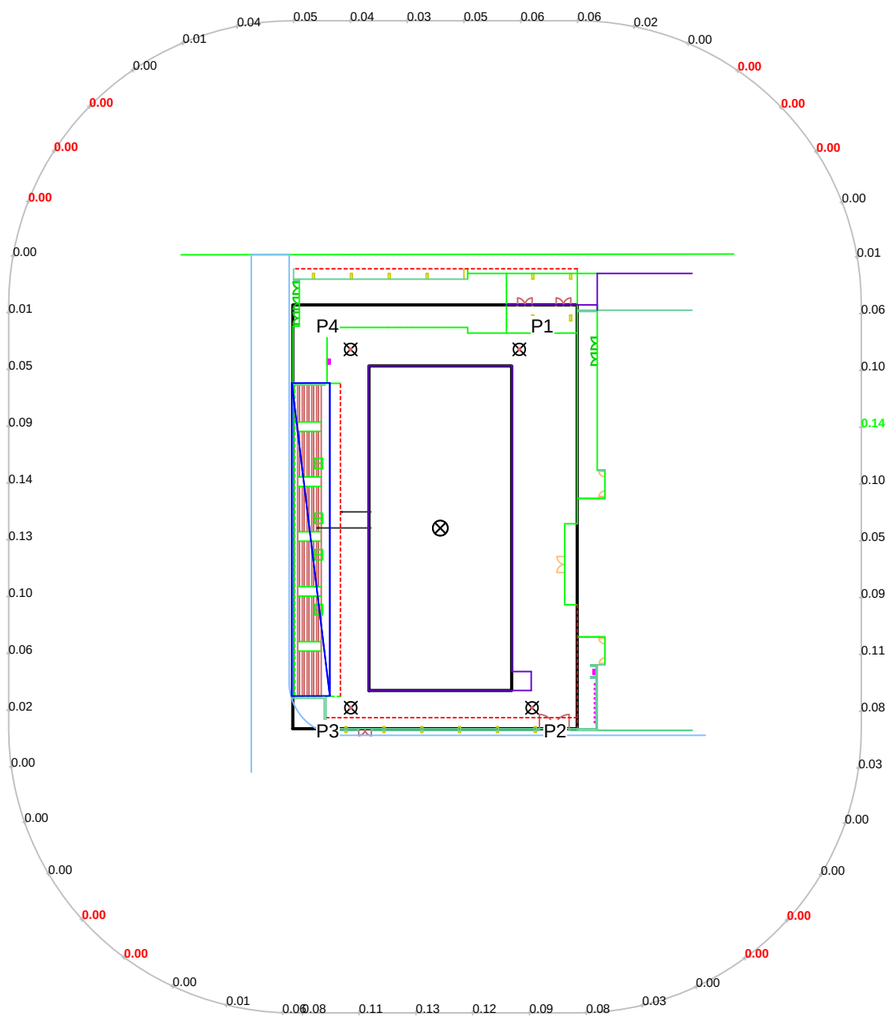
MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	3	0
4	Totals					12	12	0

*Above Grade level relative to the field



Grid Summary

Name	**Spill @ 5ft**
Spacing	30.0'
Height	5.0' above grade

Illumination Summary

	INITIAL MAX VERTICAL FOOTCANDLES
	Entire Grid
Scan Average	**0.0430**
Maximum	0.14
Minimum	0.00
CU	0.00
No. of Points	57
LUMINAIRE INFORMATION	
Applied Circuits	A,B
No. of Luminaires	**12**
Total Load	14.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 80

0' 80' 160'

ENGINEERED DESIGN By: E.Fox • File #241863A • 20-Jan-25

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊠

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MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment Layout

INCLUDES:
· Egress
· Pool

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

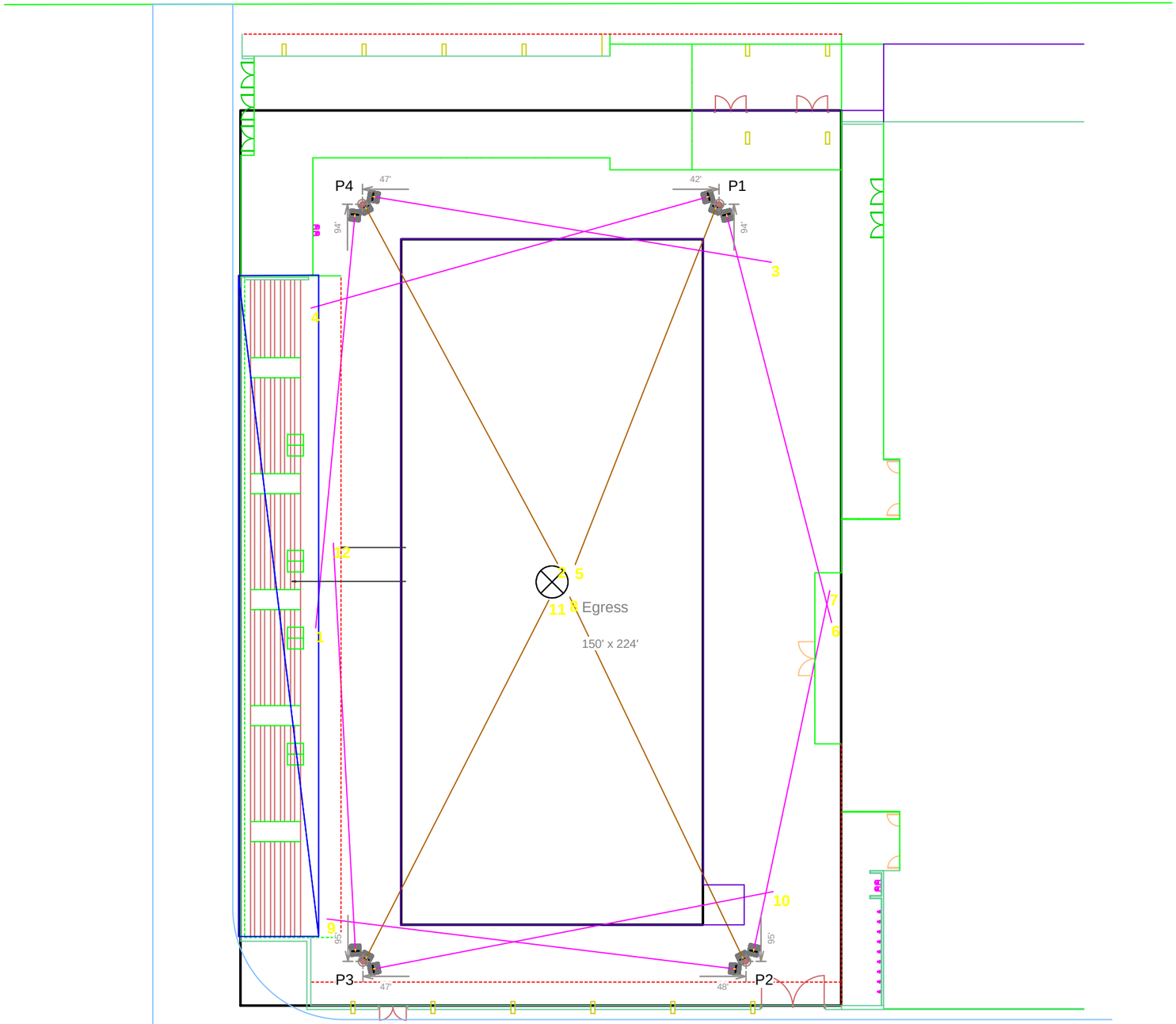
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Equipment List For Areas Shown

Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE
4	P1-P4	60'	-	60'	TLC-LED-1200	3
4	Totals					12

Single Luminaire Amperage Draw Chart

Driver Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0



SCALE IN FEET 1 : 30

0' 30' 60'

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Public Scoping Comments

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NAHC HEADQUARTERS
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Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

December 9, 2025

Dana Grudem
Long Beach Unified School District
2425 Webster Avenue
Long Beach CA 90810

Re: 2025120356 Millikan High School Aquatic Center Project, Los Angeles County

Dear Ms. Grudem:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

B 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@NAHC.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Katherine M. Butler, MPH, Director
8800 Cal Center Drive
Sacramento, California 95826-3200
dtsc.ca.gov

Gavin Newsom
Governor

SENT VIA ELECTRONIC MAIL

December 12, 2025

Dana Grudem
Senior Program Manager
Long Beach Unified School District
2425 Webster Avenue
Long Beach, CA 90810
ceqa@lbschools.net

RE: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE MILLIKAN HIGH SCHOOL AQUATIC CENTER PROJECT DATED DECEMBER 9, 2025, STATE CLEARINGHOUSE NUMBER 2025120356

Dear Dana Grudem,

The Department of Toxic Substances Control (DTSC) reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the Millikan High School Aquatic Center Project (Project). The district proposes to demolish Building 700/3000 and adjacent portable classrooms at Millikan High School and construct a new Aquatic Center within the existing developed campus footprint. DTSC recommends and requests consideration of the following comments:

1. If the district plans to use California Department of Education (CDE) State funds for the Project, then the district shall comply with the requirements of Education Code (EDC), §17210, §17213.1, and §17213.2, unless otherwise specifically exempted under section §17268. If the district is not using CDE State funds for the Project, or is otherwise specifically exempt under section §17268, DTSC recommends the district continue to investigate, clean up the Site under the oversight of Los Angeles County and in concurrence with all applicable DTSC

guidance documents, if necessary. For more information on the CDE State funding, please visit the Office of Public-School Construction webpage. A local education agency may also voluntarily request the CDE site/plan approval for locally funded site acquisitions and new construction projects. In these cases, CDE will require DTSC to review and approve prior to its final approval, except when exempt under section 17268.

2. If buildings or other structures are to be demolished on any Project sites included in the proposed Project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition, and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's Preliminary Endangerment Assessment (PEA) Guidance Manual.
3. All imported soil/fill material should be tested to assess any contaminants of concern meet screening levels as outlined in DTSC's PEA Guidance Manual. Additionally, DTSC advises referencing the DTSC Information Advisory Clean Imported Fill Material Fact Sheet if importing fill is necessary. To minimize the possibility of introducing contaminated soil/fill material, there should be documentation of the origins of the soil/fill material and, if applicable, sampling be conducted to ensure that the imported soil/fill material are suitable for the intended land use. The soil sampling should include analysis based on the source of the soil/fill and knowledge of prior land use.

DTSC appreciates the opportunity to comment on the NOP of a DEIR for the Millikan High School Aquatic Center Project. If you would like to proceed with DTSC's school environmental review process, please visit DTSC's Evaluating & Clean-up School 3-Step Process to begin a Phase I Environmental Site Assessment. If you have any questions or would like clarification on DTSC's comments, please respond to this letter or via our CEQA Review email for additional guidance.

Sincerely,



Dave Kereazis
Associate Environmental Planner
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

cc: (via email)

Governor's Office of Land Use and Climate Innovation
State Clearinghouse
State.Clearinghouse@lci.ca.gov

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Appendix B. Air Quality – CalEEMod Results

Millikan Aquatic Center Summary Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Millikan Aquatic Center
Construction Start Date	6/1/2026
Operational Year	2028
Lead Agency	Long Beach Unified School District
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.30000
Precipitation (days)	17.4000
Location	2800 Snowden Ave, Long Beach, CA 90815, USA
County	Los Angeles-South Coast
City	Long Beach
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4743
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Long Beach Gas & Oil
App Version	2022.1.1.37

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Educational	1.000000	User Defined Unit	6.28000	0.00000	28,035.0	19,477.0	—	Aquatic Center

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-4*	Use Local and Sustainable Building Materials
Area Sources	AS-1	Use Low-VOC Cleaning Supplies
Area Sources	AS-2	Use Low-VOC Paints

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.86286	8.78802	4.23231	25.3608	0.03281	0.19389	1.75470	1.82037	0.15802	0.77236	0.83803	—	3,975.16	3,975.16	0.17682	0.18600	2.75154	4,037.75
Mit.	8.86286	8.78802	4.23231	25.3608	0.03281	0.19389	1.75470	1.82037	0.15802	0.77236	0.83803	—	3,975.16	3,975.16	0.17682	0.18600	2.75154	4,037.75
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.98262	1.98262	3.78815	16.9631	0.03281	0.06567	1.75470	1.82037	0.06567	0.77236	0.83803	—	3,967.18	3,967.18	0.17721	0.18600	0.07141	4,027.11
Mit.	1.98262	1.98262	3.78815	16.9631	0.03281	0.06567	1.75470	1.82037	0.06567	0.77236	0.83803	—	3,967.18	3,967.18	0.17721	0.18600	0.07141	4,027.11
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.19268	1.17185	1.40248	7.36191	0.01091	0.03967	0.47653	0.51620	0.03524	0.19247	0.22772	—	1,284.00	1,284.00	0.05591	0.04551	0.29350	1,299.26

Mit.	1.19268	1.17185	1.40248	7.36191	0.01091	0.03967	0.47653	0.51620	0.03524	0.19247	0.22772	—	1,284.00	1,284.00	0.05591	0.04551	0.29350	1,299.26
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.21766	0.21386	0.25595	1.34355	0.00199	0.00724	0.08697	0.09421	0.00643	0.03513	0.04156	—	212.581	212.581	0.00926	0.00753	0.04859	215.107
Mit.	0.21766	0.21386	0.25595	1.34355	0.00199	0.00724	0.08697	0.09421	0.00643	0.03513	0.04156	—	212.581	212.581	0.00926	0.00753	0.04859	215.107
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.37937	0.18969	1.88020	3.11665	0.02069	0.26211	0.00000	0.26211	0.26211	0.00000	0.26211	14.5513	4,698.53	4,713.08	1.74357	0.03342	0.00000	4,766.63
Mit.	0.37937	0.18969	1.88020	3.11665	0.02069	0.26211	0.00000	0.26211	0.26211	0.00000	0.26211	14.5513	4,698.53	4,713.08	1.74357	0.03342	0.00000	4,766.63
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.37937	0.18969	1.88020	3.11665	0.02069	0.26211	0.00000	0.26211	0.26211	0.00000	0.26211	14.5513	4,698.53	4,713.08	1.74357	0.03342	0.00000	4,766.63
Mit.	0.37937	0.18969	1.88020	3.11665	0.02069	0.26211	0.00000	0.26211	0.26211	0.00000	0.26211	14.5513	4,698.53	4,713.08	1.74357	0.03342	0.00000	4,766.63
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.37937	0.18969	1.88020	3.11665	0.02069	0.26211	0.00000	0.26211	0.26211	0.00000	0.26211	14.5513	4,698.53	4,713.08	1.74357	0.03342	0.00000	4,766.63
Mit.	0.37937	0.18969	1.88020	3.11665	0.02069	0.26211	0.00000	0.26211	0.26211	0.00000	0.26211	14.5513	4,698.53	4,713.08	1.74357	0.03342	0.00000	4,766.63

% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06924	0.03462	0.34314	0.56879	0.00378	0.04784	0.00000	0.04784	0.04784	0.00000	0.04784	2.40914	777.895	780.305	0.28867	0.00553	0.00000	789.170
Mit.	0.06924	0.03462	0.34314	0.56879	0.00378	0.04784	0.00000	0.04784	0.04784	0.00000	0.04784	2.40914	777.895	780.305	0.28867	0.00553	0.00000	789.170
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	44.0000
Healthy Places Index Score for Project Location (b)	86.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

Appendix C. Phase II Intensive Historic Resources Impact Assessment Report

Millikan High School Aquatic Center Project

PHASE II INTENSIVE HISTORIC RESOURCES IMPACT ASSESSMENT REPORT

Submitted to:

Long Beach Unified School District
1515 Hughes Way
Long Beach, CA 90810

Prepared for:

Terraphase Engineering Inc.
1300 Clay St, Suite 1000
Oakland, CA 94612

Prepared by:

Delcamp Preservation & Planning, 2647 Gateway Road, Suite 105 #228
Carlsbad, CA 92009

January 22, 2026

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ACRONYMS AND ABBREVIATIONS

CAB	Compliance Activity B
CAC	Compliance Activity C
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
District	Long Beach Unified School District
DP&P	Delcamp Preservation & Planning
HABS	Historic American Buildings Survey
HRAR	Historic Resource Impact Assessment Report
HRER	Historic Resource Evaluation Report
HS	High School
LBUSD	Long Beach Unified School District
NEPA	National Environmental Policy Act
NPS	National Park Service
NRHP	National Register of Historic Places
SCCIC	South Central Coastal Information Center
SOIS	Secretary of the Interior's Standards for the Treatment of Historic Properties

MANAGEMENT SUMMARY

Delcamp Preservation & Planning (DP&P) was contracted by Terraphase Engineering Inc. (Terraphase) to provide historic resources services for the Long Beach Unified School District (District) proposed Millikan High School (HS) Aquatic Center Project (project). The project is the proposed demolition of the Millikan HS Industrial Building, formerly known as Building 700 and now known as Building 3000. Millikan HS was previously identified in 2017 and 2025 to be eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) under Criteria C/3 as an excellent example of a Post-War Modern style school campus designed by prolific architect C. Hugh Gibbs with landscaping by Eckbo, Royston and Williams. The prior historical evaluations identified eight buildings in the original rectangular grouping and the site plan, for a total of nine contributing elements to the historic character of the school. Building 3000 is one of the eight contributing buildings, and is located at the northeast corner of the rectangular grouping of the contributing buildings.

The proposed improvements were generally identified in the District's 2017 *Cultural Resources Assessment for Long Beach Unified School District* as a major renovation that would not impact the school's historic eligibility. As a major renovation, the Study stipulated that the project is subject to Compliance Activities B and C (CAB and CAC), and potentially Compliance Activity D.[1] CAB requires a Phase II Intensive Historic Resources Assessment to document character-defining features, assess potential impacts, and identify design, treatment or mitigation recommendations to reduce potential impacts. CAC requires the historic preservation professional to provide preservation advice including review of plans throughout the design process, preparing written advice and attending meetings. In the event mitigation is required, Compliance Activity D would come into effect which may include but would not be limited to monitoring, documentation, salvage and interpretation activities. DP&P's scope is to provide services under CAB and CAC; Compliance Activity D is outside DP&P's current scope.

DP&P's Principal Architectural Historian reviewed available project plans, completed a site visit in August 2025 and identified character-defining features of the school to assess the potential impacts of the project on Millikan HS. Based on a review of available project plans and the scope of the proposed project at the current design stage, the project will result in demolition of one contributing building and would result in significant modification of the character-defining features of Millikan HS. Mitigation measures are recommended to reduce potential impacts of the project, but are not sufficient to reduce impacts to a less than significant level. As such, the project would result in a substantial adverse change that would impair the historical significance of Millikan HS.

[1] PCR Services Inc., *Cultural Resources Assessment for Long Beach Unified School District*, 2017, Appendix G, Table 12.

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PHASE II HISTORIC RESOURCES IMPACT ASSESSMENT

This Phase II intensive historic resources impact assessment report (HRAR) has been prepared in accordance with Compliance Activity B as stipulated by the *Cultural Resources Assessment for Long Beach Unified School District* (Study) prepared by PCR Services Inc. in 2017.

One of the purposes of the Study was to identify and preliminarily evaluate schools that were found potentially eligible for listing as historic resources in the National Register of Historic Resources (NRHP) and/or California Register of Historical Resources (CRHR). Another important purpose of the Study was to provide guidance and practical approaches to assist the District in ensuring projects affecting eligible historic resources comply with the California Environmental Quality Act (CEQA). As part of the Study, Robert A. Millikan High School (Millikan HS) was found to be eligible for listing in the NRHP and CRHR under Criteria C/3 as an excellent example of a Post-War Modern style school campus designed by locally prolific architect C. Hugh Gibbs with landscaping by Eckbo, Royston and Williams. The planned project for Millikan HS was categorized at that time as a major renovation that would not impact the school's historic eligibility, yet would not be exempt from review under CEQA.

The 2017 Study stipulated that the following Compliance Activities need to be completed for Major Renovation projects at eligible historic resource campuses:

1. Compliance Activity B. Perform Phase II Intensive Historic Resources Assessments
   Document character-defining features; review detailed scopes of work w/Architect; provide written guidance in accordance w/ the Secretary of the Interior's Standards for the Treatment of Historic Properties; assessment of potential impacts for CEQA/NEPA [National Environmental Policy Act] compliance.

2. Compliance Activity C. Preservation Advice
   Attend meetings with Architect and/or District as required; review plans at concept, preliminary, and final design; prepare CEQA Compliance Letter; attend pre-construction meetings/critical stage construction review.

As part of the current undertaking, DP&P recommends that the Cafeteria Building is additionally eligible as a contributor to the Millikan HS historic resource. Furthermore, DP&P recommends that Building 900, previously identified and confirmed as a contributor in 2017 and 2025, is not eligible as a contributor based on its later construction date after Millikan HS' period of significance of 1954-1957. Additionally, DP&P has identified and clarified changes that have occurred to some of the school's buildings and site plan character-defining features. Following a summary of the project, potential impacts associated with the project are analyzed and mitigation measures are presented. The preparer's qualifications and references are included in the concluding sections of the report.

MILLIKAN HIGH SCHOOL

Character-Defining Features of Millikan High School

The prior evaluations completed by PCR Services and Kleinfelder in 2017 and 2025, respectively, concluded that Millikan HS is an eligible historic resource with several contributing elements. The prior studies identified and/or confirmed that eight buildings and the entire site plan are contributors to the historic significance of the Millikan HS campus: Buildings 100 (now 1000) – Administration, 200 (now 2000) – Social Studies, 300 (now 12000) – Commerce and Science, 400 (now 7000) – Arts and Home Economics, 500 (now 8000) – Auditorium, 600 (now 4000) – Physical Education, 700 (now 3000) – Industrial Arts, and 900 – David Radford Hall. The "entire site plan" was stated in 2025 to be an additional contributor without any other description. For the purpose of this report, the "entire site plan" is interpreted to mean the layout of the school's core original buildings including any intact site features remaining from the period of significance. As contributors, the buildings and core site plan elements are not individually significant, but together they contribute to the significance of the resource as a whole.

Cafeteria and Building 900

The list of previously identified contributors did not include the Cafeteria building. Current research in conjunction with the site visit indicates that the Cafeteria is an original building that was overlooked as a contributor in prior evaluations. This building appears in Gibbs' 1952 concept rendering of the Millikan HS campus and appears complete in the earliest available historic aerial of the campus while still under construction in 1956 (see Figures 1 and 2).

The research conducted for this report indicates that Building 900, which was identified in 2017 and 2025 as a contributor, is not one of the original buildings. The plans for its construction were approved by the State of California in October 1961, indicating it was built circa 1962, which is outside the school's period of significance. Moreover, the design of the building includes only the access lobby and stairway on the ground floor and all classrooms on the second floor with no interior access to adjacent Building 4000. Building 900 exhibits different exterior construction and finishing details and bulky cylindrical pylons supporting the building. The combination of these features expresses a distinctly different design vocabulary than the original buildings. Additionally, Building 900 interrupted the original execution of the quad area's intentional design plan, which is discussed further in the next section (see Figures 1 and 3).



Figure 1. Rendering of Millikan HS, AIA 1952

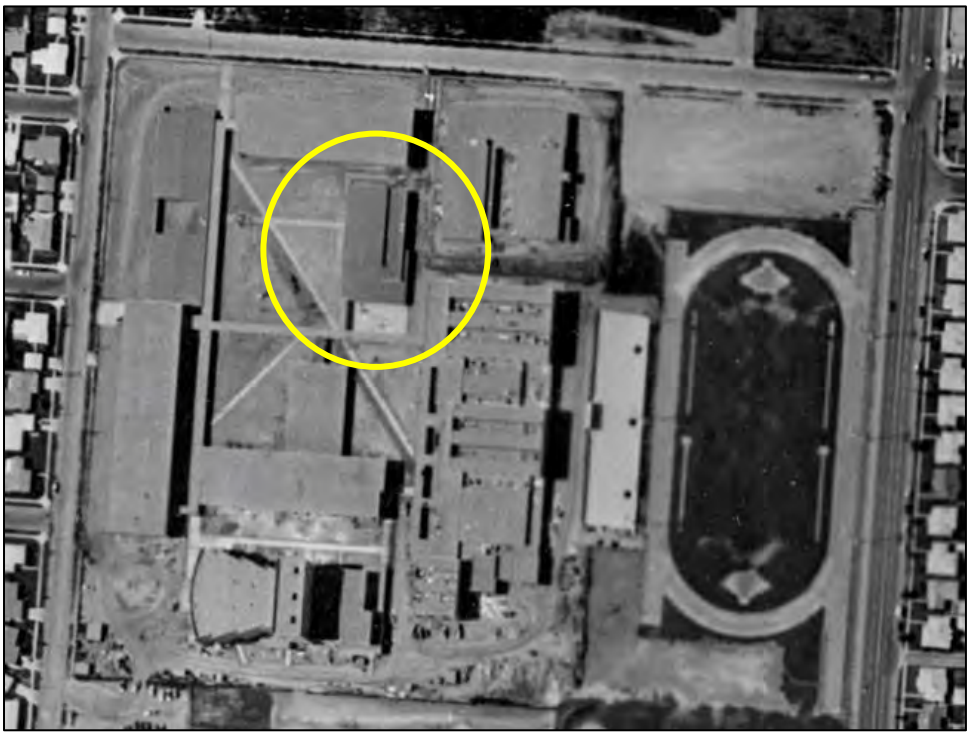


Figure 2. Aerial photograph, 1956, with Cafeteria highlighted

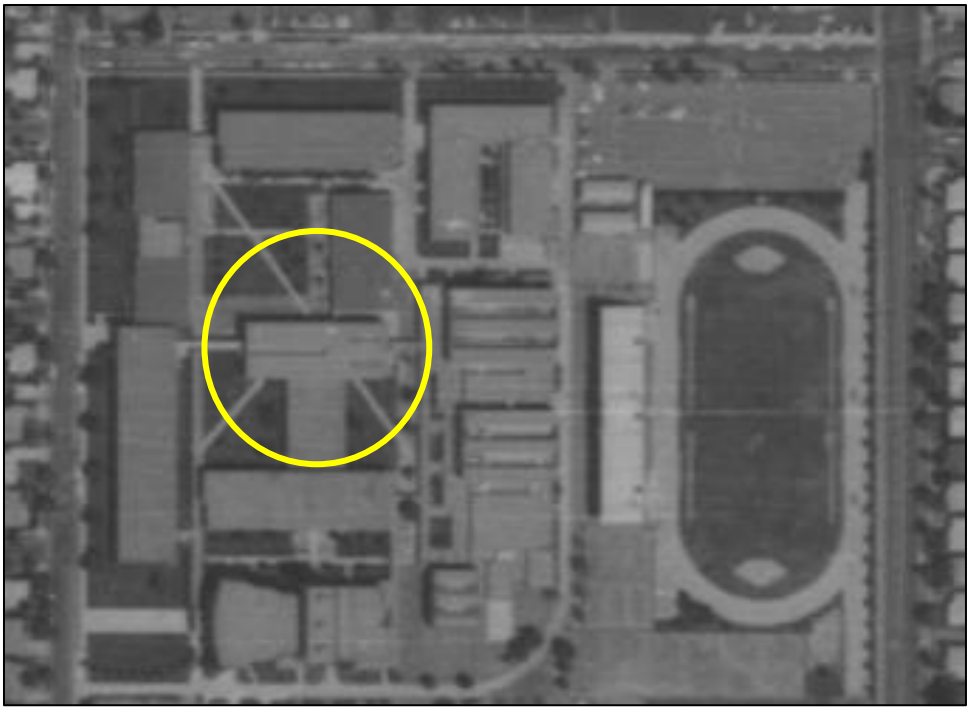


Figure 3. Aerial photograph, 1968, with the addition of Building 900 highlighted

Campus Site Plan

As noted above, the identification of the "entire site plan" as a contributing element to Millikan HS is interpreted to mean the layout of the school's core original buildings and any intact site features remaining from the period of significance. The character-defining features of the campus and site plan are presented below, noting where character-defining features have been altered or are not original.

Character-defining features:

- Loosely rectangular plan of core original buildings surrounding an interior open area ("quad").
- Northern portion of quad bracketed by Buildings 1000, 2000 and Cafeteria.
- Southern portion of quad flanked by Buildings 4000 and 12000, and partially intersected by northerly projection of Building 7000 (but excluding non-original Building 900).
- One- and two-story building volumes. The original design planned for potential capacity expansion by adding a floor to one-story buildings.
- Core quad buildings that exhibit Post War Modern architecture featuring an abundance of brick walls, brick veneer cladding, instances of metal panel accents, and expansive glazing.
- Prominent auditorium located at southern end of site plan with entrance facing Snowden Avenue for easy public access.
- Open walkways through quad, connecting buildings. Original walkway connecting Building 1000 and the Cafeteria is intact. (Two others that were altered by the addition of Building 900 are remnants of sidewalks that originally connected Buildings 1000 and 4000 and an intersecting sidewalk that extended to Building 12000).

- Buildings 3000 and 4000 located east of the core quad-facing buildings, with athletic facilities and parking areas located beyond the historic resource site plan to the rear (east) and south perimeters of the school campus.

Alterations:

- An addition to Building 1000 was constructed circa 1962 filled in an original landscaped patio between the library and administrative office sections of the building; a narrow landscaped walkway remains.
- Building 900 was constructed as an addition to Building 7000 (then Building 400) circa 1964.
- Covered walkway between Building 4000 and 12000 was interrupted by the addition of Building 900.
- Original, angled, redwood-topped concrete benches were removed between 1977 and 1988.
- An allée of trees was added between public sidewalk and facades of Buildings 2000 and 3000 along E. Belen Street between 1977 and 1988.
- Original walkway and trees between Buildings 2000 and 3000 were removed and replaced with wider fire lane.
- Some coverings over walkways have been removed.

Contributing Building 3000

As discussed above, Building 3000 (formerly Building 700) was built as part of the original plan for Millikan HS. Building 3000 was the Industrial Arts building. The building exhibits a more functional plan and exterior appearance than the general classroom buildings, as needed based on its original purpose. The original floor plan notes large rooms dedicated to a metal shop, electrical shop, automotive shop and wood shop. There were also smaller rooms for industrial drafting, architectural drafting, blue prints/models, visual aids, graphic arts, dark room, journalism, and typewriting. The building also features offices, storage rooms and restrooms. The primary access to all of the main rooms is from the courtyard; every room has secondary access either directly to the exterior or via a corridor to the exterior. These shop rooms are not interconnected, while some of the smaller rooms connect to others with related purposes. Based on the site visit, the floor plan has not changed, but the use of the shops and rooms has changed over time.

Character-Defining Features

- Post War Modern style
- U-shaped plan around internal courtyard and rectangular massing
- One-story
- Flat roof
- Rectangular continuous cantilevered concrete overhang supported by *pilotis* covering internal courtyard walkways
- Painted concrete surfaces
- Aluminum-frame single-pane fixed and awning windows (some windows painted over, alteration)
- Internal courtyard partially-landscaped with asphalt and concrete paving/walkways (benches replaced, alteration).

- Freestanding brick wall with *pilotis* supporting cantilevered overhang that "encloses" south end of internal courtyard between walkway entrances; overhang fascia exhibits original "Industrial Arts" sign lettering
- Interiors contain some original cabinetry and fixtures, including metal, circular, communal handwashing fixture in original automotive shop

Other Contributing Buildings

The character-defining features of the other contributing buildings previously evaluated in 2017 and 2025, and the Cafeteria, are identified below.

Character-Defining Features

Building 1000 (Formerly Building 100 – Administration and Library)

- Post War Modern style
- Rectangular plan and massing
- One-story
- Asymmetrical façade
- Original low-pitched side-gable roofs with wide, boxed overhang at north and south ends; infilled central section is flat-roofed (later addition)
- Brick veneer and stucco exterior wall cladding
- Extension of brick walls beyond building façade
- Aluminum-frame single-pane fixed and awning ribbon windows; windows set flush with the exterior wall

Building 2000 (Formerly Building 200 – Social Studies)

- Post War Modern style
- Rectangular plan and massing
- Two-story
- Asymmetrical façade
- Flat roof with cantilevered concrete roof overhang, and cantilevered concrete overhang above the first story
- Brick veneer and stucco exterior wall cladding with colored metal panels below ribbon windows
- Extension of brick walls beyond building façade
- Aluminum-frame single-pane fixed and awning ribbon windows; windows set flush with the exterior wall

Building 4000 (Formerly Building 600 – Physical Education)

- Post War Modern style
- Asymmetrical shaped plan and rectangular massing
- One- and two-story
- Flat roofs with varied roof heights
- Painted concrete wall surfaces with minimal area of brick veneer cladding

- Primary entry under a cantilevered canopy supported by *pilotis*; covered walkways extend to secondary entrances
- Clerestory aluminum-frame single-pane windows on exterior and at roof projections to light interiors (some windows painted over, alteration)

Building 7000 (Formerly Building 400 – Arts and Home Economics), Excluding Building 900

- Post War Modern style
- T-shaped plan and rectangular massing
- One- and two-story
- Asymmetrical façade
- Flat roof with cantilevered concrete roof overhangs, and cantilevered concrete overhang above the first story at two-story volume
- Brick veneer wall cladding with colored metal panels below ribbon windows; brick accent walls
- Extension of brick accent walls beyond building façade
- Aluminum-frame single-pane fixed and awning ribbon windows; windows set flush with the exterior wall

Building 8000 (Formerly Building 500 – Auditorium)

- Post War Modern style
- Irregular plan and massing
- One- and two-story with mezzanine balcony and central projecting flyloft element
- Asymmetrical façade on sides and rear; symmetrical primary (west) elevation
- Flat, low-pitched gable, and low-pitched shed roof forms
- Primary elevation clad in panels of concrete with exposed pebble aggregate finish above brick veneer walls; all other secondary surfaces are painted concrete
- Secondary elevations exhibit large expanses of blank walls; one aluminum-frame single-pane fixed and awning ribbon window occurs on the south elevation of the two-story façade (east)
- Pairs of aluminum-frame single-pane main entrance doors below transoms elevated above concrete steps and set under concrete, low-pitched gable canopy
- Extension of painted concrete walls beyond front building façade

Building 12000 (Formerly Building 300 – Commerce and Science)

- Post War Modern style
- Rectangular plan and massing
- Two-story
- Asymmetrical façade
- Flat roof with cantilevered concrete roof overhang, and cantilevered concrete overhang above the first story
- Brick veneer and stucco exterior wall cladding with colored metal panels below ribbon windows
- Main entrance breezeway into the campus at north end set underneath cantilevered second story
- Extension of brick walls beyond building façade

- Aluminum-frame single-pane fixed and awning ribbon windows; windows set flush with the exterior wall

Cafeteria

- Post War Modern style
- Rectangular plan and massing
- One-story
- Asymmetrical façade
- Flat roof with cantilevered, wide boxed roof overhang facing quad supported by *pilotis*
- Painted concrete exterior
- Large aluminum-frame, single-pane fixed windows below transoms; windows set flush with the exterior wall
- Original "Cafeteria" wall sign lettering and adjacent analog wall clock with accents

As demonstrated in Figures 1 and 2, the Cafeteria was part of the original design and construction. Photographs were included in the prior 2017 and 2025 evaluations and are supplemented in Figures 4 and 5 below.



Figure 4. Cafeteria, west elevation facing quad



Figure 5. Cafeteria original wall sign and clock

Updated Historic Resource Contributors

Based on the above discussion and identification of character-defining features, the following list updates the list of contributors to the Millikan HS eligible historic resource:

Contributors

- Building 1000 – Administration and Library
- Building 2000 – Social Studies
- Building 7000 (excluding non-contributing Building 900) – Arts and Home Economics
- Building 8000 – Auditorium
- Building 12000 – Commerce and Science
- Cafeteria
- Building 3000 – Industrial Arts
- Building 4000 – Physical Education
- Rectangular site plan of quad area surrounded by above buildings

Non-Contributor

- Building 900

POTENTIAL EFFECTS

The evaluation of the project's potential effects on the eligible historic resource must center on whether the loss of one contributor and the construction of the new aquatic center will result in Millikan HS no longer being eligible for listing in the NRHP or CRHR. After describing the project, this evaluation considers the project's consistency with the Secretary of the Interior's Standards for the Treatment of Historic Properties (SOIS) and the potential for the project to cause a substantial adverse change in the significance of the resource in accordance with CEQA.

Project Description

The project proposes to demolish existing Building 3000 and related hardscape and landscape elements and adjacent portable buildings, and construct a new Aquatic Center in its place for use by swim and water polo teams, physical education to accommodate up to 100 students, students with special needs, Special Olympics, and community learn-to-swim programs. The aquatic center will comprise two buildings, Building 3000A to the east oriented perpendicular to E. Belen and Building 3000B adjacent and parallel to E. Belen, along with a swimming pool, plunge pool, bleachers under a shade structure, hardscape decking and walkways, designated fire lanes on the west and south side of the aquatic center, and landscaping between the buildings and the public sidewalk along E. Belen. Building walls will be CMU block in precision, burnished and projected block finishes accented with regularly spaced CMU pilasters, and limited wall areas clad in ceramic tile. Roofs will be metal. The main public entrance gate will be located on E. Belen, with a flat roofed canopy supported by CMU columns, adjacent to the ticket booth.

A more detailed description of the new Aquatic Center scope follows:

Pool and Pool Deck

1. A 51.5-meter modular pool by Myrtha Pools 25-yards wide.
2. A 30-foot pool deck surrounding the pool.
3. Bleachers to seat 500 with a shade cover structure above.
4. Equipment storage enclosure/room.
5. Musco stadium lights and LED scoreboard with integrated sound system throughout the complex.
6. Perimeter walls for security and privacy and surveillance cameras.

Aquatic Center Buildings

1. 500-square foot (sf) snack bar/ticket booth.
2. Gender neutral locker room facility with up to 60 changing stalls, 10 shower stalls and approximately 200 lockers.
3. Two team rooms.
4. Office with up to four working spaces.
5. Pool attendant office including a restroom and shower.
6. Equipment storage enclosure/room(s).
7. Laundry room, chemical storage rooms, and mechanical and electrical rooms.

8. Outdoor shower heads.

Secretary of the Interior's Standards (SOIS)

Projects that are consistent with the SOIS generally avoid adverse impacts to historic resources (CEQA Guidelines Section 15064.5(b)(3)) and may qualify for a categorical exemption. Therefore, an analysis of a project's consistency with the SOIS is the first step in identifying potential adverse impacts associated with the Millikan HS Aquatic Center project. This section outlines the appropriate SOIS treatment approach, identifies elements of the project design that are consistent with the SOIS, and identifies design elements that are inconsistent with the SOIS. In the event that elements of the project are identified as inconsistent with the SOIS, the project would not qualify for a categorical exemption under CEQA Section 15331. Further analysis of the project's potential to cause a significant adverse impact and material impairment to the resource per CEQA Guidelines Section 15064.5(b) is then required.

There are four treatment approaches defined in the SOIS: Preservation, Restoration, Reconstruction and Rehabilitation. Preservation involves preserving the existing form, materials and spaces of a historic resource. Restoration is the process of returning the form and features of a resource to a particular time in its history. Reconstruction involves new construction that recreates the appearance of a historic resource that is no longer present due to prior natural or manmade acts. Finally, Rehabilitation makes possible new uses at a historic resource through alterations or additions while preserving the buildings, structures and/or elements sufficiently to convey the resource's historical significance. Of these four treatment approaches, Rehabilitation is the most flexible treatment approach. Rehabilitation is the appropriate treatment for the proposed project because it makes possible the creation of a space for the new use of a free-standing aquatic center as an addition to the set of buildings and site plan that contribute to the school's eligibility as a historic resource. To accomplish this outcome, one of the nine contributing elements will be demolished.

Consistency with the SOIS

There are ten standards under the SOIS Rehabilitation treatment approach. Table 1 below provides an analysis of the project's consistency with the standards.

Table 1

PROJECT CONSISTENCY WITH SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

Standard for Rehabilitation	SOIS Consistency Determination
Standard 1: A property will be used as it was historically or be given a new use that requires minimal change	**Consistent.** The existing property (high school) will remain and continue to be used as it was historically. The demolition and replacement of existing Building 3000 with a new aquatic center represents a new use of the space within the historic resource boundary, but is consistent with the property's use as a high school.
Standard 2: The historic character of a property will be retained and preserved	**Not Consistent.** The property's historic character is conveyed by the entire site plan and eight buildings that are contributing elements within an identified boundary. Neither the entire site plan nor any of the contributing buildings are individually significant, but together make up the overall historic character of the school. Millikan HS is eligible for listing in the NRHP and CRHR under Criteria C/3 for its architecture. Four of the eight contributing buildings (Buildings 1000, 2000, 7000 and 12000) exhibit a consistent design vocabulary featuring brick cladding and expansive glazing in one- and/or two-story volumes. These four buildings bracket the central quad, along with the Cafeteria. The quad retains some elements of the original site plan and landscape design. Buildings 3000 and 4000 do not express the same design vocabulary as the prior four buildings, but their lack of unique features and bland designs are consistent with the use of each building. The Auditorium and Cafeteria exhibit use-specific design elements consistent with their functions. Although the rest of the contributors would not be affected by the project, demolition of contributing Building 3000 represents a loss of historic integrity and an adverse effect on the historic character of the property.
Standard 3: Each property will be recognized as a physical record of its time, place, and use.	**Consistent.** Millikan HS will continue to exist and be used in its original location as a high school. Building 3000 will be replaced with a new structure and use in the northeast corner of the rectangular site plan layout (which is a character-defining feature of a contributor to the historic resource). Although the demolition of Building 3000 will represent a loss of integrity and historic character, the overall historic resource that is Millikan HS will generally continue to be recognized as a physical record of its time, place and use.

Standard for Rehabilitation	SOIS Consistency Determination
Standard 4: Changes to a property that have acquired historic significance will be retained and preserved.	**Consistent.** The project does not propose alterations to changed areas of the property that have been identified as historically significant (i.e., changes to buildings that occurred within the Millikan HS period of significance), so the project is considered to be consistent with this standard.
Standard 5: Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.	**Not Consistent.** The demolition of the Building 3000 results in a complete loss of the building including its distinctive materials, features, finishes, construction techniques and examples of craftsmanship. The contributes in equal measure with the other contributors to convey the significance of Millikan HS, which has been determined to be eligible for its Post War Modern architecture. Therefore, the demolition of contributing Building 3000 does not preserve important elements that help characterize the property.
Standard 6: Deteriorated historic features will be repaired rather than replaced.	**Not Consistent.** Any deteriorated historic features of the Building 3000 will not be repaired because the building will be demolished.
Standard 7: Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible.	**Not Applicable.** The project does not propose chemical or physical treatments of building features, so this standard is not applicable.
Standard 8: Archaeological resources will be protected and preserved in place.	**Consistent.** The site is almost entirely paved over. Any measures for protecting and preserving archaeological resources will be addressed by another discipline and are not a part of this scope. For the purpose of this analysis, the project is presumed to be consistent with this standard.
Standard 9: New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.	**Not Consistent**. The project will demolish Building 3000, a contributor to the historic resource, in order to allow for construction of the new Aquatic Center. Thus, the project will "destroy historic materials that characterize the property" and is not consistent with the first threshold contained in this standard. The proposed new Aquatic Center structure that will replace Building 3000 could be considered "related new construction" in relation to the second threshold of this standard. Under this threshold, the project proposes a replacement structure that allows the site plan to continue to convey the school's rectangular layout and street-facing characteristics along E. Belen Street. The Aquatic Center structure will be slightly larger

Standard for Rehabilitation	SOIS Consistency Determination
Standard 9 (cont'd)	than the footprint of Building 3000 and its volume will be slightly closer to Building 2000, but the design will preserve a significant separation between the two buildings for the required fire lane access. The Aquatic Center footprint will also place its volume closer to E. Belen Street to accommodate a ticket booth and public entrance. A line of existing mature trees along that frontage will be removed and replaced with low level landscape and paving, consistent with its proposed use as a public access and entrance space for events. The original landscape plan created by Eckbo, Royston and Williams did not include any trees within this frontage, and review of historic aerials confirms that the trees were added much later, outside the historic resource's period of significance. The proposed design of the structure is generally compatible with the massing, size, and scale of the property's existing buildings. The design of features and the proposed materials are compatible and yet differentiated from the rest of the contributing buildings, so as to be clearly modern and to not create a false sense of history that might otherwise confuse the general public. Thus, the proposed project is consistent with the second threshold contained in this standard. Although the proposed project is partially consistent with Standard 9, the demolition of the existing contributor is the primary and overarching consideration for a consistency finding. Thus, the demolition of Building 3000 renders the project not consistent with this standard.
Standard 10: New additions and adjacent new construction shall be undertaken such that, if removed in the future, the essential form/integrity of the historic property would be unimpaired.	**Not Consistent**. The existing Building 3000 will be demolished and replaced with the new Aquatic Center. Any future removal of the Aquatic Center would create a void in that area of the campus, which would impair the essential form/integrity of the historic property.

The above analysis has determined that the project is not consistent with SOIS Standards 2, 5, 6, 9 and 10. Because the property comprises several contributing buildings and a contributing site plan layout that will remain to ensure its continued use as a high school, the project is consistent with Standards 1 and 3. The project is deemed and presumed to be consistent with Standards 4 and 8, respectively, and Standard 7 is not applicable to the project.

Impacts under CEQA

While a finding that a project is consistent with the SOIS is sufficient to determine that a project can be exempt under CEQA, the reverse (that a project's lack of consistency with the SOIS automatically renders it not exempt under CEQA) does not necessarily follow. Under CEQA, a determination must be made about whether a proposed project will result in a "substantial adverse change" in the significance of a historic resource. A project that is not consistent with the SOIS could still be found to not result in a substantial adverse change under CEQA. A substantial adverse change in the significance of a historic resource would result when a project would so materially alter a resource's physical characteristics, which convey its significance and justify its eligibility for listing in the NRHP or CRHR, that the resource is no longer eligible.

The demolition of a historic resource is a significant impact under CEQA, as demonstrated by case law (for example, *Friends of the Juana Briones House* (2010) and *League for Protection of Oakland's Architectural and Historic Resources* (1997)). There are eight buildings on the campus and the site plan that equally help convey the school's historic significance under Criteria C/3 and justify its NRHP and CRHR eligibility. Building 3000 is one of those buildings, and is the only one designed to provide a space with vocational and industrial education opportunities for students. The building retains integrity of design and use. Therefore, the loss of contributing Building 3000 would so materially alter the school's physical characteristics that the resource would no longer be considered eligible as a historic resource under CEQA.

Mitigation Measures

In order to minimize potential impacts to historic resources, the following mitigation measures shall be implemented:

CUL-1: Historic American Buildings Survey Documentation

Prior to the commencement of demolition, the Long Beach Unified School District (LBUSD) shall record Building 3000 (Industrial Arts building) through a documentation report based on Historic American Buildings Survey (HABS) standards. The report will be completed by an architectural historian, historian or historic architect who meets the applicable Secretary of the Interior's Professional Qualification Standards and will be based on the National Park Service (NPS) HABS Level I standards for format and content requirements. The HABS report will include a full set of measured drawings; photographs with large-format negatives of exterior and interior views, and photocopies with large-format negatives of select, existing drawings and/or historic views; and a written history and description of the building. A copy shall be submitted to the Library of Congress, and to the state library if accepted. A hard copy and digital copy of the HABS report will be filed with LBUSD, and additional copies may be deposited in the collections of the Long Beach Public Library and Long Beach Heritage Museum, if requested. A digital copy will also be deposited in the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC).

CUL-2: Salvage and Use of Salvaged Materials

Prior to the commencement of demolition, the Long Beach Unified School District (LBUSD) shall coordinate with an architectural historian, historian or historic architect who meets the applicable Secretary of the Interior's Professional Qualification Standards, the project architect, and the demolition contractor, to

develop a list of materials that would be salvaged during demolition of Building 3000 (Industrial Arts building), as well as a salvage plan which may include architectural history monitoring during demolition. Materials to be salvaged should include the original exterior building signage letters, the circular communal handwashing fixture, and any interior fixtures, cabinetry and/or fittings deemed to be of historical/salvage value. Salvaged items may be reused as a part of the Aquatic Center project or elsewhere within the Millikan High School site or other LBUSD location. Salvaged items may also be incorporated into interpretive displays within the school (if displayed in an appropriate, archival manner) or donated to museums, historical societies or other appropriate organizations or architectural salvage company.

CUL-3: Interpretive Exhibit

The Long Beach Unified School District (LBUSD) shall coordinate with an architectural historian or historian who meets the applicable Secretary of the Interior's Professional Qualification Standards to create an exhibit about Millikan High School's historic significance and the Industrial Arts building (Building 3000). LBUSD shall ensure fabrication of the exhibit in permanent materials, and shall display it near the public entrance of the new Aquatic Center, or in the Millikan High School library, administration office, or other well-visited location on the school campus. The exhibit shall consist of one permanent panel, measuring at minimum 24" by 36," or equivalent size depending on the medium. The exhibit must include a representation of Building 3000, ideally in context with the other historic resource contributing elements, and consist of historic photo, architectural rendering, plans, and/or artistic representation, along with information about Millikan High School's history and significance.

Level of Significance after Mitigation

The incorporation of the above mitigation measures is not sufficient to reduce impacts to a less than significant level because contributing Building 3000 will be demolished. Therefore, impacts to historic resources would be significant and unavoidable.

IMPACTS CONCLUSION

The Millikan HS eligible historic resource comprises nine contributing elements, including eight buildings and the site plan. The contributing elements are not historically significant in and of themselves but together convey the significance of the resource as a whole. The project proposes the demolition of Building 3000. As such, the project is not consistent with SOIS Standards 2, 5, 6, 9 and 10. Therefore, the project does not qualify for a categorical exemption under Section 15331 of the CEQA Guidelines. Based on the above CEQA impacts analysis, the project would result in alterations to the historic resource that would affect its ability to convey the historic significance that led to the determination that the Millikan HS resource is eligible for listing in the CRHR. The demolition of contributing Building 3000 would materially alter the school's physical characteristics to such an extent that the resource would no longer be considered eligible as a historic resource under CEQA. The incorporation of mitigation measures is not sufficient to completely reduce impacts from the project, so impacts to the historic resource would be significant and unavoidable. Therefore, the project would cause a significant adverse impact and material impairment to the resource as defined by CEQA Guidelines Section 15064.5(b).

PREPARER'S QUALIFICATIONS

Teri Delcamp, M.A., served as project manager and author of this technical report. She has more than 35 years of experience and expertise in municipal planning, historic preservation planning, training, preservation project management, public history, development process planning, and environmental review. Her extensive experience includes preparation of historic building evaluations, historic surveys, CEQA and NEPA analyses, and peer reviews of these documents prepared by others. Ms. Delcamp meets and exceeds the Secretary of the Interior's Professional Qualification Standards for Architectural History and History; her resume is included in Appendix A.

REFERENCES

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Kleinfelder. "District-Wide Cultural Resources Assessment Report Update for Long Beach Unified School District, Los Angeles County, California." Prepared for Long Beach Unified School District. Long Beach, CA, 2025.

PCR Services. "District-Wide Historical Resources Assessment for Long Beach Unified School District." Prepared for Long Beach Unified School District. Long Beach, CA, 2017.

Appendix A

DELCAMP PRESERVATION & PLANNING



TERI DELCAMP, M.A., Founding Principal, is a Historian, Architectural Historian, Preservation Planner and Urban Planner with more than 35 years of experience and expertise in municipal planning, historic preservation planning, training, preservation project management, public history, development process planning, long-range planning, and environmental review. Her extensive experience includes preparation of historic building evaluations, historic surveys, CEQA and NEPA analyses, and peer reviews of these documents prepared by others. Ms. Delcamp has been involved in the development and implementation of historic preservation incentive programs including the Mills Act as well as preservation training sessions at several Southern California cities and conferences. She was part of the effort to obtain Certified Local Government (CLG) status at one city and served as qualified CLG staff at three cities in Southern California. She regularly conducts consistency reviews for projects under the Secretary of the Interior's Standards and Guidelines. She has served as staff to Historic Preservation Commissions and Planning Commissions and made hundreds of presentations to Commissions and City Councils as well as the general public. Ms. Delcamp has also supervised preservation, development and customer services sections of city planning departments, and processed straightforward to the most complex projects across a broad spectrum of development types so is well-versed in CEQA in general and especially as it relates to cultural, historical and Tribal resources. Ms. Delcamp meets or exceeds the Secretary of the Interior's Professional Qualifications Standards for History and Architectural History.

EDUCATION

- M.A., History, California State University San Marcos
- B.A., Liberal Studies – History Concentration, California State University Long Beach
- Historic Preservation Summer Program, University of Southern California School of Architecture

EMPLOYMENT HISTORY

- Delcamp Preservation & Planning, Founder/Principal – 2020 through present
- HELIX Environmental Planning Inc., As-Needed Senior Architectural Historian – 2021 through present
- IS Architecture – Limited Term Architectural Historian – 2022 - 2023
- City of Carlsbad Principal Planner – 2015-2020
- City of Riverside Senior Historic Preservation Planner – 2011-2015
- City of San Juan Capistrano Historic Preservation Manager – 2005-2011
- City of Oceanside Senior Planner – 2004-2005
- City of San Diego Senior Historic Preservation Planner – 2002-2004
- City of San Clemente Senior Planner – 1990-2002

SELECT REPRESENTATIVE PROJECTS AND ACTIVITIES

- Historic Resource Evaluation Report, 1350 Front Street/345 W. Ash St/1301 State Street Redevelopment Project, San Diego, CA. Work performed for HELIX.
- Historic Built Environment Study, Old Juvenile Hall Demolition Project, Martinez, CA. Work performed for HELIX.
- Historic Resource Evaluation, Oak Grove Mental Health Facility, Concord, CA. Work performed for HELIX (combined cultural/historic resources evaluation report).
- Built Environment Assessment, Granite Grammar School, Folsom, CA. Work performed for HELIX.
- Developed Carlsbad Mills Act Program. Work performed by DP&P for City of Carlsbad.
- Historical Resources Technical Report co-author, Copper Basin Dam Valve Replacement Project, San Bernardino County, CA. Work performed for HELIX.

- Historic Evaluation Section QA/QC and Revisions, 43 Middle Rincon Road Project Cultural Resources Assessment and Evaluation, Santa Rosa, CA. Work performed for HELIX.
- Historic Background and Significance Evaluation Sections/DPR Form Recordation, Tijuana River Valley Regional Park Brown Fill Restoration Project Cultural Resources Survey and Assessment, San Diego, CA. Work performed for HELIX.
- Historic Background and Significance Evaluation Sections, Shady View Residential Project Cultural Resources Survey and Historical Evaluation, Chino Hills, CA. Work performed for HELIX.
- Historic Background and Significance Evaluation Sections, Mid-Coachella Canal Storage Project Cultural Resources Technical Report, Imperial County, CA. Work performed for HELIX.
- Historic Context Section, Marysville Parks & Open Space Master Plan Draft Historic Resources Evaluation Report, Marysville, CA. Work performed for HELIX.
- Historic Resource Evaluation DPR Form, 2066 MacKinnon Avenue, Cardiff, CA.
- Historic Resource Evaluation DPR Form, 130 Athena Street, Encinitas, CA.
- Historic Resource Evaluation Report, 2956-2958 State Street, Carlsbad, CA.
- Historic Built Environment Assessment Letter Report for the San Marcos Industrial Park Project, San Marcos, CA. Work performed for HELIX.
- Built Environment Survey in Cultural Resources Study, SMB Mixed-Use Development (former Sears building), San Marcos, CA. Work performed for HELIX.
- Historic Resource Evaluation Report for Bethel Baptist Church, Escondido, CA. Work performed for HELIX.
- Historic Built Environment Assessment for the Modera Neptune Mixed Use Redevelopment Project, Oceanside, CA. Work performed for HELIX.
- Historic Resource Evaluation Report, 3408 Madison Street, Carlsbad, CA. Work performed for IS Architecture.
- Historic Designation Report, Las Hermanas Women's Cultural Center (LGBTQ History), San Diego, CA. Work performed for IS Architecture.
- City of Carlsbad Tribal, Cultural & Paleontological Resources Guidelines – Contract & project manager/contributor/editor/tribal consultation. Work performed for City of Carlsbad.
- City of Carlsbad Archaeological and Historic Sensitivity Map Updates – Contract & project manager. Work performed for City of Carlsbad.
- Cultural Resources Report and Evaluation of Impacts, Relocation of the Cooper House, Riverside, CA. Work performed for City of Riverside.
- Historic Evaluation/DPR Form Recordation, Structure of Merit Designation of 4135 Market Street, Riverside, CA. Work performed for City of Riverside.
- Historic Evaluation & DPR Form Recordation, Landmark Designation of the James & Jessie Shaw Residence, 8410 Cleveland Avenue, Riverside, CA. Work performed for City of Riverside.
- Cultural Resources Report and Evaluation of Impacts, Demolition of 11134 and 11144 Pierce Street, Riverside, CA. Work performed for City of Riverside.
- Facilitation Plan, Trujillo Adobe Reconstruction Strategy, Riverside, CA. Work performed for City of Riverside.
- Historic Evaluation Report, Nick's Café, 26755 Verdugo Street, San Juan Capistrano, CA. Work performed for City of San Juan Capistrano.
- RFP, Design, Bid and/or Construction Project Manager for 11 city-owned historic resource buildings. Work performed for City of San Juan Capistrano.
- Secretary of the Interior's Standards Consistency Evaluations, Naval Training Center Re-Use/Liberty Station Construction Drawings, San Diego, CA. Work performed for City of San Diego.
- Section 106 Programmatic Agreement Compliance Reviews, Marine Corps Recruit Depot & FAA Quieter Home Program, Lindbergh Field, San Diego, CA. Work performed for City of San Diego.
- Historic Surveys/Districts, La Jolla Intensive Survey, Burlingame Historic District, Islenair Historic District, East Village Survey, African-American Historic Survey – work performed for City of San Diego. Historic Town Center Historic Survey - work performed for City of San Juan Capistrano. Mid-Century Modern Building Survey, Japanese American Historical Context DPR Forms - work performed for City of Riverside.
- Historic Preservation Program Update, Survey and Historic Context - Research, Outreach and Training (with Heumann & Associates). Work performed for City of San Clemente.
- Mills Act Program Development, Adoption and Implementation. Work performed for City of San Clemente.

- Metrolink Station addition to National Register Ole Hanson Beach Club Site, Entitlement Project Manager (with OCTA/Fluor Daniel). Work performed for City of San Clemente.
- Certificates of Appropriateness for 100+ historic structures/districts. Work performed for cities of San Diego, San Juan Capistrano, Riverside and San Clemente.
- Mills Act Program Implementation/Oversight. Work performed for cities of San Diego, San Juan Capistrano, Riverside and San Clemente.
- Managed complex discretionary entitlements and approved administrative permits including mixed-use, industrial, commercial, retail, hotel, institutional, theme park, infrastructure and 1,000+ residential dwelling units for cities of San Diego, Carlsbad, Riverside, San Juan Capistrano, Oceanside and San Clemente.
- Served as staff meeting Secretary of the Interior's Professional Qualifications Standards for Historian and Architectural Historian for cities of San Diego, Carlsbad, Riverside, San Juan Capistrano and San Clemente.

- Moderator: *Rising to the Occasion: Rehabilitation of Challenging Buildings*, California Preservation Foundation State Conference (online).
- Presenter: *The Mills Act*, Historic Preservation Commission, City of Carlsbad.
- Speaker: *Climate Action Planning Tips: Resilient Planning to Meet Resiliency Purpose*, American Planning Association State Conference, San Diego.
- Presenter: *Tribal, Cultural & Paleontological Resources Guidelines*, City of Carlsbad Commissions and City Council.
- Presenter: *Carlsbad Development*, Carlsbad by the Sea, Carlsbad.
- Presenter*: Share-worthy Digital History and Storytelling Resources* mobile app, Cultural Heritage Board, City of Riverside.
- Speaker: *Preservation A to Z,* California Preservation Foundation State Conference, Palm Springs.
- Speaker: *The Mills Act*, California Preservation Foundation Workshop, San Clemente.
- Presenter: *Historic Preservation in San Juan Capistrano*, Orange County Historical Society, Tustin.
- Speaker: San Juan Capistrano Annual Historic Preservation Week Lectures.
- Presenter: Historical Resources Board Training Retreats, City of San Diego.
- Speaker: *Historic Preservation Mini-Track*, American Planning Association State Conference, Orange.

Appendix D. Noise Impact Analysis

NOISE IMPACT ANALYSIS

MILLIKAN HIGH SCHOOL AQUATIC CENTER PROJECT

CITY OF LONG BEACH

Lead Agency:

Long Beach Unified School District
Facilities and Planning Branch
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Project No. 25047

February 6, 2026

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ACRONYMS AND ABBREVIATIONS

ANSI	American National Standards Institute
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
City	City of Long Beach
CMU	Concrete Masonry Unit
CNEL	Community Noise Equivalent Level
dB	Decibel
dBA	A-weighted decibels
DOT	Department of Transportation
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
EPA	Environmental Protection Agency
FTES	Full Time Equivalent Students
HVAC	Heating Ventilation & Air Conditioning System
Hz	Hertz
Ldn	Day-night average noise level
Leq	Equivalent sound level
Lmax	Maximum noise level
ONAC	Federal Office of Noise Abatement and Control
OSHA	Occupational Safety and Health Administration
PPV	Peak particle velocity
RMS	Root mean square
SEL	Single Event Level or Sound Exposure Level
STC	Sound Transmission Class
VdB	Vibration velocity level in decibels

1.0 INTRODUCTION

1.1 Purpose of Analysis and Study Objectives

This Noise Impact Analysis has been prepared to determine the noise impacts associated with the proposed Millikan High School Aquatic Center project (proposed project). The following is provided in this report:

- A description of the study area and the proposed project;
- Information regarding the fundamentals of noise;
- Information regarding the fundamentals of vibration;
- A description of the local noise guidelines and standards;
- An evaluation of the current noise environment;
- An analysis of the potential short-term construction-related noise impacts from the proposed project; and,
- An analysis of long-term operations-related noise impacts from the proposed project.

1.2 Site Location and Study Area

Millikan High School (School) is located at 2800 Snowden Avenue in the City of Long Beach (City). The School accommodates children from grades 9-12 with an approximate enrollment of 3,369 students. The School is approximately 34.4 acres in size and encompasses ten (10) permanent buildings, 28 portable classrooms, and one modular building, and athletic facilities. The project site is located on approximately 6.28 acres in the middle of the northern portion of the School that includes the existing Building 700/3000 and surrounding walkways and portable buildings.

The project site is bounded by Belen Street and commercial uses to the north, a parking lot and portable classrooms to the east, Building 4000 (Large Gym) to the south, and Classroom Building 200/2000 and Cafeteria to the west. The project study area is shown in Figure 1.

Sensitive Receptors in Project Vicinity

The nearest sensitive receptors to the project site are residents at the single-family home located as near as 330 feet northwest of the project site at 2930 Belen Street. There are also single-family homes located on the east side of Palo Verde Avenue that are as near as 490 feet east of the project site. The nearest offsite structure is a commercial building located as near as 210 feet north of the project site, however commercial uses are not typically considered as sensitive receptors.

1.3 Proposed Project Description

The Proposed Project consists of the demolition of Building 700/3000 and adjacent portable buildings and construction of a new Aquatic Center within the existing developed campus footprint. The Aquatic Center would feature a Myrtha modular competition pool measuring approximately 51.5 meters by 22.9 meters, equipped with a 1.5-meter-wide movable bulkhead to accommodate multiple program uses. The pool would be surrounded by a 30-foot-wide pool deck. A new single-story support building would include:

- An inclusive locker room facility (gender-neutral) with more than 15 changing stalls, 15 shower stalls, and approximately 236 lockers;

- A boys locker room with ten changing stalls, ten shower stalls and approximately 84 lockers;
- A girls locker room with ten changing stalls, ten shower stalls and approximately 84 lockers;
- A coach/administrative office area with four workspaces;
- Restrooms;
- A washer/dryer room;
- Secure chemical storage rooms;
- A mechanical room sized to accommodate a regenerative media filtration system;
- Electrical rooms;
- A pool attendant's office with restroom and shower
- Support buildings for the pool; and
- Equipment storage enclosures/rooms.

Ancillary site improvements would include bleachers with capacity for 500 spectators, shade structures over spectator seating, a 500-square-foot snack bar/ticket booth, Sports LED stadium lighting, an electronic LED scoreboard with integrated sound system, perimeter security walls, outdoor showers, and surveillance cameras.

The Proposed Project would support physical education classes of 54 to 100 students, competitive swim and water polo programs, Special Olympics events, students with special needs, and community swim programs. Construction would also include site preparation, grading, utility connections (storm drain, sewer, water, electrical), circulation improvements, and landscaping. The design of the new aquatic facilities will consider contextual compatibility with the surrounding campus in terms of materials, scale, and massing. The proposed Site Plan is shown in Figure 2.

Construction of the Proposed Project would occur over an estimated 18 to 24 months, beginning with the demolition of Building 700/3000 and adjacent portable buildings. Work would be phased to include demolition, site preparation, grading, utility installation, building and pool construction, and final finishes/landscaping. Demolition would include removal of Building 700/3000 and adjacent portable classrooms, utility connections, pavement, and associated hardscape. Work would be scheduled to occur during normal construction hours, generally 7:00 a.m. to 7:00 p.m. Monday through Friday, consistent with the City of Long Beach Noise Ordinance. No nighttime or weekend construction is anticipated.

1.4 Standard Noise Regulatory Conditions

The proposed project will be required to comply with the following regulatory conditions from the City of Long Beach and State of California.

City of Long Beach Municipal Code

The following lists the noise and vibration regulations from the Municipal Code that are applicable, but not limited to the proposed project.

- Section 8.80.160 Exterior Noise Standards at Nearby Residential Uses
- Section 8.80.202 Construction activities

- Section 8.80.200(G) Vibration

State of California Rules

The following lists the State of California noise regulations that are applicable, but not limited to the proposed project.

- California Vehicle Code Section 2700-27207 – On Road Vehicle Noise Limits
- California Vehicle Code Section 38365-38350 – Off-Road Vehicle Noise Limits

1.5 Summary of Analysis Results

The following is a summary of the proposed project's impacts with regard to the State CEQA Guidelines noise checklist questions.

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?

Less than significant impact.

Generation of excessive groundborne vibration or groundborne noise levels?

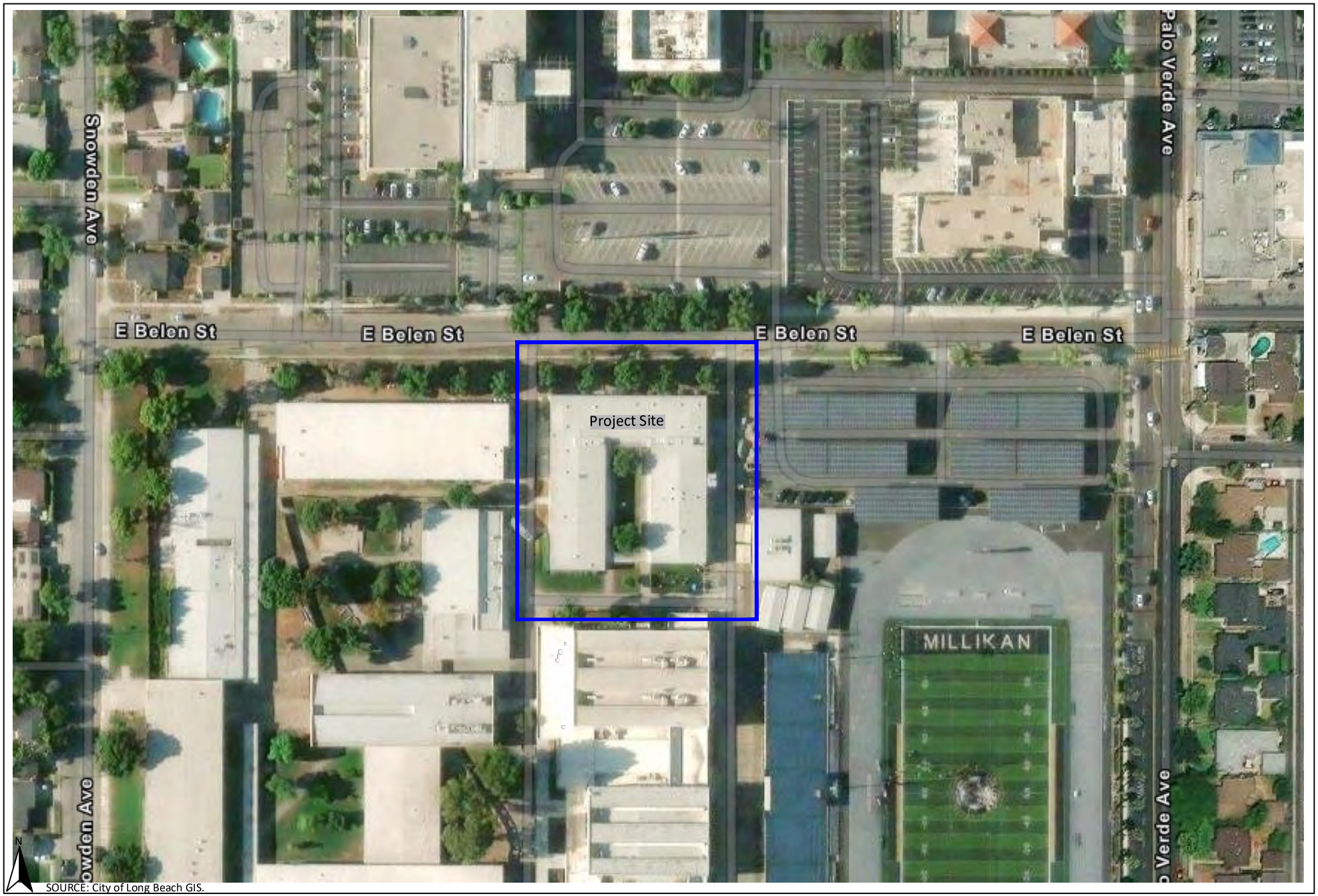
Less than significant impact.

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?

Less than significant impact.

1.6 Mitigation Measures for the Proposed Project

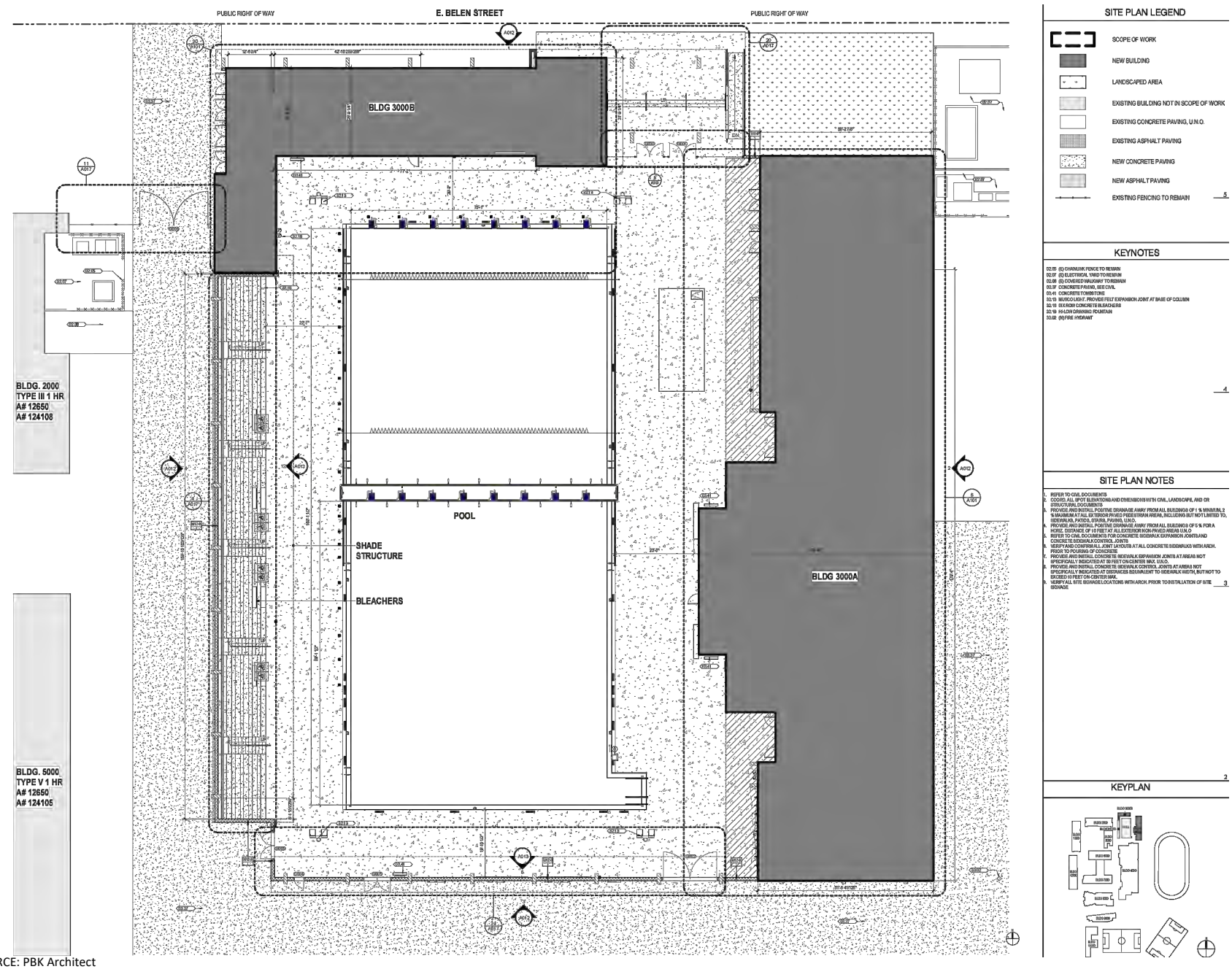
This analysis found that through adherence to the noise and vibration regulations detailed in Section 1.4 above were adequate to limit all noise and vibration impacts to less than significant levels. No mitigation measures are required for the proposed project with respect to noise and vibration impacts.



SOURCE: City of Long Beach GIS.

VISTA ENVIRONMENTAL

Figure 1
Project Location Map



SOURCE: PBK Architect

VISTA ENVIRONMENTAL

Figure 2
Proposed Site Plan

2.0 NOISE FUNDAMENTALS

Noise is defined as unwanted sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit which expresses the ratio of the sound pressure level being measured to a standard reference level. A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear.

2.1 Noise Descriptors

Noise Equivalent sound levels are not measured directly, but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. The peak traffic hour Leq is the noise metric used by California Department of Transportation (Caltrans) for all traffic noise impact analyses.

The Day-Night Average Level (Ldn) is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of ten decibels to sound levels at night between 10 p.m. and 7 a.m. While the Community Noise Equivalent Level (CNEL) is similar to the Ldn, except that it has another addition of 4.77 decibels to sound levels during the evening hours between 7 p.m. and 10 p.m. These additions are made to the sound levels at these time periods because during the evening and nighttime hours, when compared to daytime hours, there is a decrease in the ambient noise levels, which creates an increased sensitivity to sounds. For this reason, the sound appears louder in the evening and nighttime hours and is weighted accordingly. The City of Long Beach relies on the CNEL noise standard to assess transportation-related impacts on noise sensitive land uses.

2.2 Tone Noise

A pure tone noise is a noise produced at a single frequency and laboratory tests have shown that humans are more perceptible to changes in noise levels of a pure tone. For a noise source to contain a “pure tone,” there must be a significantly higher A-weighted sound energy in a given frequency band than in the neighboring bands, thereby causing the noise source to “stand out” against other noise sources. A pure tone occurs if the sound pressure level in the one-third octave band with the tone exceeds the average of the sound pressure levels of the two contiguous one-third octave bands by:

- 5 dB for center frequencies of 500 hertz (Hz) and above
- 8 dB for center frequencies between 160 and 400 Hz
- 15 dB for center frequencies of 125 Hz or less

2.3 Noise Propagation

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source as well as ground

absorption, atmospheric effects and refraction, and shielding by natural and manmade features. Sound from point sources, such as air conditioning condensers, radiate uniformly outward as it travels away from the source in a spherical pattern. The noise drop-off rate associated with this geometric spreading is 6 dBA per each doubling of the distance (dBA/DD). Transportation noise sources such as roadways are typically analyzed as line sources, since at any given moment the receiver may be impacted by noise from multiple vehicles at various locations along the roadway. Because of the geometry of a line source, the noise drop-off rate associated with the geometric spreading of a line source is 3 dBA/DD.

2.4 Ground Absorption

The sound drop-off rate is highly dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in traffic noise models, soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA/DD is typically observed over soft ground with landscaping, as compared with a 6.0 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone and very hard packed earth. For line sources a 4.5 dBA/DD is typically observed for soft-site conditions compared to the 3.0 dBA/DD drop-off rate for hard-site conditions. Caltrans research has shown that the use of soft-site conditions is more appropriate for the application of the Federal Highway Administration (FHWA) traffic noise prediction model used in this analysis.

3.0 GROUND-BORNE VIBRATION FUNDAMENTALS

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

3.1 Vibration Descriptors

There are several different methods that are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (rms) amplitude of the vibration velocity. Due to the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels and is denoted as (L_v) and is based on the rms velocity amplitude. A commonly used abbreviation is "VdB", which in this text, is when L_v is based on the reference quantity of 1 micro inch per second.

3.2 Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration.

3.3 Vibration Propagation

The propagation of ground-borne vibration is not as simple to model as airborne noise. This is due to the fact that noise in the air travels through a relatively uniform median, while ground-borne vibrations travel through the earth which may contain significant geological differences. There are three main types of vibration propagation; surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or "side-to-side and perpendicular to the direction of propagation."

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

4.0 REGULATORY SETTING

The project site is located in the City of Long Beach. Noise regulations are addressed through the efforts of various federal, state, and local government agencies. The agencies responsible for regulating noise are discussed below.

4.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce
- Assisting state and local abatement efforts
- Promoting noise education and research

The Federal Office of Noise Abatement and Control (ONAC) was initially tasked with implementing the Noise Control Act. However, the ONAC has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees. For example, the Occupational Safety and Health Administration (OSHA) agency prohibits exposure of workers to excessive sound levels. The Department of Transportation (DOT) assumed a significant role in noise control through its various operating agencies. The Federal Aviation Administration (FAA) regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration (FTA). Transit noise is regulated by the FTA, while freeways that are part of the interstate highway system are regulated by the Federal Highway Administration (FHWA). Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that "noise sensitive" uses are either prohibited from being sited adjacent to a highway or, alternately that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Although the proposed project is not under the jurisdiction of the FTA, the *Transit Noise and Vibration Impact Assessment Manual* (FTA Manual), prepared by the FTA, September 2018, is a guidance document from a government agency that provides specific guidance for construction noise and is referenced in the *City of Long Beach General Plan Noise Element*, June 2023, which details that the federal standards may be used when local criteria are not established. The FTA recommends developing construction noise criteria on a project-specific basis that utilizes local noise ordinances if possible. However, local noise ordinances usually relates to nuisance and hours of allowed activity and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the noise impacts of a construction project. Project construction noise criteria should take into account the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land uses. The FTA standards are based on extensive studies by the FTA and other governmental agencies on the human effects and reaction to noise and a summary of the FTA findings for a general construction noise assessment are provided below in Table A.

Table A – FTA General Assessment Construction Noise Criteria

Land Use	Day (dBA $Leq_{(1\text{-hour})}$)	Night (dBA $Leq_{(1\text{-hour})}$)
Residential	90	80
Commercial	100	100
Industrial	100	100

Source: Federal Transit Administration, 2018.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation sources, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

4.2 State Regulations

Noise Standards

California Department of Health Services Office of Noise Control

Established in 1973, the California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the "Land Use Compatibility for Community Noise Environments Matrix," which allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise. The Land Use Compatibility Matrix that was adopted by the City is shown in Figure 4.

California Noise Insulation Standards

Title 24, Chapter 1, Article 4 of the California Administrative Code (California Noise Insulation Standards) requires noise insulation in new hotels, motels, apartment houses, and dwellings (other than single-family detached housing) that provides an annual average noise level of no more than 45 dBA CNEL. When such structures are located within a 60-dBA CNEL (or greater) noise contour, an acoustical analysis is required to ensure that interior levels do not exceed the 45-dBA CNEL annual threshold. In addition, Title 21, Chapter 6, Article 1 of the California Administrative Code requires that all habitable rooms, hospitals, convalescent homes, and places of worship shall have an interior CNEL of 45 dB or less due to aircraft noise.

Government Code Section 65302

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

California Vehicle Code Section 27200-27207 – On-Road Vehicle Noise

California Vehicle Code Section 27200-27207 provides noise limits for vehicles operated in California. For vehicles over 10,000 pounds noise is limited to 88 dB for vehicles manufactured before 1973, 86 dB for vehicles manufactured before 1975, 83 dB for vehicles manufactured before 1988, and 80 dB for vehicles manufactured after 1987. All measurements are based at 50 feet from the vehicle.

Table N-2: Land Use Compatibility Guidelines for Noise Exposure

Land Use Type	Community Noise Exposure L_{dn} or CNEL, dB						
	55	60	65	70	75	80	85
Residential - Low Density Single Family Duplex, Mobile Homes							
Residential - Multi-Family							
Transient Lodging - Hotels, Motels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings - Business, Commercial & Professional							
Industrial, Manufacturing, Utilities, Agriculture							

Normally Acceptable	*Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.*
Conditionally Acceptable	*New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.*
Normally Unacceptable	*New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.*
Clearly Unacceptable	*New construction or development should generally not be undertaken.*

Source: California Office of Planning and Research, General Plan Guidelines (2017), Appendix D.

SOURCE: City of Long Beach General Plan Noise Element, June 2023.

VISTA ENVIRONMENTAL

Figure 3
City of Long Beach Land Use Compatibility Matrix

California Vehicle Section 38365-38380 – Off-Road Vehicle Noise

California Vehicle Code Section 38365-38380 provides noise limits for off-highway motor vehicles operated in California. 92 dBA for vehicles manufactured before 1973, 88 dBA for vehicles manufactured before 1975, 86 dBA for vehicles manufactured before 1986, and 82 dBA for vehicles manufactured after December 31, 1985. All measurements are based at 50 feet from the vehicle.

Vibration Standards

Title 14 of the California Administrative Code Section 15000 requires that all state and local agencies implement the California Environmental Quality Act (CEQA) Guidelines, which requires the analysis of exposure of persons to excessive groundborne vibration. However, no statute has been adopted by the state that quantifies the level at which excessive groundborne vibration occurs.

Caltrans issued the *Transportation and Construction Vibration Guidance Manual*, April 2020. The Manual provides practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. However, this manual is also used as a reference point by many lead agencies and CEQA practitioners throughout California, as it provides numeric thresholds for vibration impacts. Thresholds are established for continuous (construction-related) and transient (transportation-related) sources of vibration, which found that the human response becomes distinctly perceptible at 0.25 inch per second PPV for transient sources and 0.04 inch per second PPV for continuous sources.

4.3 Local Regulations

The *City of Long Beach General Plan Noise Element*, June 2023 and Municipal Code establishes the following applicable policies related to noise and vibration.

City of Long Beach General Plan Noise Element

Strategy No. 1 Apply site planning and other design strategies to reduce noise impacts, especially within the Founding and Contemporary Neighborhoods, Multifamily Residential—Low and Moderate, and Neighborhood-Serving Centers and Corridors – Low and Moderate PlaceTypes.

Policy N 1-1 Integrate noise considerations into the land use planning process in order to prevent new land use noise conflicts.

Policy N 1-2 Require noise attenuation measures to be incorporated into all development and redevelopment of sensitive receptor uses, including residential, health care facilities, schools, libraries, senior facilities, and churches in close proximity to existing or known planned rail lines.

Policy N 1-3 Ensure development and redevelopment is considerate of the natural shape and contours of a site in order to reduce noise impacts.

Policy N 1-4 Encourage developer or landowners to incorporate noise reduction features in the site planning process.

Policy N 1-5 Incorporate urban design strategies such as courtyards, paseos, alleys, plazas and open space areas to provide a buffer to noise sensitive uses.

Policy N 1-6 Ensure that project site design and function minimize the potential adverse impacts of noise.

Policy N 1-7 Encourage educational facilities to locate playgrounds, sports fields, and other outdoor activity areas away from residential areas.

Policy N 1-8 Require new development to provide facilities which support the use of multimodal transportation, including, walking, bicycling, carpooling and transit.

Policy N 1-9 Utilize noise barriers after all practical design-related noise measures have been integrated into the project. In instances where sound walls are necessary, they should be incorporated into the architectural and site character of the development and pedestrian access should be integrated.

Strategy No. 4 Protect and buffer noise sensitive areas and uses through effective building design and material selection.

Policy N 4-1 Encourage developers to utilize noise absorbing materials.

Policy N 4-5 Encourage building design that incorporates varying and/or angled wall articulation to disperse noise.

Policy N 4-6 Promote building design best practices such as staggering wall studs to minimize transmission of noise between rooms.

Policy N 4-7 Consider use of decorative walls and/or dense landscaping to further buffer noise between uses.

Strategy No. 6 Minimize vehicular traffic noise in residential areas and near noise-sensitive land uses.

Policy N 6-1 Ensure noise-compatible land uses along existing and future roadways, highways, and freeways.

Policy N 6-2 Use the "Land Use Compatibility Guidelines" and established Noise Standards or other measures that are acceptable to the City, to guide land use and zoning reclassification, subdivision, conditional use and use variance determinations and environmental assessment considerations, especially relative to sensitive uses, as defined by this chapter within a line-of-sight of freeways, major highways, or truck haul routes.

Policy N 6-4 Work toward understanding and reducing traffic noise in residential neighborhoods with a focus on analyzing the effects of traffic noise exposure throughout the City.

Policy N 6-6 For future noise sensitive land uses proposed within the 65 dBA Ldn noise contours, a qualified acoustical consultant shall conduct a noise analysis to determine appropriate measures are implemented to meet the necessary exterior and interior noise standards.

Policy N 6-9 Encourage site planning and building design measures that minimize the effects of traffic noise in residential zones.

Strategy No. 7 Promote multimodal mobility to reduce noise generated from vehicular traffic.

Policy N 7-1 Encourage the use of active transportation modes (walking, bicycling), micro-mobility (electric vehicles) and transit as stipulated in the Mobility Element to minimize traffic noise in the City.

Strategy No. 10 While the operations of airports and airport related uses are noisy by nature, the adverse effects of aircraft-related noise should be minimized.

Policy N 10-1 Ensure that new development can be made compatible with the noise environment by using noise/land use compatibility standards and the airport noise contour maps as guides to future planning and development decisions.

Strategy No. 12 Minimize construction noise and vibration levels in residential areas and in other locations near noise-sensitive uses where possible.

Policy N 12-1 Reduce construction, maintenance, and nuisance noise at the source, when possible, to reduce noise conflicts.

Policy N 12-2 Limit the allowable hours for construction activities and maintenance operations near sensitive uses.

Policy N 12-3 As part of the City's Municipal Code, establish noise levels standards based on PlaceType and time of day, to which construction noise shall conform.

Policy N 12-4 Encourage off-site fabrication to reduce needed onsite construction activities and corresponding noise levels and duration.

Policy N 12-5 Encourage the following construction best practices:

- Schedule high-noise and vibration-producing activities to a shorter window of time during the day outside early morning hours to minimize disruption to sensitive uses.
- Grading and construction contractors should use equipment that generates lower noise and vibration levels, such as rubber-tired equipment rather than metal-tracked equipment.
- Construction haul truck and materials delivery traffic should avoid residential areas whenever feasible.
- The construction contractor should place noise- and vibration-generating construction equipment and locate construction staging areas away from sensitive uses whenever feasible.
- The construction contractor should use on-site electrical sources to power equipment rather than diesel generators where feasible.
- All residential units located within 500 ft of a construction site should be sent a notice regarding the construction schedule. A sign legible at a distance of 50 ft should also be posted at the construction site. All notices and the signs should indicate the dates and durations of construction activities, as well as provide a telephone number for a "noise disturbance coordinator."

- A "noise disturbance coordinator" should be established. The disturbance coordinator should be responsible for responding to any local complaints about construction noise. The disturbance coordinator should determine the cause of the noise complaint (e.g., starting too early, bad muffler) and should be required to implement reasonable measures to reduce noise levels.

City of Long Beach Municipal Code

The City's Municipal Code identifies standards for noise intrusion from non-transportation sources within various Noise Districts. The proposed project is located in District One. Table B summarizes the applicable standards in Noise District One.

Table B – City of Long Beach Municipal Code Exterior Noise Standards

Noise level that may not be exceeded for more than…	Daytime[a] 7 a.m. – 10 p.m.	Nighttime[a] 10 p.m. – 7 a.m.
30 minutes in any hour	50 dB(A)	45 dB(A)
15 minutes in any hour	55 dB(A)	50 dB(A)
5 minutes in any hour	60 dB(A)	55 dB(A)
1 minute in any hour	65 dB(A)	60 dB(A)
Any time	70 dB(A)	65 dB(A)

Notes:

a) In the event that the alleged offensive noise contains a steady audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering or riveting or contains music or speech conveying informational content, the specified noise limits are reduced by 5 dB(A).

Source: City of Long Beach Municipal Code Chapter 8.80.160.

Section 8.80.202 of the City's Noise Ordinance regulates noise from construction activities. These regulations limit the permissible hours of construction to between 7:00 a.m. and 7:00 p.m. on weekdays or federal holidays and between 9:00 a.m. and 6:00 p.m. on Saturdays. Construction is generally prohibited on Sundays. The Noise Ordinance also limits hours of operation for mechanically powered tools (e.g., saws, sanders, drills, grinders, lawnmowers, and garden tools) from 7:00 a.m. to 10:00 p.m. Leaf blowers have more stringent standards and can only be used between 8:00 a.m. and 8:00 p.m. on weekdays, 9:00 a.m. and 5:00 p.m. on Saturdays, and 11:00 a.m. and 5:00 p.m. on Sundays.

The Noise Ordinance also provides standards for vibration (Section 8.80.200(G)). It is a violation to operate or permit the operation of any device that creates vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the source. The Noise Ordinance defines the perception threshold as 0.001 g's in the frequency range of 0-30 hertz and 0.003 g's in the frequency range between 30 and 100 hertz. It should be noted that this perception threshold is only applicable to vibration caused during the operation of the proposed project.

5.0 EXISTING NOISE CONDITIONS

To determine the existing noise levels, noise measurements have been taken in the vicinity of the project site. The field survey noted that noise within the proposed project area is generally characterized by vehicle traffic on the nearby roadways and from activities at the School.

5.1 Noise Measurements taken in Project Vicinity

The following describes the measurement procedures, measurement locations, and noise measurement results of the noise measurements taken in the project vicinity.

Noise Measurement Equipment

The noise measurements were taken using three Larson Davis Model LXT1 Class 1 sound level meters programmed in "slow" mode to record the sound pressure level at 1-second intervals for 24 hours in "A" weighted form. In addition, the L_{eq} averaged over the entire measuring time and L_{max} were recorded with the three sound level meters. The sound level meters and microphones were mounted on tree, were placed approximately six feet above the ground and were equipped with windscreens during all measurements. The noise meters were calibrated before and after the monitoring using a Larson Davis Cal200 calibrator. All noise level measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (ANSI S1.4-2014 standard).

Noise Measurement Locations

The noise monitoring locations were selected in order to obtain noise levels at in the vicinity of the nearest residential uses to the proposed improvements. Descriptions of the noise monitoring sites are provided below in Table B and are shown in Figure 4. Appendix A includes a photo index of the study area and noise level measurement locations.

Noise Measurement Timing and Climate

The noise measurements were recorded between 2:02 p.m. on Monday, January 26, 2026 and 2:16 p.m. on Tuesday, January 27, 2026. At the start of the noise measurements, the sky was partly cloudy, the temperature was 77 degrees Fahrenheit, the humidity was 30 percent, barometric pressure was 30.12 inches of mercury, and the wind was blowing around two miles per hour. Overnight, the temperature dropped to 38 degrees Fahrenheit and the humidity peaked at 84 percent. At the conclusion of the noise measurements, the sky was clear (no clouds), the temperature was 74 degrees Fahrenheit, the humidity was 33 percent, barometric pressure was 30.08 inches of mercury, and the wind was blowing around five miles per hour.

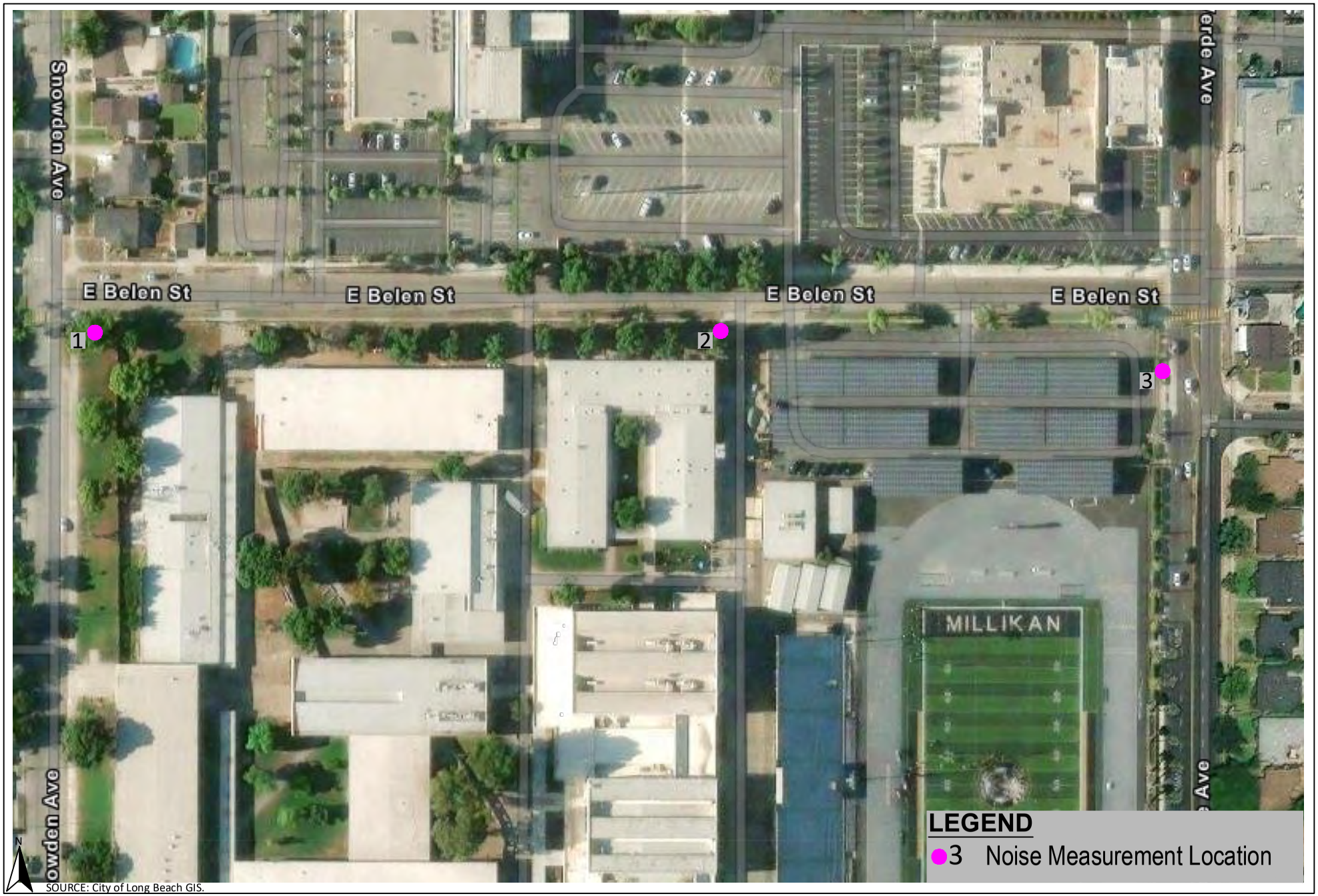
Noise Measurement Results

The results of the noise level measurements are presented in Table B. The measured sound pressure levels in dBA have been used to calculate the minimum and maximum L_{eq} averaged over 1-hour intervals. Table B also shows the L_{eq}, L_{max}, and CNEL, based on the entire measurement time. The CNEL was calculated through use of the hourly Leq that was entered into Equation 2-23 from *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (TeNS), prepared by Caltrans, September 2013. The noise monitoring data printouts are included in Appendix B. Figure 5 shows a graph of the 24-hour noise measurements.

Table C – Existing (Ambient) Noise Level Measurements

Site No.	Site Description	Average (dBA L_{eq})		1-hr Average (dBA L_{eq}/Time)		24-hour dBA CNEL
		Daytime[1]	Nighttime[2]	Minimum	Maximum	
1	Located on a tree near the northwest corner of the School, approximately 45 feet south of Belen Street centerline and 50 feet east of Snowden Avenue centerline.	67.4	51.4	44.8 1:24 a.m.	75.6 7:15 a.m.	65.3
2	Located on a construction fence, near northeast corner of proposed Aquatic Center approximately 30 feet south of Belen Street centerline	64.7	58.1	43.6 1:43 a.m.	72.9 7:30 a.m.	65.5
3	Located on a fence near the northeast corner of the School, approximately 40 feet east of Palo Verde Avenue centerline and 80 feet south of Belen Street centerline.	66.3	60.5	47.8 1:42 a.m.	68.4 7:46 a.m.	66.8

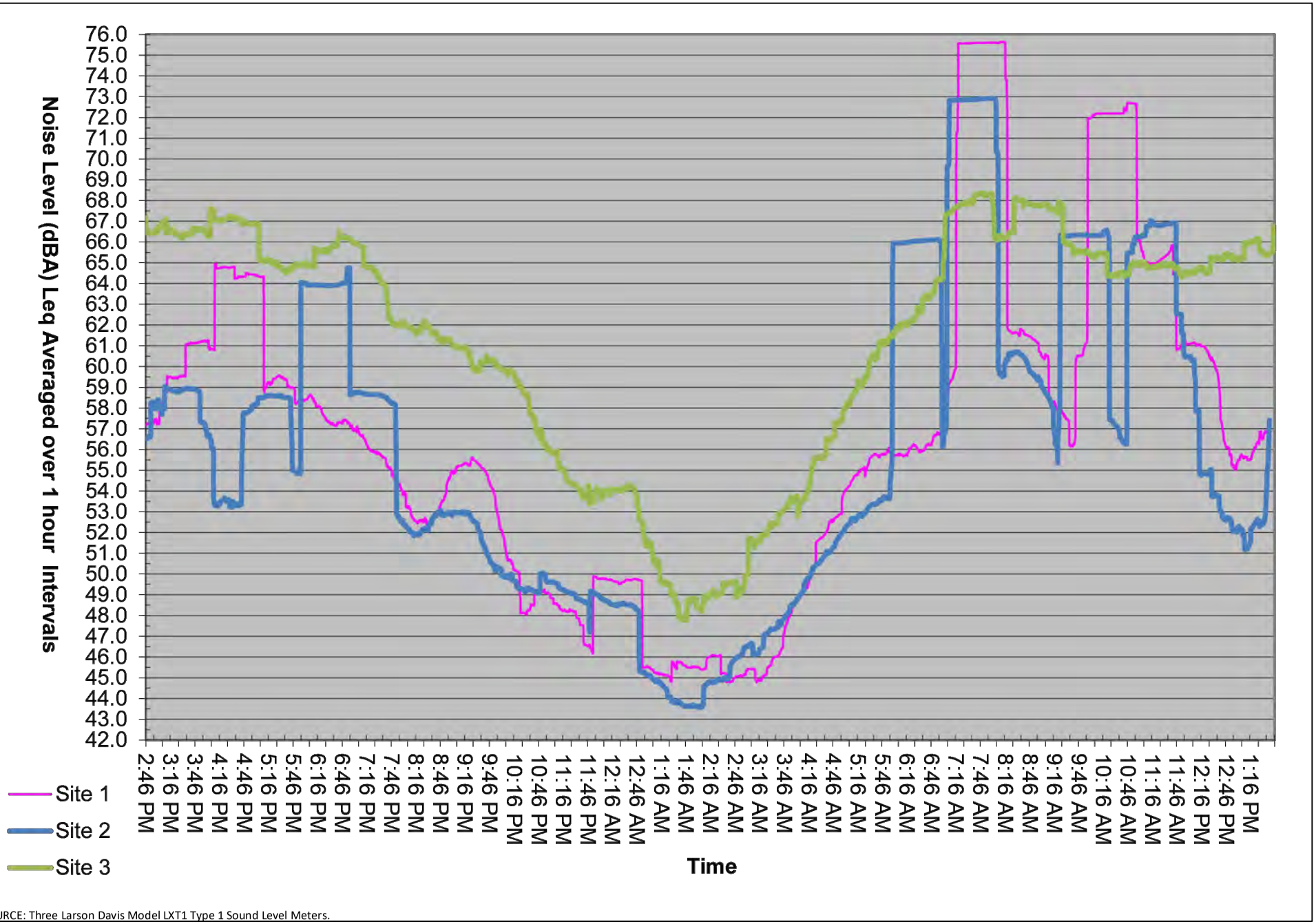
Notes:
[1] Daytime defined as 7:00 a.m. to 10:00 p.m. (Section 8.80.160 of the Municipal Code)
[2] Nighttime define as 10:00 p.m. to 7:00 a.m. (Section8.80.160 of the Municipal Code)
Source: Noise measurements taken between Monday, January 26, 2026 and Tues, January 27, 2026.



SOURCE: City of Long Beach GIS.

VISTA ENVIRONMENTAL

Figure 4
Field Noise Monitoring Locations



SOURCE: Three Larson Davis Model LXT1 Type 1 Sound Level Meters.

VISTA ENVIRONMENTAL

Figure 5
Field Noise Measurements Graph

6.0 MODELING PARAMETERS AND ASSUMPTIONS

6.1 Construction Noise

The noise impacts from construction of the proposed project have been analyzed through use of the FHWA's Roadway Construction Noise Model (RCNM). The FHWA compiled noise measurement data regarding the noise generating characteristics of several different types of construction equipment used during the Central Artery/Tunnel project in Boston. Table D below provides a list of the construction equipment anticipated to be used for each phase of construction as detailed in the CalEEMod model run from the Air Quality Report (Terraphase Engineering, 2026) that was prepared for the proposed project.

Table D – Construction Equipment Noise Emissions and Usage Factors

Equipment Description	Number of Equipment	Acoustical Use Factor[1] (percent)	Spec 721.560 Lmax at 50 feet[2] (dBA, slow[3])	Actual Measured Lmax at 50 feet[4] (dBA, slow[3])
Demolition				
Rubber Tired Loader (Front End Loader)	1	40	80	79
Excavator	1	40	85	81
Rubber Tired Dozer	1	40	85	82
Skid Steer Loader (Front End Loader)	1	40	80	79
Crushing/Proc. Equipment (Mounted Impact Hammer)	1	20	90	90
Off-Hwy Truck (Dump Truck)	1	40	84	76
Site Preparation				
Rubber Tired Dozer	1	40	85	82
Excavator	1	40	85	81
Skid Steer Loader (Front End Loader)	1	40	80	79
Backhoe	1	40	80	78
Roller	1	20	85	80
Grader	1	40	85	83
Tractor	1	40	84	N/A
Off-Hwy Truck (Dump Truck)	1	40	84	76
Grading				
Grader	1	40	85	83
Excavator	1	40	85	81
Rubber Tired Dozer	1	40	85	82
Backhoe	1	40	80	78
Roller	1	20	85	80
Tractor	1	40	84	N/A
Off-Hwy Truck (Dump Truck)	1	40	84	76
Foundations and Pool Structural Shell				
Crane	1	16	85	81
Forklift (Gradall)	1	40	85	83
Generator	1	50	82	81

Table D – Construction Equipment Noise Emissions and Usage Factors

Equipment Description	Number of Equipment	Acoustical Use Factor[1] (percent)	Spec 721.560 Lmax at 50 feet[2] (dBA, slow[3])	Actual Measured Lmax at 50 feet[4] (dBA, slow[3])
Backhoe	1	40	80	78
Excavator	1	40	85	81
Tractor	1	40	84	N/A
Welders	1	40	73	74
Vertical Construction				
Crane	1	16	85	81
Forklift (Gradall)	1	40	85	83
Generator	1	50	82	81
Skid Steer Loader (Front End Loader)	1	40	80	79
Excavator	1	40	85	81
Air Compressor	1	40	80	78
Welder	1	40	73	74
Interior Buildout				
Forklift (Gradall)	1	40	85	83
Generator	1	50	82	81
Skid Steer Loader (Front End Loader)	1	40	80	79
Air Compressor	1	40	80	78
Building/Landscape				
Crane	1	16	85	81
Forklift (Gradall)	1	40	85	83
Generator	1	50	82	81
Skid Steer Loader (Front End Loader)	1	40	80	79
Excavator	1	40	85	81
Welder	1	40	73	74
Decking/Flatwork				
Tractor	1	40	84	N/A
Skid Steer Loader (Front End Loader)	1	40	80	79
Excavator	1	40	85	81
Roller	1	20	85	80
Off-Hwy Truck (Dump Truck)	1	40	84	76
Architectural Coating				
Air Compressor	1	40	80	78
Forklift (Gradall)	1	40	85	83
Generator	1	50	82	81

Notes:
[1] Acoustical use factor is the percentage of time each piece of equipment is operational during a typical workday.
[2] Spec 721.560 is the equipment noise level utilized by the RCNM program.
[3] The "slow" response averages sound levels over 1-second increments. A "fast" response averages sound levels over 0.125-second increments.
[4] Actual Measured is the average noise level measured of each piece of equipment during the Central Artery/Tunnel project in Boston, Massachusetts primarily during the 1990s.
Source: Federal Highway Administration, 2006.

Table D also shows the associated measured noise emissions for each piece of equipment from the RCNM model and measured percentage of typical equipment use per day. Construction noise impacts to the nearby sensitive receptors have been calculated according to the equipment noise levels and usage factors listed in Table D and through use of the RCNM. For each phase of construction, all construction equipment was analyzed based on being placed in the middle of the nearest structure to be renovated, which is based on the analysis methodology detailed in FTA Manual for a General Assessment. However, in order to provide a conservative analysis, all equipment was analyzed, instead of just the two nosiest pieces of equipment as detailed in the FTA Manual. The RCNM model printouts are provided in Appendix C.

6.2 Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the construction site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. Table E gives approximate vibration levels for particular construction activities. The data in Table E provides a reasonable estimate for a wide range of soil conditions.

Table E – Vibration Source Levels for Construction Equipment

Equipment		Peak Particle Velocity (inches/second)	Approximate Vibration Level (L_v)at 25 feet
Pile driver (impact)	Upper range	1.518	112
	typical	0.644	104
Pile driver (sonic)	Upper range	0.734	105
	typical	0.170	93
Clam shovel drop (slurry wall)		0.202	94
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large bulldozer		0.089	87
Caisson drill		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

Source: Federal Transit Administration, 2020.

The construction-related vibration impacts have been calculated through the vibration levels shown above in Table E and through typical vibration propagation rates. The equipment assumptions were based on the equipment lists provided above in Table D.

7.0 IMPACT ANALYSIS

7.1 CEQA Thresholds of Significance

Consistent with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, a significant impact related to noise would occur if a proposed project is determined to result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generation of excessive groundborne vibration or groundborne noise levels; or
- 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.

7.2 Generation of Noise Levels in Excess of Standards

The proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The following section calculates the potential noise emissions associated with the temporary construction activities and long-term operations of the proposed project and compares the noise levels to the City standards.

Construction-Related Noise

The construction activities for the proposed project are anticipated to include the demolition of Building 700/3000 and adjacent portable buildings, site preparation and grading, and building construction that would include foundation and pool structure, vertical construction, interior buildout, building/landscape, decking/flatwork, and application of architectural coatings. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities.

Section 8.80.202 of the City's Noise Ordinance restricts construction activities from occurring between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between 6:00 p.m. and 9:00 a.m. on Saturdays, or anytime on Sundays or federal holidays. Through adherence to the construction-related noise requirements provided in the City's Noise Ordinance, construction-related noise levels would not exceed any noise standards established in the General Plan or Noise Ordinance. However, as detailed above in Section 4.1, the General Plan Noise Element details that the federal standards may be used when local criteria are not established. As such, the FTA construction noise level standard of 90 dBA at the nearby homes and 100 dBA at the nearby commercial uses have been utilized in this analysis.

Construction noise levels to the nearby sensitive receptors have been calculated through use of the RCNM and the parameters and assumptions detailed in Section 6.1 of this report including Table D – Construction Equipment Noise Emissions and Usage Factors. The results are shown below in Table F and the RCNM printouts are provided in Appendix C.

Table F – Construction Noise Levels at the Nearby Sensitive Receptors

Construction Phase	Construction Noise Level (dBA Leq) at:		
	Home to Northwest[1]	Commercial to North[2]	Homes to East[3]
Demolition	66	69	64
Site Preparation	66	69	64
Grading	66	69	64
Foundations + Pool Structural Shell	66	69	64
Vertical Construction	65	68	63
Interior Buildout	64	67	62
Building/Landscape	64	67	62
Decking/Flatwork	64	67	62
Architectural Coatings	62	66	61
FTA Construction Noise Threshold[4]	**90**	**100**	**90**
Exceed Thresholds?	**No**	**No**	**No**

Notes:
[1] The home to the northwest is located as near as 490 feet from center of the proposed aquatic center.
[2] The commercial building to the north is located as near as 340 feet from center of the proposed aquatic center.
[3] The homes to the east are located as near as 610 feet from center of the proposed aquatic center.
[5] The FTA Construction noise thresholds are detailed above in Table A.
Source: RCNM, Federal Highway Administration, 2006

Table F shows that the greatest noise impacts would occur during the demolition, site preparation, grading, and foundations and pool structural shell construction phases, with noise levels as high as 66 dBA Leq at the nearest home to the northwest, 69 dBA Leq at the commercial building to the north, and 64 dBA Leq at the homes to the east. All calculated construction noise levels shown in Table F are within the FTA daytime construction noise standards of 90 dBA at the nearby homes and 100 dBA at the nearby commercial uses. Therefore, through adherence to allowable construction times provided in Section 8.80.202 of the Municipal Code, the construction activities for the proposed project would not create a substantial temporary increase in ambient noise levels that are in excess of applicable noise standards. Impacts would be less than significant.

Operational-Related Noise

The proposed project would consist of the development of an aquatics center. Since the proposed project consists of the relocation of an existing aquatic center on campus that would not result in an increase in student enrollment nor would it result in a new use on campus, the proposed project is not anticipated to generate any new vehicle trips to the School. As such, no roadway noise impacts are anticipated to be created from operation of the proposed project. Potential noise impacts associated with the operations of the proposed project would limited to onsite activities associated with the operation of the aquatics center.

The operation of the proposed project may create an increase in onsite noise levels from the operation of pool area and rooftop mechanical equipment. Section 8.80.160 of the Municipal Code limits onsite noise sources at the property lines of the nearby homes and commercial uses to 50 dBA between 7 a.m. and 10 p.m. and 45 dBA between 10 p.m. and 7 a.m..

In order to determine the noise impacts from the operation of pool activities and rooftop mechanical equipment, reference noise measurements for similar operations were taken of each source and are

shown in Table G and the reference noise measurement printouts are provided in Appendix D. In order to account for the noise reduction provided by the proposed Buildings 3000A and 3000B that would be as effective at blocking noise as a 10-foot high sound wall, the wall attenuation algorithm from the *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (TeNS), prepared by Caltrans, September 2013, was utilized and the sound wall noise reduction calculation spreadsheets are also provided in Appendix D.

Table G – Operational Noise Levels at the Nearby Sensitive Receptors

	Reference Noise Measurements[1]		Calculated Noise Levels (dBA Leq) at[2]:		
Noise Source	Distance Receptor to Source (feet)	Reference Noise Level (dBA Leq)	Home to Northwest	Commercial to North	Homes to East
Pool Activities[3]	30	71.8	39	41	36
Rooftop Equipment	6	65.1	24	34	21
Noise Level from All Sources Combined			**40**	**42**	**36**
City Noise Standards (day/night)			**50/45**	**50/45**	**50/45**
Exceed City Noise Standards (day/night)?			**No/No**	**No/No**	**No/No**

Notes:
[1] The reference noise measurements printouts are provided in Appendix D.
[2] The calculated noise levels account for the proposed Buildings 300A and 3000B and the wall noise reduction calculation spreadsheets are provided in Appendix D.
[3] The pool activities was based on a noise measurement 30 feet from Long Beach Community College Liberal Arts Campus pool hosting a swim meet.
Source: Noise calculation methodology from Caltrans, 2013 (see Appendix D).

Table G shows that the proposed project's worst-case (i.e., during a swim meet) operational noise from the simultaneous operation of all noise sources on the project site would create noise levels as high as 40 dBA Leq at the single-family home to the northwest, 42 dBA Leq at the commercial building to the north, and 36 dBA Leq at the single-family homes to the east, which would all be within both the City's daytime noise standards of 50 dBA between 7 a.m. and 10 p.m. and the City's nighttime noise standard of 45 dBA between 10 p.m. and 7 a.m.. Therefore, the operational activities for the proposed project would not create a substantial temporary increase in ambient noise levels that are in excess of applicable noise standards. Impacts would be less than significant.

Level of Significance

Less than significant impact.

7.3 Generation of Excessive Groundborne Vibration

The proposed project would not expose persons to or generation of excessive groundborne vibration or groundborne noise levels. The following section analyzes the potential vibration impacts associated with the construction and operations of the proposed project.

Construction-Related Vibration Impacts

The construction activities for the proposed project are anticipated to include the demolition of Building 700/3000 and adjacent portable buildings, site preparation and grading, and building construction that would include foundation and pool structure, vertical construction, interior buildout, building/landscape, decking/flatwork, and application of architectural coatings. Vibration impacts from construction activities associated with the proposed project would typically be created from the operation of heavy off-road

equipment. The nearest offsite sensitive receptors to the proposed aquatic center are employees at the commercial building located as near as 210 feet north of the project site.

Section 8.80.200(G) of the City's Municipal Code limits vibration impacts to the nearby single-family homes to 0.001 g's in the frequency range of 0 to 30 hertz and 0.003 g's in the frequency range of 30 to 100 hertz. The acceleration of gravity (g), which is 32.2 feet per second can be converted into peak particle velocity by multiplying 0.001 g's by 32.2 and then converting to inch per second, which results in a threshold of 0.386 inch per second PPV.

The primary source of vibration during construction would be from the operation of a vibratory roller. From Table E above a vibratory roller would create a vibration level of 0.21 inch per second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest offsite structure (210 feet away) would be 0.02 inch per second PPV. The vibration level at the nearest offsite structure to where heavy off-road equipment would operate would be below the 0.386 inch per second PPV threshold detailed above. Impacts would be less than significant.

Operations-Related Vibration Impacts

The proposed project would consist of the development of an aquatic center on campus. The on-going operation of the proposed project would not include the operation of any known vibration sources. Therefore, a less than significant vibration impact is anticipated from the operation of the proposed project.

Level of Significance

Less than significant impact.

7.4 Aircraft Noise

The proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. The nearest airport is Long Beach Airport that is located approximately 1.5 miles west of the project site. The project site is located outside of the 60 dBA CNEL noise contours of Long Beach Airport. A less than significant impact would occur from aircraft noise.

Level of Significance

Less than significant impact.

8.0 REFERENCES

California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analytics Protocol*, September 2013.

California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, April 2020.

City of Long Beach, *City of Long Beach General Plan Noise Element*, June, 2023.

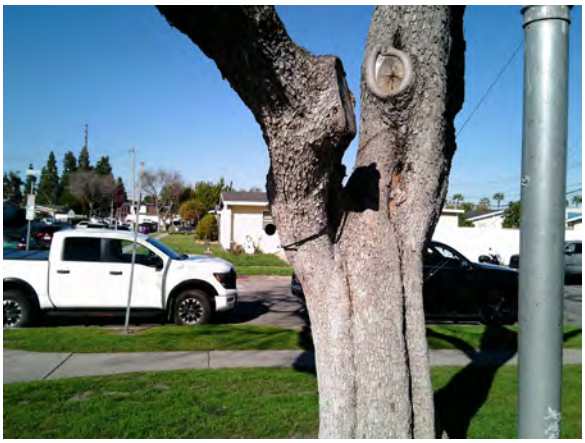
City of Long Beach, *A Codification of the General Ordinances of Long Beach, California*, November 22, 2023.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment,* September 2018.

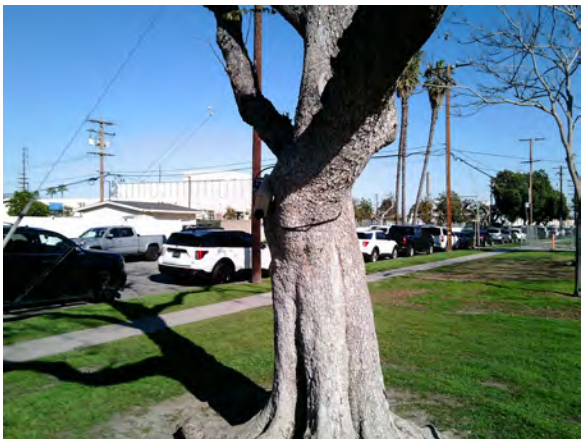
U.S. Department of Transportation, *FHWA Roadway Construction Noise Model User's Guide,* January, 2006.

APPENDIX A

Field Noise Measurements Photo Index



Noise Measurement Site 1 - looking north



Noise Measurement Site 1 - looking northeast



Noise Measurement Site 1 - looking east



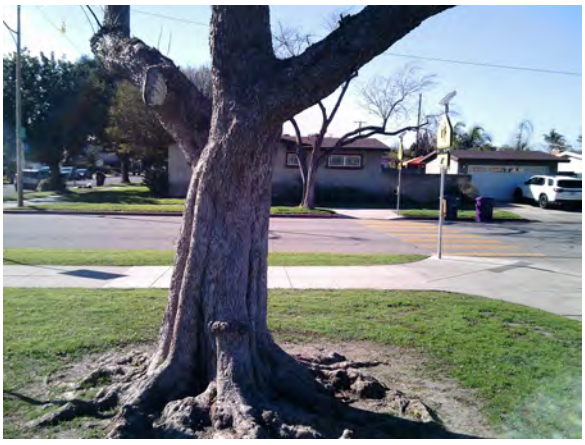
Noise Measurement Site 1 - looking southeast



Noise Measurement Site 1 - looking south



Noise Measurement Site 1 - looking southwest



Noise Measurement Site 1 - looking west



Noise Measurement Site 1 - looking northwest



Noise Measurement Site 2 - looking north



Noise Measurement Site 2 - looking northeast



Noise Measurement Site 2 - looking east



Noise Measurement Site 2 - looking southeast



Noise Measurement Site 2 - looking south



Noise Measurement Site 2 - looking southwest



Noise Measurement Site 2 - looking west



Noise Measurement Site 2 - looking northwest



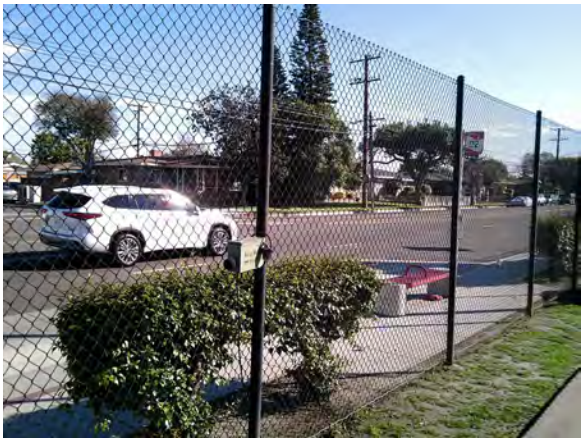
Noise Measurement Site 3 - looking north



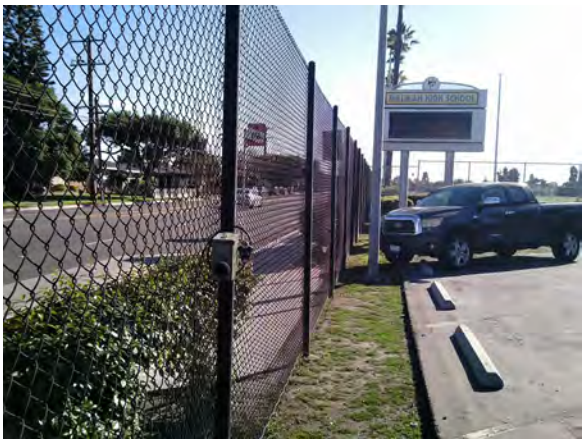
Noise Measurement Site 3 - looking northeast



Noise Measurement Site 3 - looking east



Noise Measurement Site 3 - looking southeast



Noise Measurement Site 3 - looking south



Noise Measurement Site 3 - looking southwest



Noise Measurement Site 3 - looking west



Noise Measurement Site 3 - looking northwest

APPENDIX B

Field Noise Measurements Printouts

Site 1 - West of Project - SE Corner of Snowden Ave & Belen St

January 26, 2026
Sampling Time = 1 sec
Record Num = 86402
Leq = 64.5
Min = 37.8
Max = 103.0

Freq Weighting=A
Leq Daytime = 67.4
Leq Evening = 54.7
Leq Nighttime = 51.4
Ldn(24hr)= 65.2
CNEL = 65.3
Min Leq hr at 1:24 AM 44.8
Max Leq hr at 7:15 AM 75.6

Site 1 - West of Project - SE Corner of Snowden Ave & Belen St

SPL	Time	Leq (1 hour Avg.)	Ldn	CNEL
47.3	14:02:06		47.3	47.3
44.7	14:02:07		44.7	44.7
65.0	14:02:08		65.0	65.0
66.6	14:02:09		66.6	66.6
56.0	14:02:10		56.0	56.0
68.4	14:02:11		68.4	68.4
68.3	14:02:12		68.3	68.3
75.8	14:02:13		75.8	75.8
54.4	14:02:14		54.4	54.4
59.0	14:02:15		59.0	59.0
70.0	14:02:16		70.0	70.0
68.2	14:02:17		68.2	68.2
63.8	14:02:18		63.8	63.8
59.1	14:02:19		59.1	59.1
59.9	14:02:20		59.9	59.9
60.0	14:02:21		60.0	60.0
57.7	14:02:22		57.7	57.7
55.4	14:02:23		55.4	55.4
54.3	14:02:24		54.3	54.3
52.2	14:02:25		52.2	52.2
52.2	14:02:26		52.2	52.2
53.0	14:02:27		53.0	53.0
49.5	14:02:28		49.5	49.5
57.4	14:02:29		57.4	57.4
56.9	14:02:30		56.9	56.9
65.0	14:02:31		65.0	65.0
48.4	14:02:32		48.4	48.4
71.0	14:02:33		71.0	71.0
50.6	14:02:34		50.6	50.6
53.0	14:02:35		53.0	53.0
64.9	14:02:36		64.9	64.9
69.9	14:02:37		69.9	69.9
66.4	14:02:38		66.4	66.4
65.1	14:02:39		65.1	65.1
60.4	14:02:40		60.4	60.4
65.0	14:02:41		65.0	65.0
68.0	14:02:42		68.0	68.0
61.2	14:02:43		61.2	61.2
74.5	14:02:44		74.5	74.5
74.4	14:02:45		74.4	74.4
64.6	14:02:46		64.6	64.6
63.0	14:02:47		63.0	63.0
50.9	14:02:48		50.9	50.9
49.1	14:02:49		49.1	49.1
59.7	14:02:50		59.7	59.7
48.3	14:02:51		48.3	48.3
50.3	14:02:52		50.3	50.3
49.5	14:02:53		49.5	49.5
51.2	14:02:54		51.2	51.2
64.8	14:02:55		64.8	64.8
69.1	14:02:56		69.1	69.1
63.5	14:02:57		63.5	63.5
74.2	14:02:58		74.2	74.2
76.3	14:02:59		76.3	76.3
71.0	14:03:00		71.0	71.0
64.8	14:03:01		64.8	64.8
76.3	14:03:02		76.3	76.3
68.0	14:03:03		68.0	68.0
61.7	14:03:04		61.7	61.7
68.3	14:03:05		68.3	68.3
65.8	14:03:06		65.8	65.8
58.4	14:03:07		58.4	58.4
55.2	14:03:08		55.2	55.2
66.2	14:03:09		66.2	66.2
70.6	14:03:10		70.6	70.6
64.0	14:03:11		64.0	64.0
65.2	14:03:12		65.2	65.2
64.9	14:03:13		64.9	64.9
73.2	14:03:14		73.2	73.2
57.2	14:03:15		57.2	57.2
52.3	14:03:16		52.3	52.3
58.7	14:03:17		58.7	58.7
60.4	14:03:18		60.4	60.4
64.6	14:03:19		64.6	64.6
65.5	14:03:20		65.5	65.5
67.0	14:03:21		67.0	67.0
58.8	14:03:22		58.8	58.8
61.6	14:03:23		61.6	61.6
79.1	14:03:24		79.1	79.1
49.6	14:03:25		49.6	49.6
49.8	14:03:26		49.8	49.8
52.6	14:03:27		52.6	52.6
56.1	14:03:28		56.1	56.1
59.2	14:03:29		59.2	59.2
74.8	14:03:30		74.8	74.8
63.6	14:03:31		63.6	63.6
66.2	14:03:32		66.2	66.2
63.6	14:03:33		63.6	63.6
62.5	14:03:34		62.5	62.5
56.4	14:03:35		56.4	56.4
51.3	14:03:36		51.3	51.3
53.7	14:03:37		53.7	53.7
50.6	14:03:38		50.6	50.6
53.9	14:03:39		53.9	53.9
50.2	14:03:40		50.2	50.2
49.0	14:03:41		49.0	49.0
55.2	14:03:42		55.2	55.2
59.0	14:03:43		59.0	59.0
62.8	14:03:44		62.8	62.8
72.1	14:03:45		72.1	72.1
63.5	14:03:46		63.5	63.5
64.2	14:03:47		64.2	64.2
60.5	14:03:48		60.5	60.5
60.3	14:03:49		60.3	60.3
61.6	14:03:50		61.6	61.6
60.7	14:03:51		60.7	60.7
61.3	14:03:52		61.3	61.3
62.6	14:03:53		62.6	62.6
60.4	14:03:54		60.4	60.4
56.3	14:03:55		56.3	56.3
53.1	14:03:56		53.1	53.1
54.1	14:03:57		54.1	54.1
55.5	14:03:58		55.5	55.5
57.8	14:03:59		57.8	57.8
58.9	14:04:00		58.9	58.9
58.9	14:04:01		58.9	58.9
59.3	14:04:02		59.3	59.3
59.6	14:04:03		59.6	59.6
59.0	14:04:04		59.0	59.0
56.4	14:04:05		56.4	56.4
53.1	14:04:06		53.1	53.1
51.1	14:04:07		51.1	51.1
55.2	14:04:08		55.2	55.2
58.6	14:04:09		58.6	58.6
62.8	14:04:10		62.8	62.8
64.4	14:04:11		64.4	64.4
62.9	14:04:12		62.9	62.9
64.5	14:04:13		64.5	64.5
61.9	14:04:14		61.9	61.9
60.7	14:04:15		60.7	60.7
58.3	14:04:16		58.3	58.3
54.9	14:04:17		54.9	54.9
52.6	14:04:18		52.6	52.6
51.8	14:04:19		51.8	51.8
51.9	14:04:20		51.9	51.9
54.8	14:04:21		54.8	54.8
55.9	14:04:22		55.9	55.9
56.4	14:04:23		56.4	56.4
56.5	14:04:24		56.5	56.5
53.7	14:04:25		53.7	53.7
51.7	14:04:26		51.7	51.7
49.8	14:04:27		49.8	49.8
49.2	14:04:28		49.2	49.2
50.4	14:04:29		50.4	50.4
52.7	14:04:30		52.7	52.7
53.4	14:04:31		53.4	53.4
52.3	14:04:32		52.3	52.3
51.3	14:04:33		51.3	51.3
51.9	14:04:34		51.9	51.9
51.0	14:04:35		51.0	51.0
51.6	14:04:36		51.6	51.6
51.8	14:04:37		51.8	51.8
47.7	14:04:38		47.7	47.7
47.9	14:04:39		47.9	47.9
53.9	14:04:40		53.9	53.9
54.7	14:04:41		54.7	54.7
55.8	14:04:42		55.8	55.8
59.1	14:04:43		59.1	59.1
63.3	14:04:44		63.3	63.3
58.4	14:04:45		58.4	58.4
54.5	14:04:46		54.5	54.5
54.8	14:04:47		54.8	54.8
57.0	14:04:48		57.0	57.0
58.3	14:04:49		58.3	58.3

Site 2 - Near NE Corner of Proposed Aquatic Center

January 26, 2026 2:09:46 PM
Sampling Time = 1 sec
Record Num = 86402
Leq = 62.4
Min = 38.9
Max = 101.6

Freq Weighting=A
Leq Daytime = 64.7
Leq Evening = 55.5
Leq Nighttime = 58.1
Ldn(24hr)= 65.4
CNEL = 65.5
Min Leq hr at 1:43 AM 43.6
Max Leq hr at 7:30 AM 72.9

Site 2 - Near NE Corner of Proposed Aquatic Center

SPL	Time	Leq (1 hour Avg.)	Ldn	CNEL
52.6	14:09:47		52.6	52.6
58.6	14:09:48		58.6	58.6
60.8	14:09:49		60.8	60.8
61.3	14:09:50		61.3	61.3
66.7	14:09:51		66.7	66.7
68.0	14:09:52		68.0	68.0
80.0	14:09:53		80.0	80.0
53.0	14:09:54		53.0	53.0
67.4	14:09:55		67.4	67.4
59.0	14:09:56		59.0	59.0
62.5	14:09:57		62.5	62.5
73.4	14:09:58		73.4	73.4
57.5	14:09:59		57.5	57.5
62.5	14:10:00		62.5	62.5
60.8	14:10:01		60.8	60.8
65.1	14:10:02		65.1	65.1
69.8	14:10:03		69.8	69.8
64.9	14:10:04		64.9	64.9
67.7	14:10:05		67.7	67.7
66.9	14:10:06		66.9	66.9
64.4	14:10:07		64.4	64.4
62.5	14:10:08		62.5	62.5
61.1	14:10:09		61.1	61.1
59.2	14:10:10		59.2	59.2
60.5	14:10:11		60.5	60.5
65.7	14:10:12		65.7	65.7
63.5	14:10:13		63.5	63.5
56.3	14:10:14		56.3	56.3
61.9	14:10:15		61.9	61.9
71.4	14:10:16		71.4	71.4
62.2	14:10:17		62.2	62.2
56.1	14:10:18		56.1	56.1
54.1	14:10:19		54.1	54.1
53.0	14:10:20		53.0	53.0
53.5	14:10:21		53.5	53.5
52.4	14:10:22		52.4	52.4
60.4	14:10:23		60.4	60.4
52.8	14:10:24		52.8	52.8
63.6	14:10:25		63.6	63.6
54.4	14:10:26		54.4	54.4
54.6	14:10:27		54.6	54.6
52.7	14:10:28		52.7	52.7
56.4	14:10:29		56.4	56.4
63.8	14:10:30		63.8	63.8
59.0	14:10:31		59.0	59.0
61.6	14:10:32		61.6	61.6
55.7	14:10:33		55.7	55.7
69.1	14:10:34		69.1	69.1
69.4	14:10:35		69.4	69.4
57.2	14:10:36		57.2	57.2
66.9	14:10:37		66.9	66.9
75.8	14:10:38		75.8	75.8
52.3	14:10:39		52.3	52.3
67.8	14:10:40		67.8	67.8
66.3	14:10:41		66.3	66.3
64.5	14:10:42		64.5	64.5
64.7	14:10:43		64.7	64.7
61.5	14:10:44		61.5	61.5
55.4	14:10:45		55.4	55.4
52.3	14:10:46		52.3	52.3
50.7	14:10:47		50.7	50.7
54.9	14:10:48		54.9	54.9
63.3	14:10:49		63.3	63.3
63.1	14:10:50		63.1	63.1
54.2	14:10:51		54.2	54.2
56.3	14:10:52		56.3	56.3
58.6	14:10:53		58.6	58.6
60.9	14:10:54		60.9	60.9
52.9	14:10:55		52.9	52.9
53.9	14:10:56		53.9	53.9
66.7	14:10:57		66.7	66.7
67.3	14:10:58		67.3	67.3
58.4	14:10:59		58.4	58.4
58.7	14:11:00		58.7	58.7
58.7	14:11:01		58.7	58.7
59.9	14:11:02		59.9	59.9
67.5	14:11:03		67.5	67.5
62.5	14:11:04		62.5	62.5
58.4	14:11:05		58.4	58.4
68.9	14:11:06		68.9	68.9
64.9	14:11:07		64.9	64.9
75.7	14:11:08		75.7	75.7
68.0	14:11:09		68.0	68.0
65.6	14:11:10		65.6	65.6
60.8	14:11:11		60.8	60.8
67.2	14:11:12		67.2	67.2
58.0	14:11:13		58.0	58.0
58.1	14:11:14		58.1	58.1
57.0	14:11:15		57.0	57.0
53.9	14:11:16		53.9	53.9
54.1	14:11:17		54.1	54.1
53.7	14:11:18		53.7	53.7
67.8	14:11:19		67.8	67.8
58.9	14:11:20		58.9	58.9
63.7	14:11:21		63.7	63.7
56.9	14:11:22		56.9	56.9
54.0	14:11:23		54.0	54.0
57.9	14:11:24		57.9	57.9
80.7	14:11:25		80.7	80.7
53.6	14:11:26		53.6	53.6
53.5	14:11:27		53.5	53.5
63.4	14:11:28		63.4	63.4
58.1	14:11:29		58.1	58.1
55.6	14:11:30		55.6	55.6
51.5	14:11:31		51.5	51.5
52.0	14:11:32		52.0	52.0
51.6	14:11:33		51.6	51.6
51.6	14:11:34		51.6	51.6
51.8	14:11:35		51.8	51.8
51.3	14:11:36		51.3	51.3
51.3	14:11:37		51.3	51.3
51.9	14:11:38		51.9	51.9
51.5	14:11:39		51.5	51.5
51.4	14:11:40		51.4	51.4
51.1	14:11:41		51.1	51.1
51.4	14:11:42		51.4	51.4
51.6	14:11:43		51.6	51.6
51.4	14:11:44		51.4	51.4
51.6	14:11:45		51.6	51.6
51.5	14:11:46		51.5	51.5
51.7	14:11:47		51.7	51.7
51.4	14:11:48		51.4	51.4
51.6	14:11:49		51.6	51.6
51.5	14:11:50		51.5	51.5
50.8	14:11:51		50.8	50.8
51.6	14:11:52		51.6	51.6
51.4	14:11:53		51.4	51.4
51.5	14:11:54		51.5	51.5
51.6	14:11:55		51.6	51.6
54.3	14:11:56		54.3	54.3
52.1	14:11:57		52.1	52.1
55.4	14:11:58		55.4	55.4
55.4	14:11:59		55.4	55.4
54.4	14:12:00		54.4	54.4
52.5	14:12:01		52.5	52.5
51.8	14:12:02		51.8	51.8
51.8	14:12:03		51.8	51.8
56.5	14:12:04		56.5	56.5
62.0	14:12:05		62.0	62.0
62.6	14:12:06		62.6	62.6
58.9	14:12:07		58.9	58.9
59.7	14:12:08		59.7	59.7
55.0	14:12:09		55.0	55.0
53.7	14:12:10		53.7	53.7
60.5	14:12:11		60.5	60.5
60.7	14:12:12		60.7	60.7
60.0	14:12:13		60.0	60.0
68.1	14:12:14		68.1	68.1
68.5	14:12:15		68.5	68.5
70.7	14:12:16		70.7	70.7
63.2	14:12:17		63.2	63.2
65.9	14:12:18		65.9	65.9
64.2	14:12:19		64.2	64.2
56.0	14:12:20		56.0	56.0
53.4	14:12:21		53.4	53.4
53.8	14:12:22		53.8	53.8
52.6	14:12:23		52.6	52.6
52.1	14:12:24		52.1	52.1
52.7	14:12:25		52.7	52.7
53.3	14:12:26		53.3	53.3
52.1	14:12:27		52.1	52.1
54.2	14:12:28		54.2	54.2
54.0	14:12:29		54.0	54.0
52.7	14:12:30		52.7	52.7

Site 3 - East of Project - SW Corner of Palo Verde Ave & Belen St

January 26, 2026 2:16:05 PM
Sampling Time = 1 sec
Record Num = 86402
Leq = 64.1
Min = 40.7
Max = 94.1

Freq Weighting=A
Leq Daytime = 66.3
Leq Evening = 62.4
Leq Nighttime = 60.5
Ldn(24hr)= 66.4
CNEL = 66.8
Min Leq hr at 1:42 AM 47.8
Max Leq hr at 7:46 AM 68.4

Site 3 - East of Project - SW Corner of Palo Verde Ave & Belen St

SPL	Time	Leq (1 hour Avg.)	Ldn	CNEL
55.7	14:16:05		55.7	55.7
55.0	14:16:06		55.0	55.0
65.9	14:16:07		65.9	65.9
60.0	14:16:08		60.0	60.0
63.2	14:16:09		63.2	63.2
63.0	14:16:10		63.0	63.0
65.7	14:16:11		65.7	65.7
57.1	14:16:12		57.1	57.1
74.9	14:16:13		74.9	74.9
67.4	14:16:14		67.4	67.4
63.7	14:16:15		63.7	63.7
93.5	14:16:16		93.5	93.5
69.8	14:16:17		69.8	69.8
54.6	14:16:18		54.6	54.6
53.8	14:16:19		53.8	53.8
65.6	14:16:20		65.6	65.6
58.4	14:16:21		58.4	58.4
58.6	14:16:22		58.6	58.6
53.8	14:16:23		53.8	53.8
71.1	14:16:24		71.1	71.1
57.7	14:16:25		57.7	57.7
63.3	14:16:26		63.3	63.3
58.5	14:16:27		58.5	58.5
63.4	14:16:28		63.4	63.4
67.2	14:16:29		67.2	67.2
70.7	14:16:30		70.7	70.7
70.3	14:16:31		70.3	70.3
65.2	14:16:32		65.2	65.2
63.8	14:16:33		63.8	63.8
63.6	14:16:34		63.6	63.6
60.0	14:16:35		60.0	60.0
60.7	14:16:36		60.7	60.7
61.6	14:16:37		61.6	61.6
63.3	14:16:38		63.3	63.3
62.9	14:16:39		62.9	62.9
66.6	14:16:40		66.6	66.6
68.1	14:16:41		68.1	68.1
61.8	14:16:42		61.8	61.8
59.6	14:16:43		59.6	59.6
59.8	14:16:44		59.8	59.8
58.7	14:16:45		58.7	58.7
57.7	14:16:46		57.7	57.7
56.3	14:16:47		56.3	56.3
60.2	14:16:48		60.2	60.2
59.3	14:16:49		59.3	59.3
59.6	14:16:50		59.6	59.6
62.7	14:16:51		62.7	62.7
60.9	14:16:52		60.9	60.9
67.1	14:16:53		67.1	67.1
66.6	14:16:54		66.6	66.6
70.2	14:16:55		70.2	70.2
75.4	14:16:56		75.4	75.4
74.6	14:16:57		74.6	74.6
69.9	14:16:58		69.9	69.9
67.8	14:16:59		67.8	67.8
67.8	14:17:00		67.8	67.8
71.2	14:17:01		71.2	71.2
68.8	14:17:02		68.8	68.8
63.9	14:17:03		63.9	63.9
65.9	14:17:04		65.9	65.9
65.2	14:17:05		65.2	65.2
67.7	14:17:06		67.7	67.7
68.3	14:17:07		68.3	68.3
70.9	14:17:08		70.9	70.9
70.1	14:17:09		70.1	70.1
68.3	14:17:10		68.3	68.3
67.0	14:17:11		67.0	67.0
66.3	14:17:12		66.3	66.3
77.1	14:17:13		77.1	77.1
70.6	14:17:14		70.6	70.6
74.1	14:17:15		74.1	74.1
77.4	14:17:16		77.4	77.4
78.4	14:17:17		78.4	78.4
71.1	14:17:18		71.1	71.1
70.6	14:17:19		70.6	70.6
72.2	14:17:20		72.2	72.2
72.4	14:17:21		72.4	72.4
69.8	14:17:22		69.8	69.8
66.7	14:17:23		66.7	66.7
66.7	14:17:24		66.7	66.7
69.3	14:17:25		69.3	69.3
74.1	14:17:26		74.1	74.1
76.5	14:17:27		76.5	76.5
81.8	14:17:28		81.8	81.8
72.2	14:17:29		72.2	72.2
70.0	14:17:30		70.0	70.0
72.7	14:17:31		72.7	72.7
68.3	14:17:32		68.3	68.3
68.2	14:17:33		68.2	68.2
70.6	14:17:34		70.6	70.6
67.1	14:17:35		67.1	67.1
71.2	14:17:36		71.2	71.2
62.1	14:17:37		62.1	62.1
60.4	14:17:38		60.4	60.4
59.5	14:17:39		59.5	59.5
58.1	14:17:40		58.1	58.1
58.5	14:17:41		58.5	58.5
57.7	14:17:42		57.7	57.7
58.7	14:17:43		58.7	58.7
59.5	14:17:44		59.5	59.5
58.1	14:17:45		58.1	58.1
59.4	14:17:46		59.4	59.4
58.8	14:17:47		58.8	58.8
59.9	14:17:48		59.9	59.9
53.5	14:17:49		53.5	53.5
57.0	14:17:50		57.0	57.0
56.8	14:17:51		56.8	56.8
52.9	14:17:52		52.9	52.9
51.3	14:17:53		51.3	51.3
52.1	14:17:54		52.1	52.1
51.2	14:17:55		51.2	51.2
50.4	14:17:56		50.4	50.4
49.6	14:17:57		49.6	49.6
50.1	14:17:58		50.1	50.1
49.7	14:17:59		49.7	49.7
49.3	14:18:00		49.3	49.3
48.7	14:18:01		48.7	48.7
49.8	14:18:02		49.8	49.8
49.0	14:18:03		49.0	49.0
49.2	14:18:04		49.2	49.2
51.8	14:18:05		51.8	51.8
53.9	14:18:06		53.9	53.9
56.9	14:18:07		56.9	56.9
60.1	14:18:08		60.1	60.1
63.3	14:18:09		63.3	63.3
62.4	14:18:10		62.4	62.4
59.9	14:18:11		59.9	59.9
58.8	14:18:12		58.8	58.8
58.1	14:18:13		58.1	58.1
60.4	14:18:14		60.4	60.4
63.9	14:18:15		63.9	63.9
72.2	14:18:16		72.2	72.2
71.1	14:18:17		71.1	71.1
66.9	14:18:18		66.9	66.9
70.4	14:18:19		70.4	70.4
70.5	14:18:20		70.5	70.5
74.5	14:18:21		74.5	74.5
70.8	14:18:22		70.8	70.8
66.8	14:18:23		66.8	66.8
70.6	14:18:24		70.6	70.6
71.6	14:18:25		71.6	71.6
66.8	14:18:26		66.8	66.8
65.5	14:18:27		65.5	65.5
71.7	14:18:28		71.7	71.7
66.8	14:18:29		66.8	66.8
62.0	14:18:30		62.0	62.0
65.3	14:18:31		65.3	65.3
66.7	14:18:32		66.7	66.7
62.2	14:18:33		62.2	62.2
56.6	14:18:34		56.6	56.6
54.4	14:18:35		54.4	54.4
52.5	14:18:36		52.5	52.5
50.8	14:18:37		50.8	50.8
49.8	14:18:38		49.8	49.8
49.0	14:18:39		49.0	49.0
47.9	14:18:40		47.9	47.9
47.5	14:18:41		47.5	47.5
50.0	14:18:42		50.0	50.0
47.5	14:18:43		47.5	47.5
47.8	14:18:44		47.8	47.8
48.2	14:18:45		48.2	48.2
47.2	14:18:46		47.2	47.2
47.7	14:18:47		47.7	47.7
47.9	14:18:48		47.9	47.9

APPENDIX C

RCNM Model Construction Noise Calculations

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Demolition

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Home to Northwest	Residential	67.4	54.7	51.4

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	490	0
Excavator	No	40		80.7	490	0
Dozer	No	40		81.7	490	0
Front End Loader	No	40		79.1	490	0
Mounted Impact Hammer (hoe ram)	Yes	20		90.3	490	0
Dump Truck	No	40		76.5	490	0

	Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment	***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Front End Loader	59.3	55.3	N/A	N/A	N/A	N/A
Excavator	60.9	56.9	N/A	N/A	N/A	N/A
Dozer	61.8	57.9	N/A	N/A	N/A	N/A
Front End Loader	59.3	55.3	N/A	N/A	N/A	N/A
Mounted Impact Hammer (hoe ram)	70.5	63.5	N/A	N/A	N/A	N/A
Dump Truck	56.6	52.6	N/A	N/A	N/A	N/A
Total	**71**	**66**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Demolition

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Commercial to North	Commercial	64.7	55.5	58.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	340	0
Excavator	No	40		80.7	340	0
Dozer	No	40		81.7	340	0
Front End Loader	No	40		79.1	340	0
Mounted Impact Hammer (hoe ram)	Yes	20		90.3	340	0
Dump Truck	No	40		76.5	340	0

	Results					
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Front End Loader	62.5	58.5	N/A	N/A	N/A	N/A
Excavator	64.1	60.1	N/A	N/A	N/A	N/A
Dozer	65.0	61.0	N/A	N/A	N/A	N/A
Front End Loader	62.5	58.5	N/A	N/A	N/A	N/A
Mounted Impact Hammer (hoe ram)	73.6	66.6	N/A	N/A	N/A	N/A
Dump Truck	59.8	55.8	N/A	N/A	N/A	N/A
Total	**74**	**69**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Demolition

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Homes to East	Residential	66	62	60.5

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	610	0
Excavator	No	40		80.7	610	0
Dozer	No	40		81.7	610	0
Front End Loader	No	40		79.1	610	0
Mounted Impact Hammer (hoe ram)	Yes	20		90.3	610	0
Dump Truck	No	40		76.5	610	0

	Results					
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Front End Loader	57	53	N/A	N/A	N/A	N/A
Excavator	59	55	N/A	N/A	N/A	N/A
Dozer	60	56	N/A	N/A	N/A	N/A
Front End Loader	57	53	N/A	N/A	N/A	N/A
Mounted Impact Hammer (hoe ram)	69	62	N/A	N/A	N/A	N/A
Dump Truck	55	51	N/A	N/A	N/A	N/A
Total	**69**	**64**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Home to Northwest	Residential	67.4	54.7	51.4

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	490	0
Front End Loader	No	40		79.1	490	0
Roller	No	20		80	490	0
Tractor	No	40	84		490	0
Grader	No	40	85		490	0
Dozer	No	40		81.7	490	0
Dump Truck	No	40		76.5	490	0

		Calculated (dBA)		Results Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Excavator		60.9	56.9	N/A	N/A	N/A	N/A
Front End Loader		59.3	55.3	N/A	N/A	N/A	N/A
Roller		60.2	53.2	N/A	N/A	N/A	N/A
Tractor		64.2	60.2	N/A	N/A	N/A	N/A
Grader		65.2	61.2	N/A	N/A	N/A	N/A
Dozer		61.8	57.9	N/A	N/A	N/A	N/A
Dump Truck		56.6	52.6	N/A	N/A	N/A	N/A
	Total	**65**	**66**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Site Preparation

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Commercial to North	Commercial	64.7	56	58.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	340	0
Front End Loader	No	40		79.1	340	0
Roller	No	20		80	340	0
Tractor	No	40	84		340	0
Grader	No	40	85		340	0
Dozer	No	40		81.7	340	0
Dump Truck	No	40		76.5	340	0

Equipment	Calculated (dBA) *Lmax	Leq	Results Day Lmax	Noise Limits (dBA) Day Leq	Evening Lmax	Evening Leq
Excavator	64.1	60.1	N/A	N/A	N/A	N/A
Front End Loader	62.5	58.5	N/A	N/A	N/A	N/A
Roller	63.3	56.4	N/A	N/A	N/A	N/A
Tractor	67.3	63.4	N/A	N/A	N/A	N/A
Grader	68.3	64.4	N/A	N/A	N/A	N/A
Dozer	65.0	61.0	N/A	N/A	N/A	N/A
Dump Truck	59.8	55.8	N/A	N/A	N/A	N/A
Total	**68**	**69**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Site Preparation

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Homes to East	Residential	66.3	62.4	60.5

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	610	0
Front End Loader	No	40		79.1	610	0
Roller	No	20		80	610	0
Tractor	No	40	84		610	0
Grader	No	40	85		610	0
Dozer	No	40		81.7	610	0
Dump Truck	No	40		76.5	610	0

		Calculated (dBA)		Results Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Excavator		59.0	55.0	N/A	N/A	N/A	N/A
Front End Loader		57.4	53.4	N/A	N/A	N/A	N/A
Roller		58.3	51.3	N/A	N/A	N/A	N/A
Tractor		62.3	58.3	N/A	N/A	N/A	N/A
Grader		63.3	59.3	N/A	N/A	N/A	N/A
Dozer		59.9	56.0	N/A	N/A	N/A	N/A
Dump Truck		54.7	50.7	N/A	N/A	N/A	N/A
	Total	**63**	**64**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Home to Northwest	Residential	67.4	54.7	51.4

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	490	0
Grader	No	40	85		490	0
Dozer	No	40		81.7	490	0
Backhoe	No	40		77.6	490	0
Tractor	No	40	84		490	0
Roller	No	20		80	490	0
Dump Truck	No	40		76.5	490	0

Equipment	Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Excavator	60.9	56.9	N/A	N/A	N/A	N/A
Grader	65.2	61.2	N/A	N/A	N/A	N/A
Dozer	61.8	57.9	N/A	N/A	N/A	N/A
Backhoe	57.7	53.8	N/A	N/A	N/A	N/A
Tractor	64.2	60.2	N/A	N/A	N/A	N/A
Roller	60.2	53.2	N/A	N/A	N/A	N/A
Dump Truck	56.6	52.6	N/A	N/A	N/A	N/A
Total	**65**	**66**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Grading

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Commercial to North	Commercial	64.7	56	58.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	340	0
Grader	No	40	85		340	0
Dozer	No	40		81.7	340	0
Backhoe	No	40		77.6	340	0
Tractor	No	40	84		340	0
Roller	No	20		80	340	0
Dump Truck	No	40		76.5	340	0

		Calculated (dBA)		Results Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Excavator		64.1	60.1	N/A	N/A	N/A	N/A
Grader		68.3	64.4	N/A	N/A	N/A	N/A
Dozer		65.0	61.0	N/A	N/A	N/A	N/A
Backhoe		60.9	56.9	N/A	N/A	N/A	N/A
Tractor		67.3	63.4	N/A	N/A	N/A	N/A
Roller		63.3	56.4	N/A	N/A	N/A	N/A
Dump Truck		59.8	55.8	N/A	N/A	N/A	N/A
	Total	**68**	**69**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Grading

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Homes to East	Residential	66	62	60.5

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	610	0
Grader	No	40	85		610	0
Dozer	No	40		81.7	610	0
Backhoe	No	40		77.6	610	0
Tractor	No	40	84		610	0
Roller	No	20		80	610	0
Dump Truck	No	40		76.5	610	0

	Calculated (dBA)		Results Noise Limits (dBA) Day		Evening	
Equipment	***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Excavator	59.0	55.0	N/A	N/A	N/A	N/A
Grader	63.3	59.3	N/A	N/A	N/A	N/A
Dozer	59.9	56.0	N/A	N/A	N/A	N/A
Backhoe	55.8	51.9	N/A	N/A	N/A	N/A
Tractor	62.3	58.3	N/A	N/A	N/A	N/A
Roller	58.3	51.3	N/A	N/A	N/A	N/A
Dump Truck	54.7	50.7	N/A	N/A	N/A	N/A
Total	**63**	**64**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Foundation & Pool Shell

				---- Receptor #1 ----
		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Home to Northwest	Residential	67.4	54.7	51.4

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	490	0
Gradall	No	40		83.4	490	0
Generator	No	50		80.6	490	0
Backhoe	No	40		77.6	490	0
Tractor	No	40	84		490	0
Welder / Torch	No	40		74	490	0
Crane	No	16		80.6	490	0

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Excavator	60.9	56.9	N/A	N/A	N/A	N/A
Gradall	63.6	59.6	N/A	N/A	N/A	N/A
Generator	60.8	57.8	N/A	N/A	N/A	N/A
Backhoe	57.7	53.8	N/A	N/A	N/A	N/A
Tractor	64.2	60.2	N/A	N/A	N/A	N/A
Welder / Torch	54.2	50.2	N/A	N/A	N/A	N/A
Crane	60.7	52.8	N/A	N/A	N/A	N/A
Total	**64**	**66**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Foundation & Pool Shell

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Commercial to North	Commercial	64.7	55.5	58.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	340	0
Gradall	No	40		83.4	340	0
Generator	No	50		80.6	340	0
Backhoe	No	40		77.6	340	0
Tractor	No	40	84		340	0
Welder / Torch	No	40		74	340	0
Crane	No	16		80.6	340	0

		Calculated (dBA)		Results Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Excavator		64.1	60.1	N/A	N/A	N/A	N/A
Gradall		66.7	62.8	N/A	N/A	N/A	N/A
Generator		64.0	61.0	N/A	N/A	N/A	N/A
Backhoe		60.9	56.9	N/A	N/A	N/A	N/A
Tractor		67.3	63.4	N/A	N/A	N/A	N/A
Welder / Torch		57.3	53.4	N/A	N/A	N/A	N/A
Crane		63.9	55.9	N/A	N/A	N/A	N/A
	Total	**67**	**69**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Foundation & Pool Shell

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Homes to East	Residential	66.3	62.4	60.5

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	610	0
Gradall	No	40		83.4	610	0
Generator	No	50.0		80.6	610	0
Backhoe	No	40		77.6	610	0
Tractor	No	40	84		610	0
Welder / Torch	No	40		74	610	0
Crane	No	16		80.6	610	0

	Calculated (dBA)		Results Noise Limits (dBA)			
			Day		Evening	
Equipment	***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Excavator	59.0	55.0	N/A	N/A	N/A	N/A
Gradall	61.7	57.7	N/A	N/A	N/A	N/A
Generator	58.9	55.9	N/A	N/A	N/A	N/A
Backhoe	55.8	51.9	N/A	N/A	N/A	N/A
Tractor	62.3	58.3	N/A	N/A	N/A	N/A
Welder / Torch	52.3	48.3	N/A	N/A	N/A	N/A
Crane	58.8	50.9	N/A	N/A	N/A	N/A
Total	**62**	**64**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Vertical Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Home to Northwest	Residential	67.4	54.7	51.4

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	490	0
Gradall	No	40		83.4	490	0
Generator	No	50		80.6	490	0
Front End Loader	No	40		79.1	490	0
Welder / Torch	No	40		74	490	0
Compressor (air)	No	40		77.7	490	0
Excavator	No	40		80.7	490	0

Equipment	Calculated (dBA) ***Lmax**	**Leq**	Results Day Lmax	Noise Limits (dBA) Day Leq	Evening Lmax	Evening Leq
Crane	60.7	52.8	N/A	N/A	N/A	N/A
Gradall	63.6	59.6	N/A	N/A	N/A	N/A
Generator	60.8	57.8	N/A	N/A	N/A	N/A
Front End Loader	59.3	55.3	N/A	N/A	N/A	N/A
Welder / Torch	54.2	50.2	N/A	N/A	N/A	N/A
Compressor (air)	57.8	53.9	N/A	N/A	N/A	N/A
Excavator	60.9	56.9	N/A	N/A	N/A	N/A
Total	**64**	**65**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Vertical Construction

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Commercial to North	Commercial	64.7	55.5	58.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	340	0
Gradall	No	40		83.4	340	0
Generator	No	50		80.6	340	0
Front End Loader	No	40		79.1	340	0
Welder / Torch	No	40		74	340	0
Compressor (air)	No	40		77.7	340	0
Excavator	No	40		80.7	340	0

	Calculated (dBA)		Results Noise Limits (dBA)			
			Day		Evening	
Equipment	***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Crane	63.9	55.9	N/A	N/A	N/A	N/A
Gradall	66.7	62.8	N/A	N/A	N/A	N/A
Generator	64.0	61.0	N/A	N/A	N/A	N/A
Front End Loader	62.5	58.5	N/A	N/A	N/A	N/A
Welder / Torch	57.3	53.4	N/A	N/A	N/A	N/A
Compressor (air)	61.0	57.0	N/A	N/A	N/A	N/A
Excavator	64.1	60.1	N/A	N/A	N/A	N/A
Total	**67**	**68**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Vertical Construction

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Homes to East	Residential	66.3	62.4	60.5

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	610	0
Gradall	No	40		83.4	610	0
Generator	No	50		80.6	610	0
Front End Loader	No	40		79.1	610	0
Welder / Torch	No	40		74	610	0
Compressor (air)	No	40		77.7	610	0
Excavator	No	40		80.7	610	0

Equipment		Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Crane		58.8	50.9	N/A	N/A	N/A	N/A
Gradall		61.7	57.7	N/A	N/A	N/A	N/A
Generator		58.9	55.9	N/A	N/A	N/A	N/A
Front End Loader		57.4	53.4	N/A	N/A	N/A	N/A
Welder / Torch		52.3	48.3	N/A	N/A	N/A	N/A
Compressor (air)		55.9	52.0	N/A	N/A	N/A	N/A
Excavator		59.0	55.0	N/A	N/A	N/A	N/A
	Total	**62**	**63**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Interior Buildout

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Home to Northwest	Residential	67.4	54.7	51.4

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	490	0
Generator	No	50		80.6	490	0
Front End Loader	No	40		79.1	490	0
Excavator	No	40		80.7	490	0
Welder / Torch	No	40		74	490	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Gradall		63.6	59.6	N/A	N/A	N/A	N/A
Generator		60.8	57.8	N/A	N/A	N/A	N/A
Front End Loader		59.3	55.3	N/A	N/A	N/A	N/A
Excavator		60.9	56.9	N/A	N/A	N/A	N/A
Welder / Torch		54.2	50.2	N/A	N/A	N/A	N/A
	Total	**64**	**64**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Interior Buildout

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Commercial to North	Commercial	64.7	55.5	58.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	340	0
Generator	No	50		80.6	340	0
Front End Loader	No	40		79.1	340	0
Excavator	No	40		80.7	340	0
Welder / Torch	No	40		74	340	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Gradall		66.7	62.8	N/A	N/A	N/A	N/A
Generator		64.0	61.0	N/A	N/A	N/A	N/A
Front End Loader		62.5	58.5	N/A	N/A	N/A	N/A
Excavator		64.1	60.1	N/A	N/A	N/A	N/A
Welder / Torch		57.3	53.4	N/A	N/A	N/A	N/A
	Total	**67**	**67**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Interior Buildout

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Homes to East	Residential	66.3	62.4	60.5

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	610	0
Generator	No	50		80.6	610	0
Front End Loader	No	40		79.1	610	0
Excavator	No	40		80.7	610	0
Welder / Torch	No	40		74	610	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Gradall		61.7	57.7	N/A	N/A	N/A	N/A
Generator		58.9	55.9	N/A	N/A	N/A	N/A
Front End Loader		57.4	53.4	N/A	N/A	N/A	N/A
Excavator		59.0	55.0	N/A	N/A	N/A	N/A
Welder / Torch		52.3	48.3	N/A	N/A	N/A	N/A
	Total	**62**	**62**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Building Landscape

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Home to Northwest	Residential	67.4	54.7	51.4

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	490	0
Gradall	No	40		83.4	490	0
Generator	No	50		80.6	490	0
Front End Loader	No	40		79.1	490	0
Welder / Torch	No	40		74	490	0
Excavator	No	40		80.7	490	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Crane		60.7	52.8	N/A	N/A	N/A	N/A
Gradall		63.6	59.6	N/A	N/A	N/A	N/A
Generator		60.8	57.8	N/A	N/A	N/A	N/A
Front End Loader		59.3	55.3	N/A	N/A	N/A	N/A
Welder / Torch		54.2	50.2	N/A	N/A	N/A	N/A
Excavator		60.9	56.9	N/A	N/A	N/A	N/A
	Total	**64**	**64**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Building Landscape

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Commercial to North	Commercial	64.7	55.5	58.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	340	0
Gradall	No	40		83.4	340	0
Generator	No	50		80.6	340	0
Front End Loader	No	40		79.1	340	0
Welder / Torch	No	40		74	340	0
Excavator	No	40		80.7	340	0

		Calculated (dBA)		Results Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Crane		63.9	55.9	N/A	N/A	N/A	N/A
Gradall		66.7	62.8	N/A	N/A	N/A	N/A
Generator		64.0	61.0	N/A	N/A	N/A	N/A
Front End Loader		62.5	58.5	N/A	N/A	N/A	N/A
Welder / Torch		57.3	53.4	N/A	N/A	N/A	N/A
Excavator		64.1	60.1	N/A	N/A	N/A	N/A
	Total	**67**	**67**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Building Landscape

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Homes to East	Residential	66	62	60.5

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	610	0
Gradall	No	40		83.4	610	0
Generator	No	50		80.6	610	0
Front End Loader	No	40		79.1	610	0
Welder / Torch	No	40		74	610	0
Excavator	No	40		80.7	610	0

		Calculated (dBA)		Results			
				Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Crane		59	51	N/A	N/A	N/A	N/A
Gradall		62	58	N/A	N/A	N/A	N/A
Generator		59	56	N/A	N/A	N/A	N/A
Front End Loader		57	53	N/A	N/A	N/A	N/A
Welder / Torch		52	48	N/A	N/A	N/A	N/A
Excavator		59	55	N/A	N/A	N/A	N/A
	Total	**62**	**62**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Decking Flatwork

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Home to Northwest	Residential	67.4	54.7	51.4

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		490	0
Front End Loader	No	40		79.1	490	0
Excavator	No	40		80.7	490	0
Roller	No	20		80	490	0
Dump Truck	No	40		76.5	490	0

		Calculated (dBA)		Results Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Tractor		64.2	60.2	N/A	N/A	N/A	N/A
Front End Loader		59.3	55.3	N/A	N/A	N/A	N/A
Excavator		60.9	56.9	N/A	N/A	N/A	N/A
Roller		60.2	53.2	N/A	N/A	N/A	N/A
Dump Truck		56.6	52.6	N/A	N/A	N/A	N/A
	Total	**64**	**64**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Decking Flatwork

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Commercial to North	Commercial	64.7	55.5	58.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84.0		340	0
Front End Loader	No	40		79.1	340	0
Excavator	No	40		80.7	340	0
Roller	No	20		80	340	0
Dump Truck	No	40		76.5	340	0

		Calculated (dBA)		Results Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Tractor		67.3	63.4	N/A	N/A	N/A	N/A
Front End Loader		62.5	58.5	N/A	N/A	N/A	N/A
Excavator		64.1	60.1	N/A	N/A	N/A	N/A
Roller		63.3	56.4	N/A	N/A	N/A	N/A
Dump Truck		59.8	55.8	N/A	N/A	N/A	N/A
	Total	**67**	**67**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Decking Flatwork

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Homes to East	Residential	66.3	62.4	60.5

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		610	0
Front End Loader	No	40		79.1	610	0
Excavator	No	40		80.7	610	0
Roller	No	20		80	610	0
Dump Truck	No	40		76.5	610	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Tractor		62.3	58.3	N/A	N/A	N/A	N/A
Front End Loader		57.4	53.4	N/A	N/A	N/A	N/A
Excavator		59.0	55.0	N/A	N/A	N/A	N/A
Roller		58.3	51.3	N/A	N/A	N/A	N/A
Dump Truck		54.7	50.7	N/A	N/A	N/A	N/A
	Total	**62**	**62**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Painting

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Home to Northwest	Residential	67.4	54.7	51.4

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	490	0
Generator	No	50		80.6	490	0
Gradall	No	40		83.4	490	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Compressor (air)		57.8	53.9	N/A	N/A	N/A	N/A
Generator		60.8	57.8	N/A	N/A	N/A	N/A
Gradall		63.6	59.6	N/A	N/A	N/A	N/A
	Total	**64**	**62**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 2/5/2026
Case Description: Millikan HS Aquatic Center - Painting

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Commercial to North	Commercial	64.7	55.5	58.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	340	0
Generator	No	50		80.6	340	0
Gradall	No	40		83.4	340	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Compressor (air)	61.0	57.0	N/A	N/A	N/A	N/A
Generator	64.0	61.0	N/A	N/A	N/A	N/A
Gradall	66.7	62.8	N/A	N/A	N/A	N/A
Total	**67**	**66**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Homes to East	Residential	66.3	62.4	60.5

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	610	0
Generator	No	50		80.6	610	0
Gradall	No	40		83.4	610	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Compressor (air)	55.9	52.0	N/A	N/A	N/A	N/A
Generator	58.9	55.9	N/A	N/A	N/A	N/A
Gradall	61.7	57.7	N/A	N/A	N/A	N/A
Total	**62**	**61**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

APPENDIX D

Operational Reference Noise Measurements

General Information

Serial Number	02509
Model	831
Firmware Version	2.314
Filename	831_Data.001
User	GT
Job Description	LBCC 2041 Facilities Master Plan
Location	Approx 30 ft north of pool and 5 ft south of scoreboard
Measurement Description	
Start Time	Friday, 2018 March 30 12:24:51
Stop Time	Friday, 2018 March 30 12:34:52
Duration	00:10:00.5
Run Time	00:10:00.5
Pause	00:00:00.0
Pre Calibration	Friday, 2018 March 30 12:23:28
Post Calibration	None
Calibration Deviation	---

Note

Noise from swim meet at pool 30 ft from pool and 60 ft from loud speaker
76F, 29.91 in Hg, 51% hu, 2 mph wind, hazy sky

Overall Data

LAeq		71.8	dB
LASmax	2018 Mar 30 12:34:05	89.5	dB
LApeak (max)	2018 Mar 30 12:34:05	100.5	dB
LASmin	2018 Mar 30 12:32:15	56.5	dB
LCeq		73.2	dB
LAeq		71.8	dB
LCeq - LAeq		1.4	dB
LAIeq		78.1	dB
LAeq		71.8	dB
LAIeq - LAeq		6.2	dB
Ldn		71.8	dB
LDay 07:00-22:00		71.8	dB
LNight 22:00-07:00		---	dB
Lden		71.8	dB
LDay 07:00-19:00		71.8	dB
LEvening 19:00-22:00		---	dB
LNight 22:00-07:00		---	dB
LAE		99.6	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS5.00	77.5	dBA
LAS10.00	75.3	dBA
LAS33.30	70.1	dBA
LAS50.00	67.6	dBA
LAS66.60	65.3	dBA
LAS90.00	62.4	dBA
LAS > 65.0 dB (Exceedence Counts / Duration)	28 / 489.8	s
LAS > 85.0 dB (Exceedence Counts / Duration)	2 / 2.8	s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting	
Peak Weight	A Weighting	
Detector	Slow	
Preamp	PRM831	
Integration Method	Linear	
OBA Range	Low	
OBA Bandwidth	1/1 and 1/3	
OBA Freq. Weighting	Z Weighting	
OBA Max Spectrum	Bin Max	
Gain	+0	dB
Under Range Limit	26.1	dB
Under Range Peak	75.8	dB
Noise Floor	17.0	dB
Overload	143.4	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZeq	58.3	61.4	64.5	63.1	61.2	59.2	64.8	69.9	62.3	60.1	43.3	34.0
LZSmax	80.3	74.2	70.6	73.0	69.5	66.1	81.7	89.2	75.4	77.9	59.7	47.9
LZSmin	49.2	55.8	60.8	57.2	56.6	53.6	53.7	52.4	48.0	43.0	33.5	23.8

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	52.9	54.4	53.8	56.2	57.5	56.5	60.5	61.7	53.2	53.9	55.6	61.5
LZSmax	73.7	77.7	69.9	70.3	71.4	69.4	65.9	68.2	62.5	60.4	65.8	72.8
LZSmin	40.5	39.9	43.6	48.1	49.2	50.1	56.1	57.5	47.9	48.5	51.3	53.5

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZeq	58.9	54.3	54.5	55.6	53.2	54.3	56.5	59.5	62.3	62.9	67.9	62.4
LZSmax	67.1	68.4	64.7	63.3	60.9	63.5	68.0	75.3	80.7	77.9	88.4	82.7
LZSmin	52.6	49.1	48.5	48.9	47.4	47.6	49.1	48.9	48.8	48.7	47.1	46.2

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	58.7	55.5	57.7	59.7	51.6	45.6	40.6	38.0	35.1	31.8	28.4	23.6
LZSmax	70.1	68.7	75.4	78.6	67.7	60.1	52.0	58.6	48.3	45.1	43.1	38.1
LZSmin	44.3	43.3	41.5	39.8	36.4	32.9	30.4	27.9	25.4	21.4	17.7	13.4

Calibration History

Preamp	Date	dB re. 1V/Pa
PRM831	30 Mar 2018 12:23:25	-25.8
PRM831	07 Mar 2018 13:40:34	-25.8
PRM831	28 Feb 2018 12:16:10	-25.9
PRM831	30 Jan 2018 23:18:32	-26.2
PRM831	30 Jan 2018 13:42:45	-26.2
PRM831	30 Jan 2018 13:32:25	-26.0
PRM831	30 Jan 2018 10:54:43	-26.0
PRM831	06 Jan 2018 13:07:04	-26.0
PRM831	19 Dec 2017 10:41:35	-25.5
PRM831	25 Oct 2017 08:21:25	-25.2
PRM831	11 Oct 2017 12:05:04	-25.5

Measurement Report

Report Summary

Meter's File Name	831_Data.004	Computer's File Name	SLM_0002509_831_Data_004.02.ldbin
Meter	831		
Firmware	2.314		
User	GT	Location	
Description	Riverside - The Motorcycle Company - Phase 3		
Note	On Roof - Approx 6 feet from HVAC Unit		
Start Time	2020-05-09 13:23:15	Duration	0:10:00.2
End Time	2020-05-09 13:33:15	Run Time	0:10:00.2
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	65.1 dB		
LAE	92.9 dB	SEA	--- dB
EA	214.7 µPa²h		
LZ_{peak}	106.4 dB	2020-05-09 13:25:40	
LAS_{max}	80.1 dB	2020-05-09 13:25:19	
LAS_{min}	55.1 dB	2020-05-09 13:30:14	
LA_{eq}	65.1 dB		
LC_{eq}	78.1 dB	LC_{eq} - LA_{eq}	13.0 dB
LAI_{eq}	68.9 dB	LAI_{eq} - LA_{eq}	3.8 dB

Exceedances	Count	Duration
LAS > 65.0 dB	16	0:02:46.5
LAS > 85.0 dB	0	0:00:00.0
LZpeak > 135.0 dB	0	0:00:00.0
LZpeak > 137.0 dB	0	0:00:00.0
LZpeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	65.1 dB	65.1 dB	0.0 dB

	LDEN	LDay	LEve	LNight
	65.1 dB	65.1 dB	--- dB	--- dB

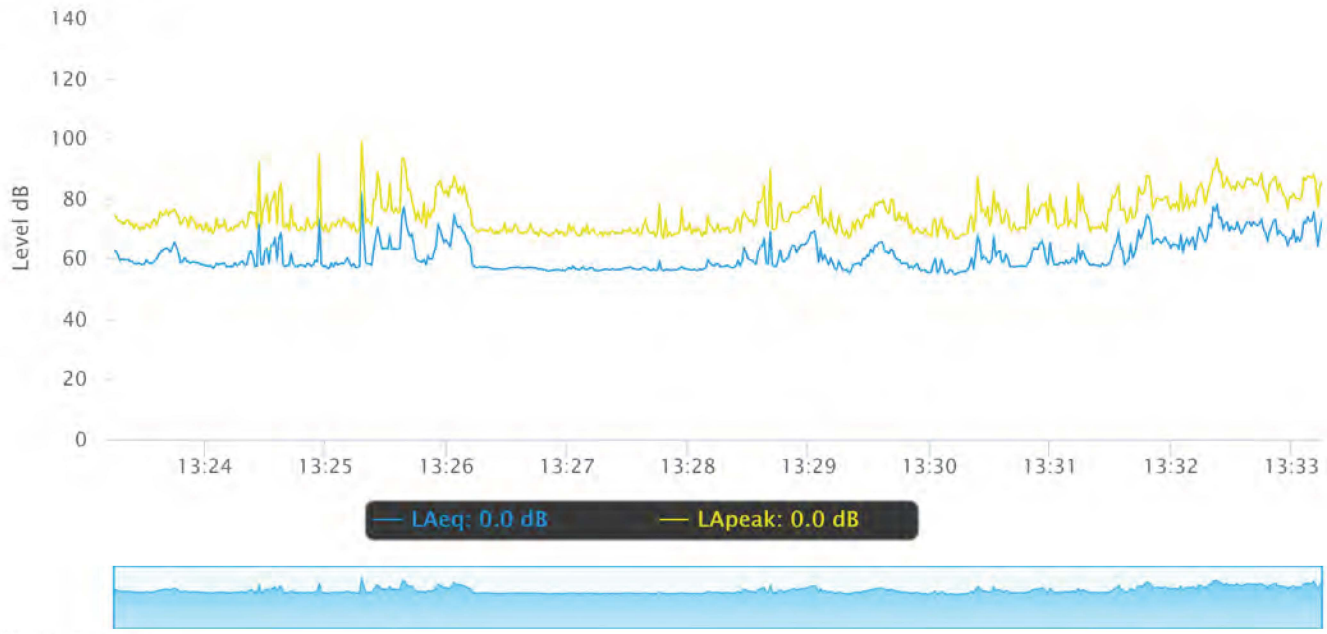
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	65.1 dB		78.1 dB		80.9 dB	
$LS_{(max)}$	80.1 dB	2020-05-09 13:25:19	91.6 dB	2020-05-09 13:26:05	97.4 dB	2020-05-09 13:23:15
$LF_{(max)}$	84.7 dB	2020-05-09 13:25:18	95.4 dB	2020-05-09 13:25:40	97.5 dB	2020-05-09 13:23:15
$LI_{(max)}$	86.7 dB	2020-05-09 13:25:18	97.5 dB	2020-05-09 13:25:40	99.6 dB	2020-05-09 13:23:15
$LS_{(min)}$	55.1 dB	2020-05-09 13:30:14	64.7 dB	2020-05-09 13:30:02	67.4 dB	2020-05-09 13:28:06
$LF_{(min)}$	54.3 dB	2020-05-09 13:30:13	63.0 dB	2020-05-09 13:30:12	65.8 dB	2020-05-09 13:27:31
$LI_{(min)}$	54.6 dB	2020-05-09 13:30:13	65.0 dB	2020-05-09 13:30:02	68.0 dB	2020-05-09 13:27:59
$L_{Peak(max)}$	98.9 dB	2020-05-09 13:25:18	105.7 dB	2020-05-09 13:25:40	106.4 dB	2020-05-09 13:25:40

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

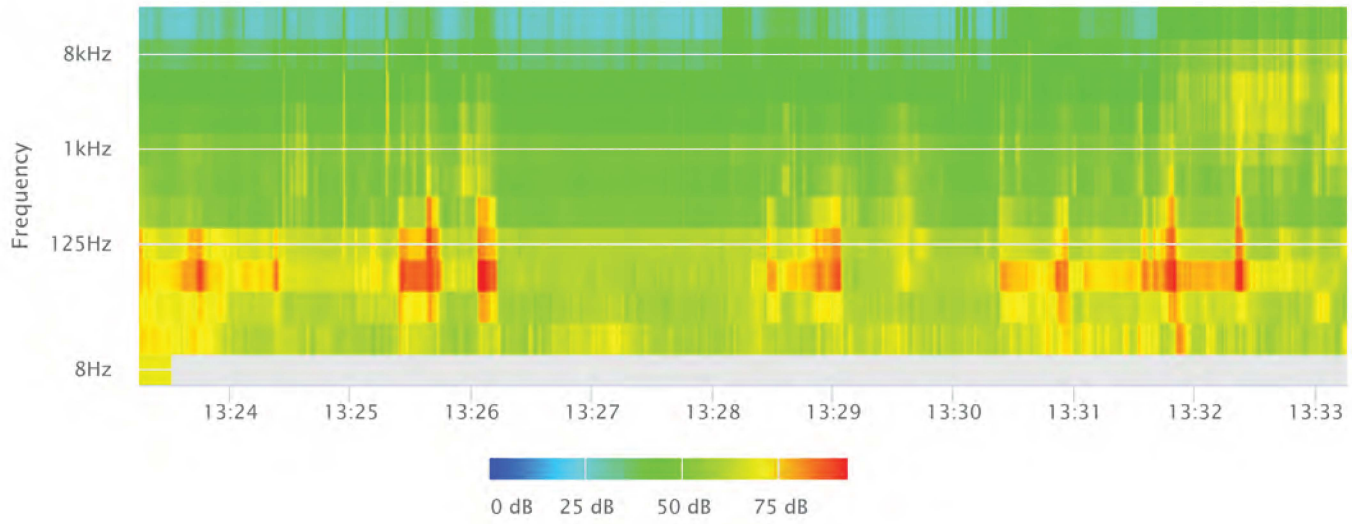
Statistics

LAS 5.0	71.5 dB
LAS 10.0	69.4 dB
LAS 33.3	62.7 dB
LAS 50.0	59.5 dB
LAS 66.6	58.1 dB
LAS 90.0	56.5 dB

Time History



OBA 1/1 Leq



Stationary Noise Calculations at Single-Family Home Northwest of Project Site

Stationary Noise Sources	Reference Measurement Distance	Reference Measurement Leq	Unmitigated Noise Level at Receptor Distance	Unmitigated Noise Level at Receptor Leq	1 (Line Source: hard=0, soft=.5; Point Source: hard=1, soft=1.5)
Pool Activities - Swim Meet	30	71.8	420	49	(eq. N-2141.2 of TeNS)
Rooftop HVAC	6	65.1	380	29	

49

Stationary Noise Sources	Distance from Receptor to Wall	Distance from source to Wall	Height of Wall (feet)	Without Wall Noise Level at Residence	With Wall Noise Level at Residence	Source Height (feet)	Exterior Observer Height (feet)	Source Frequency (hz)	barrier to receiver - b (all)	source to barrier - a	source to receiver - c	path difference y =a+b-c (auto)	line of sight (slope)	fresnel	Barrier Atten
Pool Activities - Sw	330	90	10	49	**39**	3	5	800	330.04	90.27	420.00	0.30	1	0.87	-9.88
Rooftop HVAC	330	18	10	29	**24**	18	5	800	330.04	19.70	348.24	1.49	-1	0.00	-4.9

Combined Noise Levels	**49**	**39**

Stationary Noise Calculations at Commercial Building North of Project Site

Stationary Noise Sources	Reference Measurement Distance	Reference Measurement Leq	Unmitigated Noise Level at Receptor Distance	Unmitigated Noise Level at Receptor Leq	1 (Line Source: hard=0, soft=.5; Point Source: hard=1, soft=1.5)
Pool Activities - Swim Meet	30	71.8	240	54	(eq. N-2141.2 of TeNS)
Rooftop HVAC	6	65.1	220	34	

54

Stationary Noise Sources	Distance from Receptor to Wall	Distance from source to Wall	Height of Wall (feet)	Without Wall Noise Level at Residence	With Wall Noise Level at Residence	Source Height (feet)	Exterior Observer Height (feet)	Source Frequency (hz)	barrier to receiver - b (all)	source to barrier - a	source to receiver - c	path difference y =a+b-c (auto)	line of sight (slope)	fresnel	Barrier Atten
Pool Activities - Sw	210	30	10	54	**41**	3	5	800	210.06	30.81	240.01	0.86	1.00	2.44	-12.859
Rooftop HVAC	210	10	10	34	**34**	18	5	800	210.06	12.81	220.38	2.48	-1.00	-7.06	0

Combined Noise Levels	**54**	**42**

Stationary Noise Calculations at Single-Family Homes East of Project Site

Stationary Noise Sources	Reference Measurement Distance	Reference Measurement Leq	Unmitigated Noise Level at Receptor Distance	Unmitigated Noise Level at Receptor Leq	1 (Line Source: hard=0, soft=.5; Point Source: hard=1, soft=1.5)
Pool Activities - Swim Meet	30	71.8	540	47	(eq. N-2141.2 of TeNS)
Rooftop HVAC	6	65.1	520	26	

47

Stationary Noise Sources	Distance from Receptor to Wall	Distance from source to Wall	Height of Wall (feet)	Without Wall Noise Level at Residence	With Wall Noise Level at Residence	Source Height (feet)	Exterior Observer Height (feet)	Source Frequency (hz)	barrier to receiver - b (all)	source to barrier - a	source to receiver - c	path difference y =a+b-c (auto)	line of sight (slope)	fresnel	Barrier Atten
Pool Activities - Sw	490	50	10	47	**36**	3	5	800	490.03	50.49	540.00	0.51	1	1.45	-11.18
Rooftop HVAC	490	18	10	26	**21**	18	5	800	490.03	19.70	508.17	1.56	-1	0.00	-4.9

Combined Noise Levels	**47**	**36**