San Diego High School Whole Site Modernization and Long-Range Facilities Master Plan

Draft Environmental Impact Report

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ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
АВ	Assembly Bill
ADA	Americans with Disabilities Act
ADA	average daily trips
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
amsl	above mean sea level
APCD	air pollution control district
AR4	Fourth Assessment Report
AR5	·
АКЭ	Fifth Assessment Report
bgs	below ground surface
BMP	best management practice
BPHA	Balboa Park Heritage Association
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFÉ	Corporate Average Fuel Economy
Cal/OSHA	California Division of Occupational Safety and Health
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
САРСОА	California Air Pollution Control Officers Association
CARB	California Air Resources Control Board
CBC	California Building Code
CCPD-OS	Centre City Planned District – Open Space
CCPD-PC	Centre City Planned District – Public/Civic
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH ₄	methane
CHPS	Collaborative for High Performance Schools
CHRIS	California Historical Resources Information System
City	City of San Diego
CNEL	community noise equivalent level
CO	carbon monoxide
CO ₂	carbon dioxide
-	

CO₂e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CSDHRR	City of San Diego Historical Resources Register
CSSC	California Seismic Safety Commission
cy	cubic yard
dB	decibel
dBA	A-weighted decibel
District	San Diego Unified School District
DNH	Determination of No Hazard
DPM	diesel particulate matter
DSA	Division of State Architect
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
GHG	greenhouse gas
GWP	global warming potential
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscapes Survey
HAP	hazardous air pollutant
HFC	hydrofluorocarbon
HRA	health risk assessment
HRB	Historical Resources Board
HRG	Historical Resources Guidelines
HRR	Historical Resources Regulations
HVAC	heating, ventilation, and air conditioning
Hz	Hertz
I-	Interstate
ICE	Intersection Control Evaluation
IEM	Iowa Environmental Mesonet
in/sec	inch per second
IPCC	Intergovernmental Panel on Climate Change
JROTC	Junior Reserve Officers' Training Corps
kHz	kilohertz
LCFS	Low Carbon Fuel Standard
LDIGR	Land Development and Intergovernmental Review

LDM	Land Development Manual
L _{EQ}	time-averaged noise level
LMA	Local Mobility Analysis
LOS	level of service
LRFMP	Long-Range Facilities Master Plan
Master Plan	Districtwide Long-Range Facilities Master Plan
MBTA	Migratory Bird Treaty Act
MCE	maximum considered earthquake
MHPA	Multiple Habitat Planning Area
MMT	million metric tons
mpg	miles per gallon
mph	mile per hour
MPO	Metropolitan Planning Organization
MSCP	Multiple Species Conservation Program
MT	metric tons
MTS	Metropolitan Transit System
N2O NAAQS NAHC NASA NASNI NHPA NHTSA NO NO2 NO2 NOAA NOP NOX NPS NRC NRHP NSLU	nitrous oxide National Ambient Air Quality Standards Native American Heritage Commission National Aeronautics and Space Administration Naval Air Station North Island National Historic Preservation Act National Highway Traffic Safety Administration nitric oxide nitrogen dioxide National Oceanic and Atmospheric Administration Notice of Preparation nitrogen oxides National Park Service noise reduction coefficient National Register of Historic Places noise sensitive land use
O₃	ozone
OEHHA	Office of Environmental health Hazard Assessment
OHP	Office of Historic Preservation
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Part 77	FAA Federal Regulation Title 14, Part 77
Pb	lead
PFC	perfluorocarbon
PGA	peak ground acceleration
PM ₁₀	respirable particulate matter
PM _{2.5}	fine particulate matter

ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
Project	San Diego High School Whole Site Modernization and Long-Range Facilities
	Master Plan Project
Province	Peninsular Ranges Geomorphic Province
PV	photovoltaic
RAQS	Regional Air Quality Strategies
RTP	Regional Transportation Plan
SAFE Vehicles Rule	Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021-2026
	Passenger Cars and Light Trucks
SANDAG	San Diego Association of Governments
SAR	Second Assessment Report
SB	Senate Bill
SCH	State Clearinghouse
SCIC	South Coastal Information Center
Scoping Plan	Climate Change Scoping Plan
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDC	seismic design category
SDG&E	San Diego Gas and Electric
SDHC	San Diego History Center
SDHS	San Diego High School
SDIA	San Diego International Airport
SDMC	San Diego Municipal Code
SERA	State Emergency Relief Administration
sf	square feet/foot
SF ₆	sulfur hexafluoride
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SO _x	sulfur oxides
SPL	sound pressure level
SR-	State Route
STC	Sound Transmission Class
STEM	science technology engineering and mathematics
SWIS	Solid Waste Information System
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resource Control Board
SWACD	
ТАС	toxic air contaminant
TERPS	Terminal Instrument Procedures
TSM	Transportation Study Manual
TSS	Threshold Siting Surface
1.55	

UNFCCC	United Nations Framework Convention on Climate Change
URF	unit risk factor
USEPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
VOC	volatile organic compounds
WPA	Works Progress Administration
WRCC	Western Regional Climate Center
WSM	Whole Site Modernization
ZEV	zero emissions vehicle

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EXECUTIVE SUMMARY

ES.1 INTRODUCTION

This chapter includes a summary of the Draft Environmental Impact Report (EIR) prepared for the San Diego High School Whole Site Modernization (WSM) and Long-Range Facilities Master Plan (LRFMP) Project (Project) in compliance with the California Environmental Quality Act (CEQA). The San Diego Unified School District (District) is the CEQA Lead Agency for the EIR and, as such, has the primary responsibility for evaluating environmental effects of the Proposed Project and considering whether to approve or disapprove the Proposed Project in consideration of these effects. As the Project involves the execution of a lease agreement between the City of San Diego (City) and the District, the City and the Office of the Division of the State Architect (DSA) are CEQA Responsible Agencies, which means that they also have approval authority of the Project and must consider the environmental effects of the Proposed Project when considering their Project-related actions.

As required by CEQA, this Draft EIR includes the following information: (1) a description of the Proposed Project, including its location, objectives, and features; (2) a description of the existing conditions at the Project site and surrounding areas; (3) an analysis of the direct, indirect, temporary, permanent, and cumulative adverse physical effects that would occur to existing conditions should the Proposed Project be approved and implemented; (4) an identification of feasible means of avoiding or substantially lessening the significant adverse effects; (5) a determination of significance for each impact after mitigation is incorporated; and (6) an evaluation of a reasonable range of alternatives to the Proposed Project that would meet the basic Project objectives and reduce a Project-related significant environmental impact.

This chapter covers the following topics: (1) Project Description; (2) Areas of Controversy/Issues Raised by Agencies and the Public; and (3) Issues to be Resolved, including significant environmental effects and the consideration of alternatives to the Proposed Project.

ES.2 PROJECT DESCRIPTION

ES.2.1 Overview

The Proposed Project evaluated in this EIR involves the following actions: (1) adoption of the Project by the District; (2) execution of a ground lease agreement by the City authorizing the District's use of the Project site for 50 years; and (3) implementation of the WSM and LRFMP improvements under the Proposed Project. The WSM improvements would consist of campus-wide upgrades to the site, improvements to existing buildings, and the addition of approximately 700 square feet (sf) onto Building 100. The WSM improvements also include upgrades to the athletic fields, replacement of the student quad, and reconfiguration of the east and north parking lot. The LRFMP improvements would primarily involve the demolition of three school buildings (buildings 400, 600, and 700) and the construction of seven school building 400, food service and custodial building 700, field house, and aquatic center). Other improvements would involve upgrades at Balboa Stadium, new campus entrances/exits via Park Boulevard and Russ Boulevard, and site enhancements consisting of landscape and hardscape improvements west of building 100 near the corner of Russ Boulevard and Park Boulevard.

ES.2.2 Project Location

The Proposed Project is located on an approximately 34-acre site in downtown San Diego, just south of the convergence of Interstate 5 (I-5) freeway and State Route (SR) 163, and just north of San Diego City College. The Project site is located in the northeast corner of the downtown area within the northeast sub-district of the East Village neighborhood, which is characterized by multi-story residential, commercial, office, and institutional buildings. Park Boulevard is a major north-south street in the downtown area and travels along the western edge of the Project site.

ES.2.3 Project Objectives

The District has identified the following objectives for the Proposed Project:

- 1. Use Propositions S and Z, and Measure YY funds for the renovations, repairs, and/or upgrades of the campus that would benefit student learning and health, safety, and security;
- 2. Improve student learning and instruction;
- 3. Conduct major building systems repair and replacement of existing aging facilities throughout the campus;
- 4. Provide for additional campus access from Park Boulevard;
- 5. Improve school accessibility and code compliance through modernization improvements;
- 6. Improve parking opportunities for faculty, students, and visitors; and
- 7. Improve existing athletic facilities and provide for additional athletic facilities.

ES.2.4 Project Components

The Proposed Project involves WSM and LRFMP improvements at the SDHS campus. Specifically, the WSM improvements generally would include minor improvements and reconfigurations of existing school buildings, parking areas, and student quad areas, as well as improvements to existing sports fields. The conceptual improvements associated with the LRFMP include the demolition and construction of various campus buildings, site enhancements, and a new entrance into the campus from the combined SR 163 off-ramp and I-5 on-ramp.

Whole Site Modernization Improvements

The WSM improvements would occur upon the execution of a lease agreement between the City and the District. Campus-wide updates would involve interior and exterior improvements and reconfigurations of school buildings, the addition of building identification graphics, a public address system for emergency use, surveillance cameras, and interior and exterior lighting improvements. Changes in enrollment or student capacity are not anticipated as a result of the proposed WSM improvements.

The WSM improvements would involve interior and exterior modifications/improvements to several school buildings throughout the campus. Interior upgrades would consist of replacing flooring, ceiling

tiles, doors, classroom storage cabinets, lighting, room signage, clocks and speakers, and window blinds. Exterior upgrades would include window replacement, graphic signage additions to buildings, new and existing lighting upgrades and improvements, and the addition of surveillance cameras and a public address system to be used during emergencies. Also, several buildings would receive new or replaced HVAC units on building rooftops.

Most of the WSM improvements would occur at buildings 100, 300, 400, 500, and 600. WSM plans for building 100 include interior redesigns on the first and second floors, HVAC replacement, seismic retrofitting, photovoltaic (PV) improvements, exterior redesign to include a canopy outside the building, new and replacement windows, roof replacement, and an addition to the existing administration area of approximately 700 sf. Building 300 is primarily a library building with counselor's offices and two separate spaces on the northwest and southeast corners of the building that serve as custodial and kitchen areas, respectively. On the first floor, the counselor's offices would be reconfigured, and the HVAC system would be realigned. On the second floor, a projector and screen would be installed to create a school theater. Additionally, an elevator located at the south side of building 300 would be removed. Buildings 100, 400, 500, and 600 each include replacement of interior features, including flooring, base, doors and frames, ceilings, casework, room signage, and window blinds, and they all would receive exterior improvements, including signage, surveillance cameras, and a public address system. Exterior water protrusion issues would be addressed for buildings 400 and 500. Additionally, the existing pedestrian foot bridge connecting buildings 100 and 300 would undergo facade improvements. Temporary closure of the pedestrian foot bridge is anticipated during improvements within the parking lot where the bridge begins on campus.

The outdoor student quad area (approximately 61,430 sf consisting of a lower and upper level) would be demolished and replaced with an updated student quad area. Specifically, a lower level student quad would be east of building 100 and south of building 300 and an upper level student quad would be north of building 400 and south of building 800. The student quad area would be constructed with an architectural design created to accommodate code accessibility compliance. Each student quad would include new ramps, stairs, lighting, signage, food kiosks, landscaping, irrigation, and underground storm drain and sewer lines. The two new food kiosks would be equipped with serving lines, support areas, storage, preparation areas, restrooms, and HVAC systems.

The baseball and softball athletic fields in the northern part of the campus would be upgraded as part of the WSM improvements. Specifically, new dugouts, a concessions stand and restrooms, and a scoreboard would be installed, along with replaced turf and irrigation, perimeter fencing, and batting cages. When completed, the softball field would accommodate up to approximately 100 spectators; however, attendance at baseball and softball events is not anticipated to increase due to the replacement of existing bleachers. Upgrades at the athletic fields would not involve improvements related to a public address system or nighttime field lighting.

Parking lot improvements along the east and north side of the campus would include the demolition and replacement of the existing pavement, site walls, landscaping, irrigation, and exterior lighting. Before the parking lot is restored and striped, the area would be graded to accommodate code accessibility compliance. As part of the upgrades to the east parking lot, the southern entrance into the parking lot would be realigned with 16th Street. The approximately 300 spaces in the eastern parking lot would be reduced by an estimated 50 spaces as a result of the parking improvements, for a proposed total of about 250 spaces at the eastern parking lot and 100 spaces at the western parking lot upon completion

of the WSM improvements. Temporary closure of the pedestrian foot bridge that spans I-5 is anticipated during repaving of the parking lot, during which time students would cross the I-5 along Park Boulevard.

Long-Range Facilities Master Plan Improvements

The LRFMP identifies future improvements over the life of the proposed lease renewal, which would grant the District permission to continue to utilize the Project site for school use for an additional 99 years. The timing and phasing of the LRFMP projects are not known and the details of the proposed improvements are conceptual; however, no change in enrollment or student capacity is anticipated with the proposed LRFMP improvements.

The LRFMP improvements would involve building demolition and construction throughout the campus. Building demolition of buildings 400, 600, and 700 would occur to accommodate a new building 400 and a new custodial and food service building that would serve the high school campus. Of the seven proposed school buildings as part of the LRFMP improvements, three are proposed in the western-central part of the campus and four are proposed along Russ Boulevard. The three proposed buildings in the western-central part of campus would consist of a performing arts building, parking structure with tennis courts above, and auxiliary gymnasium. The performing arts building would replace the existing performing arts center at building 400 and would be constructed where several blacktop basketball courts and relocatables occur. The performing arts building would consist of an approximately 30,000 sf space dedicated to dance, music, and theater performances. The performing arts building would include approximately 500 seats and would be used during and after school hours. For events occurring after school hours, it is anticipated that events would occur during any given day of the year until 11:00 p.m., similar to existing operations at the current performing arts center at building 400. New blacktop basketball courts would be constructed just east of the performing arts building and would replace existing handball courts. The proposed auxiliary gymnasium would support the existing gymnasium at building 200 and would include an approximately 11,000 sf structure up to about 25 feet in height. Hardtop tennis courts would be constructed on top of the proposed parking structure (to replace the existing surface tennis courts) and would be secured with fencing.

Improvements at Balboa Stadium would include upgraded ticket booths, concessions, and seating, including a new path of travel into the stadium for the visitors' side. Upgrades at Balboa Stadium would not increase the capacity of the stadium. Improvements related to a public address system or nighttime field lighting would not be included in the work done for Balboa Stadium. The proposed field house building would be located at the south end of the football field at Balboa Stadium and would consist of a 17,500 sf structure, 32 feet in height, and would include lockers/showers, equipment storage, a weight room adaptive room, team rooms, and support spaces (e.g., mechanical and electrical).

In the southeastern part of the campus, a 10,000-sf privately-funded aquatic center is proposed that would include a 25 yard by 38 yard swimming pool, restrooms, changing rooms, pool equipment room, storage room, and concessions. The pool area would include a pool deck, bleachers, spectator area, diving board, pool lighting, and pool fencing and gates. The capacity of the aquatic center is estimated to accommodate up to 439 persons and would be a shared facility between the school and the public. It should be noted that no funding source for the privately-funded aquatic center has been identified as of the preparation of this EIR. The anticipated aquatic center schedule is modeled after the recently-approved District/City Joint Use Agreement for the new Standley Park aquatic facility currently under construction. Final operational details of the proposed aquatic center will be further defined as a funding source is identified. Public use is expected in the early mornings on weekdays, on Saturday

mornings, and on Sunday afternoons for most of the year (i.e., 37 weeks during the school year and four weeks winter and spring breaks). For seven weeks in the summer when school is not in session, school use would not occur and public use would be expanded to weekday morning and afternoons, Saturday mornings and afternoons, and Sunday afternoons. The aquatic center would be closed for four weeks leading up to the end of the school year. Staffing at the aquatic center is anticipated to include two employees during school hours and up to 10 employees during peak use on weekends.

As part of the LRFMP improvements, two new campus entrance/exit points on Russ Boulevard would be constructed to access the proposed custodial and food service building and a lower level parking garage at the proposed classroom building replacing building 400. A new campus entrance/exit would be constructed for vehicular access from Park Boulevard to the campus near the proposed performing arts building and would align with the combined SR 163 off-ramp and I-5 on-ramp. Regarding changes to parking at SDHS, LRFMP improvements would involve an increase of about 150 parking spaces. Specifically, the parking created at the performing arts building and replacement 400 building would each include 100 new parking spaces (for a combined total of 200 parking spaces) and construction of the auxiliary gymnasium would result in the loss of approximately 50 parking spaces. Combined with the reduction of 50 parking spaces at SDHS during the WSM improvements, the combined change in parking spaces for the WSM and LRFMP improvements would result in a net increase of about 100 parking spaces.

Construction Measures

During construction, the District would implement several standard operating procedures or contractor specifications regarding compliance with state and federal environmental regulations, which include the following:

- The Migratory Bird Treaty Act (MBTA);
- The California Building Code (CBC); and
- Construction General Permit requirements.

Project Design Features

The Proposed Project would involve the following design features:

- Optimum thermal zoning to take advantage of building layout and system operation. The building envelope will meet requirements of the 2016 California Energy Code (or later, as applicable) for minimum thickness of roof and wall insulation.
- Optimize thermal glazing performance for equipment sizing.
- Use of airside economizers for units exceeding 2,000 cubic feet per minute to take advantage of free cooling during temperate climate conditions.
- Use of carbon dioxide sensors for optimum outside air demand control for high occupancy spaces.

ES.3 AREAS OF KNOWN CONTROVERSY/ISSUES RAISED DURING PUBLIC SCOPING

Section 15123 of the State CEQA Guidelines requires that an executive summary of an EIR include areas of controversy known to the Lead Agency, including issues raised by other public agencies and/or the public. The District circulated a Notice of Preparation (NOP) to solicit agency and public comments on the scope and content of the environmental analysis between May 29, 2020 and June 29, 2020.

The District received three NOP response letters from the Balboa Park Heritage Association, Caltrans, and the Native American Heritage Commission during the review period. The Balboa Park Heritage Association provided comments regarding the history of the District's lease of the Project site. Caltrans and the Native American Heritage Commission provided comments concerning the evaluation of transportation and traffic impacts and cultural resources impacts, respectively. The NOP comment letters are included in Appendix A of this EIR.

ES.4 ISSUES TO BE RESOLVED

This Draft EIR examines the potential environmental effects of the Proposed Project, including information related to existing site conditions, analyses of the types and magnitude of individual and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts. Prior to the preparation of this Draft EIR, an Initial Study (IS) checklist was prepared to briefly evaluate the environmental topics included in Appendix G of the State CEQA Guidelines and the following were identified as having the potential to result in a significant environmental effect:

- Air Quality;
- Cultural Resources;
- Geology and Soils;
- Greenhouse Gas Emissions;
- Hazards;
- Noise and Vibration;
- Transportation and Traffic; and
- Tribal Cultural Resources.

Table ES-1, presented at the end of this chapter, provides a summary of the environmental impacts that could result from implementation of the Proposed Project and feasible mitigation measures that would reduce or avoid the impacts. For each impact, Table ES-1 identifies the significance of the impact before mitigation, applicable mitigation measures, and the level of significance of the impact after the implementation of mitigation measures. Impacts on aesthetics, agricultural and forestry resources, biological resources, energy, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, utilities and service systems, and wildfire were determined to not present a potential environmental impact and are considered to be effects found not to be significant, in accordance with Section 15128 of the State CEQA Guidelines. These issues are discussed further in Chapter 4, *Additional Considerations*.

ES.5 **PROJECT ALTERNATIVES**

The following alternatives are analyzed in detail in Chapter 6 of this Draft EIR. The objective of the alternatives analysis is to consider a reasonable range of potentially feasible alternatives to foster informed decision-making and public participation. The alternatives to the Proposed Project are summarized below.

ES.5.1 Alternative 1: No Project Alternative

Section 15126.6(e) of the State CEQA Guidelines provides that a "no project" alternative shall be analyzed in an EIR. Because the Proposed Project is a development project, the following requirement from Section 15126.6(e)(3)(B) of the State CEQA Guidelines is applicable:

If the project is...a development project on an identifiable property, the no project alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this no project consequence should be discussed. In certain instances, the no project alternative means no build wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.

The Project involves City approval of a lease renewal with the District for continued use of the Project site as a high school and District approval of short-term (WSM) and long-term (LRFMP) campus improvements through the year 2035. If the City does not execute a lease renewal with the District, none of the WSM or LRFMP improvements would occur at the Project site because the District would not issue construction contracts without a new lease. In this instance, no new or replaced buildings or other site improvements would occur. The Project site is dedicated parkland and its use is governed by City Charter Section 55, which requires that the Project site be used for dedicated parkland purposes unless a school use is approved by two-thirds of the City's voters or if an amendment to the City Charter allowing a school use at the Project site is approved by a majority of the City's voters. Potential actions by others at the Project site if the City does not approve the lease agreement cannot be predicted at this time; however, it is assumed that a lease would be approved in the future consistent with the November 2016 voter approved Measure I, which amended City Charter Section 55 authorizing the City Council to lease the Project site to the District for "educational, cultural, recreational, and civic programs and activities, provided that the property is used for a public high school."

ES.5.2 Alternative 2: Buildings 600 and 700 Preservation Alternative

Under the Buildings 600 and 700 Preservation Alternative, the City would approve the lease agreement and the District would approve and implement the proposed WSM improvements; however, in order to avoid significant and unavoidable impacts to cultural resources, demolition of buildings 600 and 700 during the LRFMP improvements would not occur. Instead, improvements to buildings 600 and 700 would occur during the WSM improvements only and would involve HVAC installation, exterior painting, interior building reconfiguration, realignment of plumbing at building 600, and the addition of an emergency public address system at building 700. During the LRFMP improvements, no additional modifications or changes to buildings 600 and 700 would occur. All other components of the Project associated with the LRFMP improvements would occur, including demolition of building 400 and construction of the performing arts building, auxiliary gymnasium, parking structure, field house, and aquatic center.

ES.5.3 Alternative 3: No Aquatic Center Public Address System Alternative

Under the No Aquatic Center Public Address System Alternative, the City would approve the lease agreement and the District would approve and implement the proposed WSM and LRFMP improvements; however, in order to avoid significant and unavoidable impacts to noise and vibration, the aquatic center would not include a public address system during the LRFMP improvements.

ES.5.4 Environmentally Superior Alternative

Pursuant to CEQA, the EIR is required to identify the environmentally superior alternative. Although the No Project Alternative reduces the greatest number of significant impacts, CEQA requires that when the environmentally superior alternative is the No Project Alternative, another alternative should be identified.

Based on a comparison of the overall environmental impacts for the described alternatives, the No Project Alternative is identified as the environmentally superior alternative. This alternative would not result in any contribution to significant and unmitigable impacts related to cultural resources or noise and vibration, which would occur with the Project. The significant but mitigable impacts to geology and soils would also be avoided. The No Project Alternative, however, does not meet any of the Project objectives.

Of the remaining alternatives, the environmentally superior alternative is the Buildings 600 and 700 Preservation Alternative. This alternative would meet most of the Project objectives and would avoid significant and unmitigable impacts to historic buildings.

Table ES-1			
PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			

Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
ect would not result in a lerable net increase of any r which the project region nder an applicable federal r quality standard.	LS	No mitigation is required.	N/A
ct would not expose to substantial pollutant	LS	No mitigation is required.	N/A
Proposed Project has the n significant impacts to during construction of nents as a result of the to buildings 500, 600, and the student quad area, tures 2 (Gray Castle and 3 (World War I building 100 addition, tures 4 (Gray Castle doors) I plaque). Proposed Project has the n significant impacts to during construction of ements as a result of the on of buildings 600 and	PS	MM CUL-1: Prior to the implementation of the WSM improvements, design measures following the Secretary of the Interior's Standards for the Treatment of Historic Properties shall be developed to preserve the character-defining features of buildings 500, 600, and 700, Features 2 (Gray Castle courtyard fountain) and 3 (World War I memorial), and Features 4 (Gray Castle doors) and 6 (World War II plaque). A preservation architect or architectural historian meeting the Secretary of the Interior's Professional Qualifications Standards in historic architecture and/or architectural history shall participate in Project planning (i.e., design) and construction monitoring activities which shall adhere to the Secretary of the Interior's Standards for the Treatment of Historic Properties. Also, environmentally sensitive areas and, potentially, barriers shall be established as needed to protect historical resources during Project	Impact CUL-1 LS; Impact CUL-2 SU
s on a ce th	-	a historical resource e WSM and LRFMP	Also, environmentally sensitive areas and, potentially, barriers shall be established as needed to protect historical resources during Project e WSM and LRFMP construction activities.

Table ES-1 (cont.) PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			The protection of environmentally sensitive area(s)	
			shall be reviewed by a preservation architect or	
			architectural historian meeting the Secretary of the	
			Interior's Professional Qualifications Standards in	
			historic architecture and/or architectural history	
			prior to the implementation of WSM improvements	
			and environmentally sensitive area(s) established	
			shall be outlined on Project plans/engineering	
			drawings. The preservation architect or architectural	
			historian shall provide an environmental training to	
			construction crews so that they will be made aware	
			of restrictions and requirements for protecting	
			historical resources. A qualified professional meeting	
			the Secretary of the Interior's Qualification Standards	
			(historic architecture and/or architectural history)	
			shall be retained to monitor Project construction	
			activities to adhere to said restrictions as needed.	
			MM CUL-2a: Prior to the implementation of the	
			LRFMP improvements, photographic documentation	
			of buildings 600 and 700 shall occur. Such	
			documentation shall adhere to standards and	
			guidelines for Historic American Buildings Survey	
			(HABS), Historic American Engineering Record	
			(HAER), and Historic American Landscapes Survey	
			(HALS) documentation, as outlined in the updated	
			HABS/HAER/HALS Guidelines set by the Heritage	
			Documentation Programs instituted by the National	
			Parks Service (NPS 2020). HABS-like documentation	
			shall consist of measured drawings (or reproductions	
			of historic drawings), photographs, and written data	
			(e.g., historic context, building descriptions) that	
			provide a detailed record that reflects the historical	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			significance of the resources. Following completion of the HABS-like documentation, the materials shall be placed on file with the City, San Diego History Center (SDHC), and the San Diego Central Library. Also, environmentally sensitive areas and, potentially, barriers shall be established as needed to protect historical resources during Project construction activities. The protection of environmentally sensitive area(s) shall be reviewed by a preservation architect or architectural historian meeting the Secretary of the Interior's Professional Qualifications Standards in historic architecture and/or architectural history prior to the implementation of LRFMP improvements and environmentally sensitive area(s) established shall be outlined on Project plans/engineering drawings. The preservation architect or architectural historian shall provide an environmental training to construction crews so that they will be made aware of restrictions and requirements for protecting historical resources.	
			A qualified professional meeting the Secretary of the Interior's Qualification Standards (historic architecture and/or architectural history) shall be retained to monitor Project construction activities to adhere to said restrictions as needed.	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table ES-1 (cont.)
PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			MM CUL-2b: Prior to the implementation of the LRFMP improvements, interpretive signage or display panels shall be developed and installed in a publicly visible location within the SDHS campus that describe the history and significance of SDHS. The interpretive signage shall include historic photographs and a brief narrative describing the history of SDHS and the significance of the resources. In addition, educational/interpretive information which describes the history and significance of SDHS and the historical resources shall be made available to the public in a readily accessible format, such as a printed brochure and/or electronic format such as a webpage. This educational/interpretive material shall be available to schools, museums, archives and curation facilities, libraries, nonprofit organizations, the public, and other interested agencies. The interpretive signage/display and educational/ interpretive materials shall be based on the photographs produced in the HABS/HAER documentation and the historic archival research previously prepared in the Cultural Resources Technical Report for the Project.	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Archaeological Resources	Impact CUL-3: The Proposed Project has the potential to result in the disturbance of historic archaeological resources during the construction of WSM improvements involving ground-disturbing activities. Impact CUL-4: The Proposed Project has the potential to result in the disturbance of historic archaeological resources during the construction of LRFMP improvements involving ground-disturbing activities. Operational impacts on a historic archaeological resources would not occur once the WSM and LRFMP improvements are constructed.	PS	 MM CUL-3: Prior to the implementation of WSM improvements, a qualified archaeological Principal Investigator shall be retained to oversee an archaeological monitoring program during demolition and ground disturbing actives within the student quad area and/or parking lot. As part of the archaeological monitoring program, a qualified archaeologist shall be present at the preconstruction meeting to establish procedures for archaeological discovery notification and monitoring protocols. The archaeologist shall explain the procedures for temporarily halting or redirecting work to permit the sampling, identification, evaluation, and salvage of archaeological resources, as appropriate. An archaeologist shall be present to monitor initial ground disturbance for the demolition and/or other improvement activities within the student quad area and/or parking lot areas in order to inspect the subsurface for archaeological features or materials. Monitoring shall cease in areas determined to strictly contain fill and San Diego Formation materials. In the event that archaeological artifacts or features are discovered during ground-disturbing activities, all work in the vicinity of the materials shall be halted and the resource assessed for significance according to State CEQA Guidelines Section 15064.5. If any archaeological resource is determined to be significant, the District, in consultation with the Principal Investigator, and a Kumeyaay Native American Monitor in the case of prehistoric 	LS

Table ES-1 (cont.)	
PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			resources, shall determine the appropriate avoidance or treatment or measures (e.g., data recovery). Significant cultural materials recovered shall be, as necessary, subject to documentation, scientific analysis, and/or curation, according to current professional standards. MM CUL-4 : Prior to the implementation of the LRFMP improvements, a qualified archaeological Principal Investigator shall be retained to review Project engineering/grading plans and determine if monitoring is required. If it is determined that monitoring is necessary, the monitoring program protocols outlined in MM CUL-3 shall be followed. If it is determined that monitoring is not necessary, in the event that archaeological artifacts or features are inadvertently discovered during ground-	magation
			disturbing activities, all work within 30 feet of the materials shall be halted and the District shall consult with the Principal Investigator to assess the significance of the find according to State CEQA Guidelines Section 15064.5. If any resource is determined to be significant, the District and the archaeologist shall determine the appropriate avoidance or treatment or measures (e.g., data recovery). Significant cultural materials recovered shall be, as necessary, subject to documentation, scientific analysis, and/or curation, according to current professional standards.	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Human Remains	The Proposed Project would not disturb	LS	A Cultural Resources Monitoring Report shall be completed by the Principal Investigator and submitted to the District describing the methods and results of the monitoring program. No mitigation is required.	N/A
	human remains during construction or operation.			,
Geology and Soils	• •		•	
Earthquakes and seismic ground shaking	 Impact GEO-1: The Proposed Project has the potential to result in the placement of habitable structures on or near an active fault and people may be exposed to risks of loss, injury, or death during seismic events during the construction and operation of the WSM improvements. Impact GEO-2: The Proposed Project has the potential to result in the placement of habitable structures on an active fault (e.g., new buildings) and people may be exposed to risks of loss, injury, or death during seismic events during the construction and operation of the LRFMP improvements. 	PS	 MM GEO-1 Prior to DSA approval of future campus improvement engineering drawings for the WSM improvements, the District shall complete the following: Perform further geotechnical field evaluation to develop additional interpretation of the length, width, and projection of the fault zone as it relates to all new habitable structures to the satisfaction of the DSA; Design new buildings with occupancy exceeding 2,000 personhours per year to be offset 50 feet from the closest suspected fault location in accordance with the Alquist-Priolo Act and the California Geological Survey Special Publication 42 to the satisfaction of the DSA; and 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Incorporate the recommendations of the Geotechnical Evaluation provided as Appendix D1 to this EIR into new building design to be confirmed by the DSA. 	
			MM GEO-2 Prior to DSA approval of future campus improvement engineering drawings for the LRFMP improvements, the District shall complete the following:	
			 Perform further geotechnical field evaluation to develop additional interpretation of the length, width, and projection of the fault zone as it relates to all new habitable structures to the satisfaction of the DSA; 	
			 Design new buildings with occupancy exceeding 2,000 person- hours per year to be offset 50 feet from the closest suspected fault location in accordance with the Alquist-Priolo Act and the California Geological Survey Special Publication 42 to the satisfaction of the DSA; and 	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table ES-1 (cont.)
PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Incorporate the recommendations of the Geotechnical Evaluation provided as Appendix D1 to this EIR into new building design to be confirmed by the DSA. 	
Paleontological resources and unique geologic features	Impact GEO-3: The Proposed Project has the potential to result in the disturbance of paleontological resources in the San Diego Formation during the construction of WSM improvements.Impact GEO-4: The Proposed Project has the potential to result in the disturbance of paleontological resources in the San Diego Formation during the construction of LRFMP improvements.Operational impacts on a paleontological resource would not occur once the WSM and LRFMP improvements are constructed.	PS	 MM GEO-3 Prior to the commencement of ground disturbing activities during construction of the WSM improvements, the District and/or its construction supervisor shall ensure the following measures are implemented: A qualified paleontologist shall be retained to oversee the mitigation program. A qualified paleontologist is defined as an individual with an M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of San Diego County, and who has worked as a paleontological mitigation project supervisor in the county for at least one year. In addition, a regional fossil repository shall be designated to receive any discovered fossils. 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			A fossil repository is defined as a scientific institution with permanent paleontological collections. Because the District lies within San Diego County, the recommended repository is the San Diego Natural History Museum (SDNHM).	
			 The qualified paleontologist shall attend the preconstruction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. 	
			 A paleontological monitor (working under the direction of the qualified paleontologist) shall be on site on a full-time basis during initial excavation activities that are anticipated to affect high or moderate paleontological sensitivity geologic units to inspect exposures for contained fossils. The Project- specific depth threshold identified in the City's Land Development Manual shall be used to determine where monitoring is required. 	
			A paleontological monitor is defined as an individual selected by the	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			qualified paleontologist who has experience in the collection and salvage of fossil materials.	
			Paleontological monitoring may be reduced (e.g., to part-time monitoring or spot-checking) or eliminated at the discretion of the qualified paleontologist and in consultation with appropriate agencies. Changes to the paleontological monitoring schedule shall be based on the results of the mitigation program as it unfolds during site development, and actual and anticipated conditions in the field.	
			 If fossils are discovered, the qualified paleontologist (or paleontological monitor) shall recover them and temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. 	
			 Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and catalogued. 	
			 Prepared fossils, along with copies of all pertinent field notes, photos, 	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 and maps, shall be deposited (as a donation) in the designated fossil repository. Donation of the fossils shall be accompanied by financial support for initial specimen storage, paid for by the District. Within 90 days of the completion of all ground-disturbing construction activities and fossil preparation and curation work (if fossils are discovered), a final paleontological mitigation report shall be completed by the qualified paleontologist that summarizes the results of the mitigation program. This report shall include discussions of the methods used and stratigraphic section(s) exposed, as well as fossils collected and significance of recovered fossils (if 	
			fossils are discovered and recovered). MM GEO-4 Prior to the commencement of ground disturbing activities during construction of the LRFMP improvements, the District and/or its construction supervisor shall ensure the following measures are implemented:	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 A qualified paleontologist shall be 	
			retained to oversee the mitigation	
			program.	
			A qualified paleontologist is defined as	
			an individual with an M.S. or Ph.D. in	
			paleontology or geology who is familiar	
			with paleontological procedures and	
			techniques, who is knowledgeable in the	
			geology and paleontology of San Diego	
			County, and who has worked as a	
			paleontological mitigation project	
			supervisor in the county for at least one	
			year.	
			In addition, a regional fossil repository	
			shall be designated to receive any	
			discovered fossils.	
			A fossil repository is defined as a	
			scientific institution with permanent	
			paleontological collections. Because the	
			District lies within San Diego County, the	
			recommended repository is SDNHM.	
			The qualified paleontologist shall	
			attend the preconstruction meeting	
			to consult with the grading and	
			excavation contractors concerning	
			excavation schedules,	
			paleontological field techniques,	
			and safety issues.	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

lssue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
		Mitigation	 A paleontological monitor (working under the direction of the qualified paleontologist) shall be on site on a full-time basis during initial excavation activities that are anticipated to affect high or moderate paleontological sensitivity geologic units to inspect exposures for contained fossils. The Project-specific depth threshold identified in the City's Land Development Manual shall be used to determine where monitoring is required. A paleontological monitor is defined as an individual selected by the qualified paleontologist who has experience in the collection and salvage of fossil materials. Paleontological monitoring may be reduced (e.g., to part-time monitoring or spot-checking) or eliminated at the discretion of the qualified paleontologist and in consultation with appropriate agencies. Changes to the paleontological monitoring may as it unfolds during site development, and actual and anticipated conditions in the field. 	Mitigation

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 If fossils are discovered, the qualified paleontologist (or paleontological monitor) shall recover them and temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. 	
			 Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and catalogued. 	
			 Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in the designated fossil repository. Donation of the fossils shall be accompanied by financial support for initial specimen storage, paid for by the District. 	
			 Within 90 days of the completion of all ground-disturbing construction activities and fossil preparation and curation work (if fossils are discovered), a final paleontological mitigation report shall be completed by the qualified paleontologist that summarizes the results of the mitigation program. This report shall 	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			include discussions of the methods	
			used and stratigraphic section(s)	
			exposed, as well as fossils collected	
			and significance of recovered fossils	
			(if fossils are discovered and	
<u> </u>			recovered).	
Greenhouse Gas Emissions				
GHG emissions	The Project would not generate greenhouse gas emissions that may have a significant impact on the environment.	LS	No mitigation is required.	N/A
Conflict with an	The Project would not conflict with an	LS	No mitigation is required.	N/A
applicable plan related	applicable plan, policy or regulation adopted			,
to GHG emissions	for the purpose or reducing the emissions of			
	GHGs.			
Hazards				
Located within an	The Project would not result in safety hazards	LS	No mitigation is required.	N/A
airport land use plan or	and excessive noise due to the Project's			
within 2 miles of a public	location within an airport land use plan.			
airport				
Noise and Vibration				I
Generation of a	Impact NOI-1: The Proposed Project has the	PS	MM NOI-1 Construction Noise Control Measures.	Impact NOI-1
substantial increase in	potential to result in noise exceeding the		Construction noise control measures	LS;
ambient noise levels	75 dBA L _{EQ} threshold at on-site NSLUs during		shall be implemented to comply with the	
during construction and	student quad area demolition and laying the		City's Municipal Code construction noise	Impact NOI-2
operation	foundation for the building 100 addition		limits of 75 dBA LEQ (12 hour) during	LS;
	during construction of the WSM		construction of the WSM improvements.	
	improvements.		Construction of the WSM improvements	Impact NOI-3
			shall also comply with the permitted	SU
	Impact NOI-2: The Proposed Project has the		construction hours listed within the City's	
	potential to result in noise exceeding the		Municipal Code. The District shall be	
	75 dBA L_{EQ} threshold at on-site NSLUs during		responsible for requiring that contractors	

Table ES-1 (cont.) PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	 building demolition and construction of proposed buildings during the LRFMP improvements. Impact NOI-3: Operation of the public address system at the proposed aquatic center has the potential to exceed the applicable noise standards at the nearest offsite NSLU. Once constructed, impacts related to noise generation associated with the operation of the WSM improvements would be less than significant. 		 adhere to the following noise abatement measures: No demolition or debris removal shall occur during active classes within 325 feet of a classroom. No excavations or major subsurface work shall occur during active classes within 200 feet of a classroom. No cement deliveries or pumping shall occur during active classes within 225 feet of a classroom. No materials deliveries or materials truck unloading shall occur during active during active classes within 225 feet of a classroom. No construction vehicles or equipment shall occur in the student quad area of the campus during active classes. All lift and portable equipment for exterior or interior work above foundation (during active classes) is limited to the exterior area outside the student quad area. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 All lift and portable equipment used 	
			for exterior and interior work above	
			the foundation (during active	
			classes) must be shielded from direct	
			line-of-sight view of classrooms	
			within 150 feet including second	
			floor classrooms by Sound	
			Transmission Class (STC) 21 (or	
			higher) noise blankets or other	
			similar or greater STC level noise	
			control methods.	
			All building exterior construction	
			work (above foundation) must be	
			shielded from direct line of sight of	
			active classrooms within 150 feet	
			with noise control blankets STC 21	
			(interior work with closed windows	
			in place in building shell are	
			excluded from this condition).	
			If desired by the District and/or their	
			contractor, these barriers may be left in	
			place beyond the minimum durations	
			specified above, but such an extension is	
			not required. The minimum height of the	
			barriers shall be 8 feet above ground	
			level. The barriers shall provide a	
			minimum STC 21 or higher, a minimum	
			noise reduction coefficient (NRC) of 0.80,	
			and be firmly secured to the framework.	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			If blankets are used, the sound- absorptive side of the blankets shall be oriented toward the construction equipment and the blankets shall be overlapped by at least 4 inches at seams and taped and/or closed with hook-and- loop fasteners (i.e., Velcro®) or other methods so that no gaps exist. If blankets are used, the largest blankets available should be used to minimize the number of seams, and they shall be draped to the ground to eliminate any gaps at the base of the barrier.	mitgation
			 All construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and other applicable shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification. All mobile or fixed construction equipment used on the Proposed Project that is regulated for noise 	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 output by a local, state, or federal agency shall comply with such regulation while in the course of Proposed Project activities. All construction equipment shall be properly maintained to prevent the generation of excessive noise levels. All construction equipment shall be operated only when necessary and 	
			 Construction employees shall be trained in the proper operation and use of the equipment. (Careless or improper operation or inappropriate use of equipment can increase noise levels. Poor loading, unloading, excavation, and hauling techniques are examples of how a lack of adequate guidance and training may lead to increased noise levels.) 	
			 Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible. Material stockpiles and mobile equipment staging, parking, and 	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			maintenance areas shall be located	
			as far as practicable from noise-	
			sensitive receptors.	
			 The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. 	
			MM NOI-2 Construction Noise Control Measures.	
			Construction noise control measures	
			shall be implemented to comply with the	
			City's Municipal Code construction noise	
			limits of 75 dBA L_{EQ} (12 hour) during	
			construction of the LRFMP	
			improvements. Construction of the	
			LRFMP improvements shall also comply	
			with the permitted construction hours	
			listed within the City's Municipal Code.	
			The District shall be responsible for	
			requiring that contractors adhere to the	
			following noise abatement measures:	
			No demolition or debris removal	
			shall occur during active classes	
			within 325 feet of a classroom.	
			No excavations or major subsurface	
			work shall occur during active	
			classes within 200 feet of a	
			classroom.	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 No cement deliveries or pumping shall occur during active classes within 225 feet of a classroom. 	
			 No materials deliveries or materials truck unloading shall occur during active classes within 225 feet of a classroom. 	
			 No construction vehicles or equipment shall occur in the student quad area of the campus during active classes. 	
			 All lift and portable equipment for exterior or interior work above foundation (during active classes) is limited to the exterior area outside the student quad area. 	
			 All lift and portable equipment used for exterior and interior work above the foundation (during active classes) must be shielded from direct line-of-sight view of classrooms within 150 feet including second floor classrooms by Sound Transmission Class (STC) 21 (or 	
			higher) noise blankets or other similar or greater STC level noise control methods.	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

		Significance		Significance
Issue	Impact	Before	Mitigation Measure(s)	After
		Mitigation		Mitigation
			 All building exterior construction 	
			work (above foundation) must be	
			shielded from direct line of sight of	
			active classrooms within 150 feet	
			with noise control blankets STC 21	
			(interior work with closed windows	
			in place in building shell are	
			excluded from this condition).	
			If desired by the District and/or their	
			contractor, these barriers may be left in	
			place beyond the minimum durations	
			specified above, but such an extension is	
			not required. The minimum height of the	
			barriers shall be 8 feet above ground	
			level. The barriers shall provide a	
			minimum STC 21 or higher, a minimum	
			noise reduction coefficient (NRC) of 0.80,	
			and be firmly secured to the framework.	
			If blankets are used, the sound-	
			absorptive side of the blankets shall be	
			oriented toward the construction	
			equipment and the blankets shall be	
			overlapped by at least 4 inches at seams	
			and taped and/or closed with hook-and-	
			loop fasteners (i.e., Velcro [®]) or other	
			methods so that no gaps exist. If blankets	
			are used, the largest blankets available	
			should be used to minimize the number	
			of seams, and they shall be draped to the	
			ground to eliminate any gaps at the base	
			of the barrier.	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			In addition, the following noise control measures shall be implemented to reduce noise at nearby noise-sensitive land uses:	
			 All construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and other applicable shrouds, shields, or other noise- reducing features in good operating condition that meet or exceed original factory specification. 	
			 All mobile or fixed construction equipment used on the Proposed Project that is regulated for noise output by a local, state, or federal agency shall comply with such regulation while in the course of Proposed Project activities. 	
			 All construction equipment shall be properly maintained to prevent the generation of excessive noise levels. 	
			 All construction equipment shall be operated only when necessary and shall be switched off when not in use. 	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Construction employees shall be trained in the proper operation and use of the equipment. (Careless or improper operation or inappropriate use of equipment can increase noise levels. Poor loading, unloading, excavation, and hauling techniques are examples of how a lack of adequate guidance and training may lead to increased noise levels.) Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible. Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors. The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. 	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table ES-1 (cont.) PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			MM NOI-3 Aquatic Center Public Address System	
			Design. During the architectural and	
			engineering design phases for the	
			proposed aquatic center, and prior to	
			aquatic center operation, an acoustical	
			consultant shall be retained by the	
			District to evaluate the design of the	
			aquatic center's public address system	
			and provide recommendations, as	
			necessary, to ensure that the associated	
			one-hour average noise level would not	
			exceed 55 dBA L_{EQ} at the property line	
			with San Diego City College during the	
			daytime hours of 7:00 a.m. to 7:00 p.m. If	
			the aquatic center's public address	
			system would operate during the	
			evening hours of 7:00 p.m. to 10:00 p.m.,	
			the applicable one-hour noise limits shall	
			be reduced to 50 dBA L_{EQ} ; if the aquatic	
			center's public address system would	
			operate during the nighttime hours of	
			10:00 p.m. to 7:00 a.m., the applicable	
			noise limits shall be further reduced to	
			45 dBA LEQ. Design considerations may	
			include, but are not limited to, the	
			selection of a quieter public address	
			system, changes in unit	
			locations/orientations, and acoustical	
			louvers or screens. The	
			recommendations of the acoustical	
			consultant shall be incorporated into the	
			final design for the aquatic center.	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Excessive groundborne	Impact NOI-4: The Proposed Project has the	PS	MM NOI-4 Implement Vibration Avoidance	LS
vibration or	potential to result in excessive groundborne		Measure. Prior to the commencement of	
groundborne noise	vibration to onsite NSLUs during Project		construction activities for the WSM	
levels	construction of WSM improvements.		improvements, the District shall require	
			that no soil compaction occurs within	
	Impact NOI-5: The Proposed Project has the		110 feet of a classroom during active	
	potential to result in excessive groundborne		classes and shall require that this	
	vibration to onsite NSLUs during Project		mitigation measure be included on the	
	construction of LRFMP improvements.		contractor's construction plans. The	
			District Project Manager shall coordinate	
	Operational impacts related to excessive		with the construction contractor to	
	groundborne vibration would not occur once		either plan for soil compaction when	
	the WSM and LRFMP improvements are		school is not in session or when a	
	constructed.		distance of at least 110 feet from active	
			classrooms can be maintained.	
			MM NOI-5 Implement Vibration Avoidance	
			Measure. Prior to the commencement	
			of construction activities for the LRFMP	
			improvements, the District shall require	
			that no soil compaction occurs within	
			110 feet of a classroom during active	
			classes and shall require that this	
			mitigation measure be included on the	
			contractor's construction plans. The	
			District Project Manager shall	
			coordinate with the construction	
			contractor to either plan for soil	
			compaction when school is not in	
			session or when a distance of at least	
			110 feet from active classrooms can be	
			maintained.	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

lssue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Located within the vicinity of a private airstrip, in an airport land use plan, or within 2 miles of a public airport	The Project would not result in the exposure of excessive noise levels to people residing or working near the Project during construction and operation of the WSM and LRFMP improvements.	LS	No mitigation is required.	N/A
Transportation and Traffic				
Conflict with a plan addressing the circulation system	The Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system during construction and operation of the WSM and LRFMP improvements.	LS	No mitigation is required.	N/A
CEQA Guidelines Section 15064.3, subdivision (b)	The Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) during construction and operation of the WSM and LRFMP improvements.	LS	No mitigation is required.	N/A
Geometric design features	The Project would not substantially increase hazards due to a geometric design feature or incompatible uses.	LS	No mitigation is required.	N/A
Emergency access	The Project would not result in inadequate emergency access.	LS	No mitigation is required.	N/A
Tribal Cultural Resources				
Tribal cultural resource	Impact TCR-1 : The Proposed Project has the potential to result in inadvertent impacts to unknown tribal cultural resources during the construction of the WSM improvements involving ground-disturbing activities.	PS	MM TCR-1a Prior to the implementation of the WSM improvements, the District shall review Project engineering/grading plans with Jamul Indian Village to determine if the Project location is identified an as area of tribal cultural resources concern. If the Project	LS

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

lssue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Impact TCR-2: The Proposed Project has the	_	location is not identified an as area of	
	potential to result in inadvertent impacts to		tribal cultural resources concern, no	
	unknown tribal cultural resources during the		further action is required. If monitoring	
	construction of the LRFMP improvements		is determined to be required, the	
	involving ground-disturbing activities.		District shall implement mitigation	
			measure TCR-1b.	
	Operational impacts on a tribal cultural			
	resource would not occur once the WSM and		MM TCR-1b If it is determined that monitoring is	
	LRFMP improvements are constructed.		necessary for a WSM improvement	
			component, monitoring shall be	
			conducted by a Kumeyaay Native	
			American monitor during initial ground-	
			disturbing activities. The role of the	
			Kumeyaay Native American monitor	
			shall be to represent tribal concerns	
			and communicate with the tribal	
			council. Specifically, the following	
			measures shall be implemented:	
			The Native American consultant/monitor	
			shall be present at the pre-construction	
			meeting to establish procedures for	
			discovery notification and monitoring	
			protocols.	
			A Native American monitor shall be	
			present to monitor initial ground	
			disturbing activities related to the	
			improvement activities. If archaeological	
			material/features or tribal cultural	
			resources are encountered, the Native	
			American monitor shall have the	
			authority to temporarily halt or redirect	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			work to permit the identification,	
			evaluation, and treatment of the	
			resource, as appropriate.	
			In the event that prehistoric	
			archaeological artifacts or features are	
			encountered during the Native American	
			consultant/monitor's absence, work shall	
			stop until the Native American monitor	
			can observe and comment on the nature	
			of the find.	
			If a significant prehistoric archaeological	
			resource or tribal cultural resource is	
			encountered, the District, in consultation	
			with the District's qualified	
			archaeological Principal Investigator and	
			Native American consultant/monitor,	
			shall determine the appropriate	
			avoidance or treatment measures to be	
			implemented.	
			Interpretation of a find shall be	
			requested from the Native American	
			consultant/monitors involved with the	
			discovery, evaluation, or data recovery of	
			unanticipated finds for inclusion in a final	
			Cultural Resources Monitoring Report.	
			The Native American monitor, in	
			consultation with the District's qualified	
			archaeologist, shall have the discretion to	
			increase the level of monitoring, such as	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 when native soils are encountered, or decrease the level of monitoring under certain field conditions that illustrate past grading and other disturbances have removed soils with a reasonable potential for containing tribal cultural resources or archaeological deposits. Attendance by Native American monitors during construction is at the discretion of the tribe, and the absence of a Native American monitor, should the tribes choose to forgo monitoring for some reason, shall not delay work. MM TCR-2a Prior to the implementation of the LRFMP improvements, the District shall review Project engineering/grading plans with Jamul Indian Village to determine if the Project location is identified an as area of tribal cultural resources concern. If the Project location is not identified an as area of tribal cultural resources concern, no further action is required. If monitoring is determined to be required, the District shall implement mitigation measure TCR-2b. 	
			MM TCR-2b If it is determined that monitoring is necessary for a LRFMP improvement component, monitoring shall be conducted by a Kumeyaay Native American monitor during initial ground-	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			disturbing activities. The role of the	
			Kumeyaay Native American monitor	
			shall be to represent tribal concerns	
			and communicate with the tribal	
			council. Specifically, the following	
			measures shall be implemented:	
			The Native American consultant/	
			monitor shall be present at the pre-	
			construction meeting to establish	
			procedures for discovery notification	
			and monitoring protocols.	
			A Native American monitor shall be	
			present to monitor initial ground	
			disturbing activities related to the	
			improvement activities. If	
			archaeological material/features or	
			tribal cultural resources are	
			encountered, the Native American	
			monitor shall have the authority to	
			temporarily halt or redirect work to	
			permit the identification, evaluation,	
			and treatment of the resource, as	
			appropriate.	
			In the event that prehistoric	
			archaeological artifacts or features are	
			encountered during the Native	
			American consultant/monitor's	
			absence, work shall stop until the	
			Native American monitor can observe	
			and comment on the nature of the find.	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			If a significant prehistoric archaeological	
			resource or tribal cultural resource is	
			encountered, the District, in	
			consultation with the District's qualified	
			archaeological Principal Investigator	
			and Native American consultant/	
			monitor, shall determine the	
			appropriate avoidance or treatment	
			measures to be implemented.	
			Interpretation of a find shall be	
			requested from the Native American	
			consultant/monitors involved with the	
			discovery, evaluation, or data recovery	
			of unanticipated finds for inclusion in a	
			final Cultural Resources Monitoring	
			Report.	
			The Native American monitor, in	
			consultation with the District's qualified	
			archaeologist, shall have the discretion	
			to increase the level of monitoring, such	
			as when native soils are encountered,	
			or decrease the level of monitoring	
			under certain field conditions that	
			illustrate past grading and other	
			disturbances have removed soils with a	
			reasonable potential for containing	
			tribal cultural resources or	
			archaeological deposits. Attendance by	
			Native American monitors during	
			construction is at the discretion of the	
			tribe, and the absence of a Native	

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

 Table ES-1 (cont.)

 PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

lssue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			American monitor, should the tribes	
			choose to forgo monitoring for some	
			reason, shall not delay work.	

S = Significant; LS = Less than Significant; PS = Potentially Significant; SU = Significant/Unavoidable; N = No Impact; N/A = Not Applicable

Table ES-2				
COMPARISON OF PROJECT AND ALTERNATIVES IMPACTS				

Environmental Topic	Proposed Project	No Project Alternative	Buildings 600 and 700 Preservation Alternative	No Aquatic Center Public Address System Alternative
Air Quality	N	N-	N-	Ν
Cultural Resources	SU	Ν	SM	SU
Geology and Soils	SM	Ν	SM-	SM
Greenhouse Gas Emissions	N	N+	N-	Ν
Hazards	N	N-	N	Ν
Noise and Vibration	SU	Ν	SU-	SM
Transportation and Traffic	N	N-	N-	Ν
Tribal Cultural Resources	SM	Ν	SM	SM

SM = significant but mitigable impacts; SU = significant and unmitigated impacts; N = no significant impacts

- = reduced impact level(s) relative to the Project; + = increased impact level(s) relative to the Project

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1.0 INTRODUCTION

The San Diego Unified School District (District) is the Lead Agency preparing this Environmental Impact Report (EIR) for the proposed San Diego High School Whole Site Modernization (WSM) and Long-Range Facilities Master Plan (LRFMP) Project (Proposed Project). The purpose of this EIR is to provide the decision-making body (the Board of Education) and the general public with information concerning the environmental impacts associated with the Proposed Project. This EIR assesses impacts that would result with project implementation, presents mitigation measures that would avoid or reduce the level of impacts deemed to be significant, and provides alternatives that would reduce or avoid significant environmental impacts.

The Proposed Project involves a lease between the City of San Diego (City) and the District, as well as upgrades to the existing campus. The lease would extend the permission for the District to operate at the Project site on or before the expiration of the existing lease and operating agreement in 2024 for up to an additional 99 years. Most of the existing San Diego High School (SDHS) campus classrooms and infrastructure was constructed between 1976 and 2001, and while the high school has been updated over the years, much of the site needs renovations, repairs, and/or upgrades. These improvements would occur as part of Propositions S and Z and Measure YY in the near term (referred to as WSM improvements) and new structures and facilities in the long term (referred to as LRFMP improvements or projects).

Campus-wide WSM improvements would generally involve interior and exterior improvements to existing school buildings. School buildings would be upgraded with plumbing, windows, lighting, painting, signage, and roof improvements, as well as new or replaced heating, ventilation, and air conditioning (HVAC). Interior finish upgrades would consist of replacing interior flooring and base; painting walls, ceilings, and doors; removing existing casework and providing movable storage; and installing new window blinds. Other WSM components include the expansion of building 100, reconfiguration of the upper and lower student quad including construction of new food kiosks, improvements to the east parking lot, and construction of new athletic field amenities.

The LRFMP improvements would involve the demolition of buildings 400, 600, and 700 and the construction of several new buildings and facilities on campus. Specifically, the LRFMP projects include the new construction of a two-story classroom building with a lower level parking area, a food service and custodial building, an aquatic center, a performing arts building above a parking structure, an auxiliary gymnasium, a parking structure with tennis courts, and a field house at Balboa Stadium. Other LRFMP components include the interior realignment of the existing driveway (and temporary closure) with a combined State Route (SR)163 off-ramp and Interstate (I-)5 on-ramp, as well as the interior realignment of the 16th Street entrance into the Proposed Project site to improve circulation and access. Completion of the WSM improvements and LRFMP improvements would not result in an increase in classroom capacity and would not result in an increase in enrollment. Implementation and timing of the LRFMP projects is dependent on the availability of funding; however, they would occur after the WSM improvements, which are fully funded and anticipated to be completed between 2021 and 2023.

The Proposed Project is described in detail in EIR Chapter 2.0, *Environmental Setting and Project Description*, and is analyzed within the subsequent sections of this EIR.

1.1 Background

1.1.1 San Diego Unified School District

The District serves more than 123,000 students in preschool through grade 12 and is the second-largest school district in California. The student population is extremely diverse, representing more than 15 ethnic groups and more than 60 languages and dialects. The mission of the District is as follows:

All San Diego students will graduate with the skills, motivation, curiosity, and resilience to succeed in their choice of college and career in order to lead and participate in the society of tomorrow.

Since 2008, fulfillment of this mission has been achieved through the District's Vision 2020 plan, which is under update to become the District's Vision 2030 plan. The District's Vision 2030 plan will be a focused, long-term roadmap for student success, culminating in the graduation of the Class of 2030. The overarching goal of the plan is to ensure a quality educational experience for present and future students, and several of its goals emphasize the value of safe and modern school facilities in student growth and achievement. Vision 2030 sees San Diego's schools as true neighborhood learning centers where student learning extends beyond the school site and includes multiple benefits to the surrounding neighborhoods.

1.1.2 District Master Plan and Bond Measures

1.1.2.1 Long-Range Facilities Master Plan

In 2008, the District updated its Districtwide Long-Range Facilities Master Plan (Master Plan) and developed the Proposition S bond proposal to fund a portion of it. This plan identifies and prioritizes Districtwide needs for renovation and expansion of existing facilities and for new school construction. The Master Plan update was based on a comprehensive assessment of needs and extensive outreach among District stakeholders to share findings from the assessment; discuss costs, funding sources, and priorities; and seek input. Outreach included the following:

- High School Cluster Meetings (with more than 710 participants and more than 1,400 volunteer hours by non-District staff);
- Principal Surveys (approximately 170 returned);
- Ad Hoc Task Force on the Bond (approximately 25 board-appointed volunteers; six meetings held); and
- District Facilities Task Force (approximately 50 members; four meetings held).

Most of the District's 200-plus sites were built 20 to 50 years ago, and half of its buildings are more than 45 years old. The Master Plan update concluded that significant facility improvements were necessary to meet current educational needs, support 21st century teaching and learning, and ensure a safe, secure, and healthy environment for students and the staff.

1.1.2.2 Proposition S

On November 4, 2008, nearly 69 percent of San Diego voters passed the \$2.1 billion general obligation bond measure, Proposition S, which included a list of specific projects to repair, renovate, and revitalize neighborhood schools. Proposition S extends the previous voter-approved Proposition MM tax rate (\$66.70 per \$100,000 assessed value of taxable property) from 2029 to 2044. Proposition S funds must be used for the projects listed in the bond language placed before the voters and cannot be used for teacher or administrative salaries. Improvements that are both Districtwide and specifically identified for SDHS are listed below:

Districtwide

The following improvements are authorized by Proposition S to be completed at any of the District's school sites, including SDHS.

School Improvements to Support Student Health, Safety, and Security

- Replace obsolete fire alarms, including emergency communications systems;
- Improve safety of student drop-off and pick-up areas, parking, and pedestrian and vehicular circulation;
- Provide school site security improvements, including increased lighting, and vandalism and intrusion safeguards;
- Meet increased earthquake and seismic standards in pre-1976 school buildings;
- Remove and abate asbestos, mold, or other potentially dangerous substances;
- Upgrade and install classroom ventilation or air conditioning; and
- Improve and install student and neighborhood use play fields with joint-use funding.

Projects to Improve School Accessibility and Code Compliance Upgrades

- Modernize and renovate or expand student restrooms;
- Upgrade and expand student food service areas and kitchens to meet increased standards;
- Modernize and renovate physical education facilities, playgrounds, and field for accessibility and safety;
- Repair and replace aging and obsolete portable classrooms; and
- Improve accessibility for disabled persons and comply with the ADA [the Americans with Disabilities Act] and Title 24 [the California Building Standards Code].

School Improvements to Support Student Learning and Instruction

- Provide up-to-date classroom and instructional technology required for 21st century student teaching and learning;
- Upgrade and expand classrooms, labs, and specialized facilities for career and vocational technology programs;

- Provide and modernize classrooms, labs, and specialized facilities for high school students; and
- Improve inadequate loft classrooms.

Major Building Systems Repair and Replacement

- Complete major repair and renovation projects as indicated:
 - Repair and replace deteriorating plumbing and underground sewer systems;
 - Repair and replace aging, leaky roofs;
 - Repair and replace outdated, inefficient HVAC systems;
 - Upgrade electrical capacity, repair aging wiring, to support instructional technology;
 - Repair and restore classroom and building interior and exterior finishes and textures;
- Repair and replace inadequate temporary classrooms, school buildings or sites with costeffective permanent construction.

Accommodating Student Enrollment

• Provide matching funds to plan and construct classrooms and schools as needed for enrollment growth.

San Diego High School Campus

Project Improvements to Support Student Learning and Instruction

- Retrofit/build spaces to provide new and updated career technical and academy learning environments for the Multimedia Arts Program, Finance and Business Program, Hospitality, Tourism and Recreation Program and other supporting spaces;
- Provide new/renovated performance spaces to support Performing Arts Academy;
- Upgrade art and other labs with sinks and appropriate layout, finishes, and equipment to support curriculum;
- Provide 21st century technology upgrades, including audiovisual projection capabilities for all students; and
- Provide a wireless network (WiFi).

School Improvements to Support Student Health, Safety, and Security

- Replace obsolete fire alarm and emergency communications system;
- Create food service area, including dining space, food kiosks, and outdoor covered dining areas to increase service efficiency and provide healthier food choices and eating areas;
- Install security lighting, as well as, increase vandalism and intrusion safeguards, including modifications/additions to fencing;
- Remove or minimize risks of any potentially hazardous material;

- Make structural repairs to buildings to meet current seismic standards; and
- Improve student drop-off and pick-up areas and add parking.

Projects to Improve School Accessibility, Code Compliance Upgrades

- Renovate/expand capacity of existing restrooms;
- Renovate/configure locker rooms to provide accessibility;
- Renovate gym, including new bleachers, to meet accessibility regulations;
- Improve accessibility to all classrooms, labs, restrooms, and other school facilities to comply with accessibility regulations, including ADA Titles I and II;
- Install grease trap and three-compartment sink in kitchen;
- Renovate old bleachers, press box, and upgrade fields for accessibility;
- Build new two-story classroom building to replace old portable classrooms; and
- Provide accessible restrooms for stadium.

Major Building Systems Repair/Replacement

- Repair/replace plumbing and sewer systems as needed;
- Repair site sidewalks and hardscape areas where needed;
- Repair/upgrade building interiors, exteriors, finishes, and fixtures;
- Repair/replace outdated heating and ventilation systems where needed; and
- Replace aging wiring and upgrade electrical and low voltage systems as needed.

1.1.2.3 Proposition Z

On November 6, 2012, San Diego voters approved Proposition Z, a \$2.8 billion bond proposition that enables the District to maintain safe and productive learning environments for students during the state's ongoing budget crisis. Undertakings allowed under Proposition Z at SDHS include redevelopment of existing buildings and general upgrades to existing school facilities to create a better learning environment. Improvements for SDHS are listed in the bond language associated with Proposition Z are described below (District 2012).

Districtwide

Unless otherwise noted, the following projects are authorized in Proposition Z to be completed at any of the District's school sites, including SDHS.

Building Systems Repair and Replacement

- Complete major electrical, infrastructure, plumbing, sewage, structural, HVAC, and landscaping repair, upgrades and renovations to school sites including but not limited to:
 - Replace or upgrade outdated electrical systems, aging wiring, and electrical panels;

- o Repair or replace deteriorating plumbing and underground sewer systems;
- Repair or replace aging, leaky roofs;
- Repair or replace outdated, inefficient HVAC systems to save energy and reduce maintenance costs;
- Repair or restore classroom and building interior and exterior finishes and fixtures;
- Repair or replace cracked and broken concrete sidewalks, hardscape, and exterior infrastructure;
- Resurface, repair or upgrade asphalt parking lots and playground areas; and
- Repair or replace doors and windows.

School Improvements to Support Student Learning and Instruction

- Provide up-to-date classroom and instructional technology required for 21st century student learning and teaching;
- Upgrade and expand information systems and technology throughout the District to support 21st century classrooms, efficient operations, student and parent services;
- Upgrade wired and wireless infrastructure and equipment to support technology systems and leverage federal and state matching funds for school technology programs, and
- Upgrade classroom instructional technology and student connectivity devices.

College, Career and Technical Education Facility Improvements

• Upgrade and expand classrooms, labs, and specialized facilities for career and vocational technology programs.

School Improvements to Support Student Health, Safety & Security

- Replace obsolete fire alarms and outdated emergency communications systems;
- Remove, remediate, and abate asbestos, mold, and other potentially dangerous substances;
- Provide school site security improvements, including increased lighting, fencing, and vandalism and intrusion safeguards;
- Upgrade or install air conditioning for schools located in warmer areas;
- Upgrade and expand student food service areas and kitchens to improve student access to a variety of nutritious meals;
- Improve the seismic structural integrity of school buildings to better protect students and staff in the event of an earthquake; and
- Reconfigure second floor exiting to improve safety of ingress and egress for students.

Improve School Accessibility and Code Compliance Upgrades

- Improve accessibility for disabled persons to comply with ADA and Title 24;
- Modernize and renovate or expand restrooms to improve accessibility;
- Modernize and renovate physical education facilities, playgrounds, and fields to comply with Title IX gender equity requirements; and
- Repair aging portable classrooms to comply with code requirements.

Energy Efficiency and Sustainability

- Install energy efficient (LED/fluorescent) lighting systems with occupancy sensors;
- Install solar lighting systems;
- Increase building insulation and dual-pane windows;
- Replace older inefficient mechanical and central controls systems with energy efficient systems;
- Purchase and install solar panels and other devices to generate electricity from sunlight where feasible;
- Install innovative systems to produce energy and/or reduce consumption;
- Install recycled water systems for irrigation and make connections to recycled water supplies for irrigation purposes where feasible; and
- Install water saving efficient toilets and fixtures.

Quality Neighborhood Schools

- Plan, acquire property for and construct new classrooms and school facilities to accommodate student enrollment in neighborhood schools, including to accommodate growth in the following high school cluster areas: Clairemont High School cluster, Crawford High School cluster, Henry High School cluster, Hoover High School cluster, Kearny High School cluster, La Jolla High School cluster, Lincoln High School cluster, Madison High School cluster, Mira Mesa High School cluster, Mission Bay High School cluster, Morse High School cluster, Point Loma High School cluster, SDHS cluster, Scripps Ranch High School cluster, Serra High School cluster and University City High School cluster;
- Renovate existing inadequate classrooms and support facilities;
- Improve or construct school buildings, facilities, parking lots, and structures to meet the needs at neighborhood schools;
- Provide, expand, or improve facilities to meet the needs of special education students;
- Improve and install playfields for student and neighborhood joint-use with the City;
- Develop or improve education, recreation and/or community resource facilities for joint-use to support students and neighborhood families;
- Remove or replace old or inadequate buildings with new facilities;
- Remove excess portable classroom buildings to reduce utility and maintenance costs;

- Improve visual and performing arts facilities;
- Improve physical education, athletic facilities, and turf fields;
- Expand classroom capacity and school facilities to meet projected area growth needs;
- Expand classroom, science/technology lab capacity and school facilities to meet projected needs;
- Expand and develop science education facilities to support students for joint-use; and
- Expand or develop joint-use athletic facilities.

San Diego High School Campus

Building Systems Repair and Replacement

- Correct interior and exterior deficiencies including finishes and fixtures;
- Upgrade old/deteriorated electrical systems, wiring and panels;
- Repair or replace aging, leaky roofs;
- Repair or replace cracked and broken concrete sidewalks, hardscape, and exterior infrastructure;
- Repair or replace deteriorating plumbing and underground sewer systems;
- Repair or replace doors and windows;
- Repair or replace security cameras;
- Replace synthetic turf at football field;
- Replacement of old light fixtures and fluorescent light ballasts; and
- Sand and refinish wood stage, gym, and classroom floors.

School Improvements to Support Student Learning and Instruction

- Provide up-to-date classroom and instructional technology required for 21st century student learning and teaching; and
- Upgrade wired and wireless infrastructure and equipment to support technology systems and leverage federal and state matching funds for school technology programs.

College, Career and Technical Education Facility Improvements

• Construct college, career, and technical education facilities.

School Improvements to Support Student Health, Safety and Security

• Provide school site security improvements, including increased lighting, fencing, and vandalism and intrusion safeguards;

- Upgrade and expand student food service areas and kitchens; and
- Replace obsolete fire alarms and update emergency communications systems.

Improve School Accessibility and Code Compliance Upgrades

- Improve accessibility for disabled persons and comply with ADA and Title 24; and
- Modernize and renovate physical education facilities, playgrounds, and fields to comply with Title IX gender equity requirements.

Quality Neighborhood Schools

- Construct new visual and performing arts theater;
- Plan and construct classrooms and school facilities to accommodate student enrollment; and
- Improve physical education, athletic facilities, and turf field.

1.1.2.4 Measure YY

On November 6, 2018, more than 60 percent of San Diego voters approved Measure YY, a \$3.5 billion bond measure to fund school improvements, including a focus on school safety and creating the classrooms of the future. Improvements to be funded under Measure YY are identified for all school campuses within the District, as well as for specific schools, including SDHS. Improvements that apply to all campuses Districtwide, as well as specifically for SDHS, are listed in the measure language associated with Measure YY are described below (District 2018).

Districtwide

Unless otherwise noted, the following projects are authorized to be completed at any of the District's school sites, including SDHS.

School Security, Health, and Safety Improvements

- Improve school security, emergency communications systems, controlled-entry points, and door locks;
- Provide school site security improvements, including increased lighting, fencing, and vandalism and intrusion safeguards;
- Plumbing upgrades for lead solder remediation;
- Improve the seismic structural integrity of school buildings to better protect students and staff in the event of an earthquake;
- Reconfigure second floor exiting to improve safety of ingress and egress for students;
- Replace obsolete fire alarms/sprinklers and update emergency communications systems;
- Remove, remediate, and abate asbestos, mold, and other potentially dangerous substances;
- Provide playground shade shelters for students;

- Upgrade and expand student food service areas and kitchens as required to improve student access to a variety of nutritious meals;
- Vehicular/pedestrian circulation safety and parking; and
- Health and wellness centers at schools and nurses office improvements.

Major Repair Replacement and Modernization

- Replace or upgrade outdated electrical systems, aging wiring, electrical panels, and lighting;
- Repair or replace deteriorating plumbing and underground sewer systems;
- Repair deteriorated interior and exterior finishes and fixtures;
- Repair, replace worn or damaged doors and windows;
- Repair or replace roof systems;
- Repair or replace outdated, inefficient HVAC systems to save energy and reduce maintenance costs;
- Repair or replace cracked and broken concrete sidewalks, hardscape, and exterior infrastructure;
- Repair building foundations and slabs;
- Resurface, repair or upgrade asphalt parking lots and playground areas;
- Replace or upgrade auditorium sound, intercom systems and public address systems;
- Repair or replace playground equipment;
- Replace or resurface track and turf surfaces as needed;
- Repair or restore classroom and building interior and exterior finishes and fixtures;
- Repair or replace damaged or broken hardscape surfaces and exterior infrastructure;
- Complete major electrical, infrastructure, plumbing, sewage, structural systems, HVAC, and landscaping renovation, upgrades, and renovations to school sites; and
- Significant repair and replacement needs exist, construct new buildings to replace current facilities, work to be coordinated with other capital projects.

Improvements to Support Innovations in Education and Access to Technology

- Provide up-to-date classroom and instructional technology required for 21st century student learning and teaching;
- Upgrade wired and wireless infrastructure and equipment as needed to support technology systems with potential federal and state matching funds for school technology programs;
- Provide or upgrade school facilities to support education pathways including science technology engineering and mathematics (STEM) labs, maker spaces, dual language emersion and visual and performing arts;

- Upgrade, furnish, equip, acquire and/or install up-to-date classroom and instructional technology in classrooms and related school facilities;
- Upgrade and expand enterprise information systems and technology throughout the District to support 21st century classrooms, efficient operations, student, and parent services;
- Provide, expand, or improve facilities for special education students;
- Construct collaborative learning spaces, maker spaces and labs;
- Provide or expand online education facilities and innovation centers; and
- Create innovative, interactive, and collaborative outdoor learning spaces.

College, Career and Technical Education Facility Improvements

- Upgrade and expand classrooms, labs, and specialized facilities for career and vocational technology programs;
- Build specialized school facilities for career technical education; and
- Construct school facilities on leased property, including on property owned by other public agencies for joint-use with other public agencies.

Improve School Accessibility & Code Compliance Upgrades

- Improve accessibility for disabled persons and comply with ADA and Title 24;
- Modernize, renovate, and expand restrooms to improve accessibility;
- Modernize and renovate physical education facilities, playgrounds, and fields to comply with Title IX gender equity requirements; and
- Repair aging portable classrooms to comply with code requirements.

Energy Efficiency and Sustainability

- Install energy efficient (LED/fluorescent) lighting systems with occupancy sensors;
- Install solar lighting systems;
- Increase building insulation and dual-pane windows;
- Replace older inefficient mechanical and central controls systems with energy efficient systems;
- Purchase and install solar panels and other devices to generate electricity from sunlight where feasible;
- Install innovative systems to produce energy, store energy and/or reduce consumption;
- Install recycled water systems for irrigation and make connections to recycled water supplies for irrigation purposes where feasible; and
- Install water saving efficient toilets and fixtures.

Neighborhood Learning Centers

- Plan, acquire property for, design and construct new classrooms and school facilities to accommodate student enrollment in neighborhood schools, including to accommodate growth in the following high school cluster areas: Clairemont High School cluster, Crawford High School cluster, Henry High School cluster, Hoover High School cluster, Kearny High School cluster, La Jolla High School cluster, Lincoln High School cluster, Madison High School cluster, Mira Mesa High School cluster, SDHS cluster, Scripps Ranch High School cluster, Serra High School cluster and University City High School cluster;
- Renovate or replace existing inadequate classrooms and support facilities;
- Improve or construct school buildings, facilities, parking lots, and structures to meet the needs at neighborhood schools;
- Provide facilities to meet the needs of special education students;
- Develop and expand visual and performing arts theatres;
- Improve and install playfields for student and neighborhood joint-use with the City;
- Develop and build marine science blue technology focused education facilities;
- Build visual and performing arts schools and a theatres/concert halls;
- Construct health science focused schools;
- Develop and build language education facilities;
- Construct recreational and swimming facilities, including for joint-use with other public agencies and public benefit non-profit entities;
- Develop or improve education, recreation and/or community resource facilities for joint-use to support students and neighborhood families;
- Remove or replace old or inadequate buildings with new facilities;
- Remove excess portable classroom buildings to reduce utility and maintenance costs;
- Acquire property for, design and construct new school administrative facilities and/or renovate existing school administration center facilities;
- Improve or expand visual and performing arts facilities and classrooms;
- Construct or improve gymnasiums at middle and high schools;
- Improve and expand physical education facilities, athletic facilities, and turf fields;
- Install, renovate, or replace athletic fields and stadium lighting;
- Improve or expand high school stadiums;
- Expand classroom capacity and school facilities to meet projected area growth needs;
- Expand classroom, science/technology lab capacity and school facilities to meet projected needs;

- Expand and develop science education facilities to support students for joint-use; and
- Expand or develop joint-use athletic facilities.

Growth

• Construct school facilities to accommodate projected growth in high school cluster areas.

School Site and Classroom Funds

• Allocate at every elementary, middle, and high school \$100 per student (as "site discretionary funds") to be spent on qualified, permitted projects that shall remain property of the District.

San Diego High School Campus

Improvements to Support Innovations in Education and Access to Technology

- Provide up-to-date classroom and instructional technology required for 21st century student learning and teaching;
- Provide, expand, or improve facilities for Special Education students;
- Upgrade wired and wireless infrastructure and equipment as needed to support technology systems;
- Provide facilities to support Education Pathways including STEM Labs; and
- College, career, and technical education facility improvements.

School Security, Health, and Safety Improvements

- Upgrade and expand student food service areas and kitchens as required to improve student access to a variety of nutritious meals;
- Plumbing upgrades for lead solder remediation;
- Vehicular/pedestrian circulation and parking;
- Replace obsolete fire alarms/sprinklers and update emergency communications systems; and
- Provide school site security improvements where needed, including increased lighting, fencing, and vandalism and intrusion safeguards.

Accessibility and Code Compliance Upgrades

- Modernize and renovate or expand restrooms to improve accessibility;
- Modernize and renovate physical education facilities, playgrounds and fields as needed to comply with Title IX gender equity requirements; and
- Improve accessibility for disabled persons and comply with the ADA and Title 24 where required.

Major Repair, Replacement, and Modernization

- Repair or replace damaged or broken hardscape surfaces and exterior infrastructure;
- Resurface and repair of asphalt parking lots and playgrounds as needed;
- Repair deteriorated interior and exterior finishes and fixtures;
- Construct new buildings to replace facilities where repair and replacement needs are considered substantial;
- Repair or replace natural or synthetic turf playfields as needed;
- Repair or replace worn or damaged doors and windows;
- Repair or upgrade electrical systems, including wiring, electrical panels, and lighting;
- Replace or upgrade auditorium sound and public address systems;
- Repair or replace aged/deteriorated plumbing and sewer systems; and
- Repair or replace roof systems.

Neighborhood Learning Centers

- Renovate/replace high school gymnasium;
- Construct auxiliary gymnasium;
- Remove or replace old and inadequate buildings with new facilities;
- Improve and expand physical education, athletic facilities, stadiums, and fields;
- New athletic facility lighting; and
- Construct new visual and performing arts facilities as required.

Energy Efficiency and Sustainability

• Provide energy efficiency improvements to buildings.

1.2 Notice of Preparation

This EIR has been prepared in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC], Section 21000, et seq.) and the procedures for implementation of CEQA set forth in the Guidelines for Implementation of CEQA (California Code of Regulations [CCR], Section 15000, et seq.; State CEQA Guidelines). The District is the Lead Agency in the preparation of this EIR, as defined by Section 15051 of the State CEQA Guidelines.

Prior to the preparation of this EIR and during the early stages of the environmental review process, the District prepared a Notice of Preparation (NOP) and submitted it to the Office of Planning and Research's State Clearinghouse (SCH), the City and their list of interested parties, and the public at large for a 30-day review period from May 29, 2020 to June 29, 2020 (SCH #2020059044). In addition, the District held a virtual scoping meeting on June 17, 2020. The NOP described the Proposed Project, provided notification of EIR preparation, and solicited comments from the public to guide the District's

determination of the scope of the EIR and the environmental issues that should be reviewed. During the NOP public review period, a total of three comment letters were received, including comment letters from the Native American Heritage Commission (NAHC), the California Department of Transportation (Caltrans), and the Balboa Park Heritage Association (BPHA). Public comments related to traffic impact analysis on state facilities and consistency with bicycle, pedestrian, and public transportation facilities; compliance with Assembly Bill (AB) 52 relative to cultural resources; and discussion of the history of the current lease with a recommendation that the lease not be renewed and the Project site returned to the City as parkland. A copy of the Scoping Letter, NOP, and written comments received during the NOP review period are contained in Appendix A. Public comments received during the scoping process have been taken into consideration during the preparation of this EIR. An outline of the issues noted during the scoping process is contained in the *Areas of Controversy/Issues to be Resolved* discussion in the Summary section of this EIR.

1.3 Scope and Content of the EIR

This EIR provides a detailed description of the Proposed Project (Chapter 2) and the environmental review conducted for the Proposed Project (Chapters 3, *Environmental Analysis*, and 4, *Additional Considerations*). Based on the preliminary analysis during the scoping process, it was determined that implementation of the Proposed Project would not have an adverse effect on aesthetic resources; agriculture and forestry resources; biological resources; energy; hydrology and water quality; land use and planning; mineral resources; population and housing; public services; recreation; and utilities and service systems. In accordance with State CEQA Guidelines Section 15128, a brief explanation indicating the reasons that the effects on these resources would not be significant is provided in Chapter 4.

The following environmental issue areas were identified for the Proposed Project as being potentially significant based on the scoping process and are addressed in this EIR: air quality; cultural resources; geology and soils; greenhouse gas emissions; hazards; noise and vibration; transportation and traffic; and tribal cultural resources. Additional environmental review was conducted for these issue areas, and the results are presented in Chapter 3 along with mitigation measures that the District has incorporated into the Proposed Project to avoid some of the impacts or reduce them to less-than-significant levels. In addition, the remaining chapters of the EIR are Chapters 5, *Cumulative Impacts*; 6, *Alternatives*; 7, *References*; and 8, *List of Preparers and Agencies Consulted*.

1.4 Intended Uses of the EIR

The purpose of this EIR is to inform the District's decision-making body, agencies, and members of the public as to the nature of the Proposed Project; the ways in which the Proposed Project would affect the physical environment; and the measures that the District would implement to mitigate the identified environmental impacts. The EIR will be used by the District's Board of Education during the decision-making process for the Proposed Project. The Board of Education must first decide whether to certify the EIR, signifying that the document adequately complies with environmental review procedures required by CEQA, and then must use the descriptions and analysis presented in the document to make an informed decision on approval of the proposed WSM and LRFMP improvements.

The WSM improvements are anticipated to occur in 2021 and be completed by the end of 2023. The LRFMP improvements would be completed after the WSM improvements, as funding is available over multiple years, and are anticipated to be completed between 2024 and 2035. LRFMP improvements are conceptual and specific designs of the individual improvements have not yet been developed by the

District. Therefore, this EIR analyzes the WSM improvements at a project level and the LRFMP improvements at a programmatic level.

As details for future LRFMP improvements become available, the District will compare the conceptual information available at the time this EIR was prepared with updated LRFMP details. Pursuant to State CEQA Guidelines Section 15162(a), the District will then consider if substantial changes have occurred and that those changes would result in new or substantially more severe environmental impacts when compared to the impacts disclosed in this EIR. Substantial changes will be considered related to the following: (1) the details of the LRFMP improvements; (2) the circumstances (existing conditions) at the time the LRFMP improvements are implemented; and (3) new information that was not and could not have been known at the time this EIR was prepared. If it is determined that there would be new or substantially greater environmental impacts as a result of substantial changes associated with future LRFMP improvements, the District would conduct separate environmental review in compliance with CEQA to identify and disclose potential environmental impacts at a project level.

1.5 Matrix of Project Approvals and Permits

The environmental review process for the Proposed Project involves several responsible agencies that would need to grant approvals or permits for the Proposed Project to be implemented. Table 1-1, *Permits and Agency Approvals*, lists the permits and approvals required of the Proposed Project by the District and other agencies.

Approving Agency	Permit or Approval
San Diego Unified School District Board of	Certification of the EIR; Proposed Project concept
Education (District)	approval for the WSM and LRFMP components
Office of the Division of State Architect (DSA)	Administrative approval of Proposed Project design for compliance with California Code of Regulations Title 24 Building Code
City of San Diego (City)	Ground lease agreement renewal approval; new campus driveway approval and sponsorship at Park Boulevard; new campus driveway and Park Boulevard Freeway Maintenance Agreement with Caltrans; public right-of- way and traffic control permits for work within City streets; and a joint-use agreement for public use of the aquatic center
California Department of Transportation (Caltrans)	Approval of a Project Report and/or New Roadway Connection Report for the new campus driveway at Park Boulevard; and an Encroachment Permit within right-of-
Federal Aviation Administration (FAA)	way (Park Boulevard) Determination of No Hazard (DNH) or DNH with Marking and Lighting Requirements

Table 1-1 PERMITS AND AGENCY APPROVALS

2.0 ENVIRONMENTAL SETTING AND PROJECT DESCRIPTION

This chapter describes the existing conditions at the time the NOP was released in June 2020 and the proposed changes that would occur with the approval and implementation of the Proposed Project at the SDHS campus (Project site).

2.1 ENVIRONMENTAL SETTING

2.1.1 Setting

The Proposed Project would occur on an approximately 34-acre school campus at 1405 Park Boulevard in downtown San Diego. The campus is in the northeast corner of the City of San Diego's Downtown Community Plan area within the East Village neighborhood, which is characterized by multi-story residential, commercial, office, and institutional buildings. The Project's location in San Diego County is depicted on Figure 2-1, Regional Location, while Figure 2-2, Project Vicinity, depicts an aerial view of the campus and immediately surrounding areas of downtown San Diego. As shown, the Project site is bound by Park Boulevard to the west, I-5 freeway to the north and east, and Russ Boulevard to the south. Areas adjacent and south of the Project site along Russ Boulevard between Park Boulevard and 16th Street include Garfield High School and the San Diego City College, which comprises single- and multi-story buildings south of Russ Boulevard for several blocks until Broadway, a major east-west street. Areas further south include multi-story residential development in the East Village neighborhood. Areas east and north of the campus include I-5 as it loops around and adjacent to the campus; however, the school campus is separated from I-5 by an approximately 30-foot sloped bank and the campus occurs at a higher elevation than I-5. Further to the north and opposite of I-5 is the southern extent of Balboa Park, which is a large urban park. Within Balboa Park, the Naval Medical Center is located opposite the high school, north of I-5. Areas west of the Project site include educational buildings associated with San Diego City College, followed by SR 163, which occurs about 300 feet west of the Project site.

2.1.2 Project Site

The District currently holds a lease from the City to operate SDHS on an approximately 34-acre site that expires in 2024. The high school serves students in grades 9 through 12 and consists of several singleand multi-story buildings, portable classrooms (relocatables), several parking areas, hardcourt areas, ballfields, an outdoor stadium for school athletic events (Balboa Stadium or stadium), and ornamental landscaping (see Figure 2-3, *Existing Campus Layout*). Enrollment at SDHS for the 2019-2020 school year is estimated at 2,644 students and has a capacity for up to 2,759 students (District 2019). School is typically in session from 7:30 a.m. to 2:30 p.m. on Mondays, Wednesdays, Thursdays, and Fridays, and from 7:30 a.m. to 1:25 p.m. on Tuesdays.

SDHS was established in 1882; however, most of the campus was rebuilt in the early 1900s and then again in the mid-1970s to comply with state earthquake standards. As a result, buildings 500, 600, and 700 are the only buildings on campus that pre-date the mid-1970s and were built between 1938 and 1950. SDHS generally consists of 11 permanent buildings (buildings 100 through 1100) in the southwest part of the campus that surround a student quad area. Balboa Stadium occupies most of the eastern part of campus along with a large paved parking lot along the eastern campus boundary adjacent to I-5.

Paved hardtop areas, parking, and ballfields, as well as 10 relocatables that are not in use and previously were a part of East Village High School, occupy the northern part of the campus.

Regional access to the site is provided via I-5 and SR 163 and local access is provided primarily from Russ Boulevard, where student drop-off and parking areas are located. A pedestrian foot bridge spans across I-5 from the northeastern part of the campus to a parking lot at the Naval Medical Center. Campus parking is available within several small parking lots on campus, including a lot along Park Boulevard at the western edge of campus, in the northern part of the campus near the baseball and softball fields, and in the eastern part of campus near I-5. There are approximately 400 parking spaces within the Project site to serve the high school campus, of which 300 spaces are in a parking areas around Balboa Stadium and the remaining 100 spaces are along the western part of the campus near Park Boulevard.

2.2 **PROJECT DESCRIPTION**

2.2.1 Overview

The Proposed Project involves the renewal of a lease between the City and the District and upgrades to the existing school campus buildings and facilities. The lease renewal would extend the permission for the District to operate at the Project site beyond 2024 for an additional 99 years. Most of the existing SDHS campus buildings were constructed in the 1970s and while the high school has been updated over the years, much of the site needs renovations, repairs, and/or upgrades. These improvements would occur as part of Propositions S, Z, and YY in the near-term (referred to as WSM improvements) and would involve the removal and addition of school buildings and structures, as well as a new entrance into the campus from the combined SR 163 off-ramp and I-5 on-ramp in the long-term (referred to as LRFMP improvements).

While the individual components of the Proposed Project are described in more detail below, the WSM improvements generally would include minor improvements and reconfigurations of existing school buildings, parking areas, and student quad areas, as well as improvements to existing sports fields. The conceptual improvements associated with the LRFMP include the demolition and construction of various campus buildings, site enhancements, and a new entrance into the campus from the combined SR 163 off-ramp and I-5 on-ramp.

2.2.1.1 Project Objectives

CEQA requires that an EIR contain a "statement of the objectives sought by the proposed project." Under CEQA, a "clearly written statement of objectives will help the Lead Agency develop a reasonable range of alternatives to evaluate the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations. The statement of objectives should include the underlying fundamental purpose of the project" (State CEQA Guidelines Section 15124(b)). The District has identified the following objectives for the Proposed Project:

- 1. Use Propositions S and Z, and Measure YY funds for the renovations, repairs, and/or upgrades of the campus that would benefit student learning and health, safety, and security;
- 2. Improve student learning and instruction;

- 3. Conduct major building systems repair and replacement of existing aging facilities throughout the campus;
- 4. Provide for additional campus access from Park Boulevard;
- 5. Improve school accessibility and code compliance through modernization improvements;
- 6. Improve parking opportunities for faculty, students, and visitors; and
- 7. Improve existing athletic facilities and provide for additional athletic facilities.

2.2.2 Whole Site Modernization Improvements

The WSM improvements would occur upon the execution of a lease agreement between the City and the District. Campus-wide updates would involve interior and exterior improvements and reconfigurations of school buildings, the addition of building identification graphics, a public address system for emergency use, surveillance cameras, and interior and exterior lighting improvements. Changes in enrollment or student capacity are not anticipated as a result of the proposed WSM improvements. A summary of the specific WSM improvements is provided below and summarized in Table 2-1, *Overview of Whole Site Modernization Improvements*.

School Buildings

The WSM improvements would involve interior and exterior modifications/improvements to several school buildings throughout the campus. Interior upgrades would consist of replacing flooring, ceiling tiles, doors, classroom storage cabinets, lighting, room signage, clocks and speakers, and window blinds. Exterior upgrades would include window replacement, graphic signage additions to buildings, new and existing lighting upgrades and improvements, and the addition of surveillance cameras and a public address system to be used during emergencies. Also, several buildings would receive new or replaced HVAC units (see Table 2-1 for details). Proposed HVAC improvements would involve new or replaced equipment on building rooftops.

Most of the WSM improvements would occur at buildings 100, 300, 400, 500, and 600. WSM plans for building 100 include interior redesigns on the first and second floors, HVAC replacement, seismic retrofitting, photovoltaic (PV) improvements, exterior redesign to include a canopy outside the building, new and replacement windows, roof replacement, and an addition to the existing administration area of approximately 700 square feet (sf). Building 300 is primarily a library building with counselor's offices and two separate spaces on the northwest and southeast corners of the building that serve as custodial and kitchen areas, respectively. On the first floor, the counselor's offices would be reconfigured, and the HVAC system would be realigned. On the second floor, a projector and screen would be installed to create a school theater. Additionally, an elevator located at the south side of building 300 would be removed. Buildings 100, 400, 500, and 600 each include replacement of interior features, including flooring, base, doors and frames, ceilings, casework, room signage, and window blinds, and they all would receive exterior improvements, including signage, surveillance cameras, and a public address system. Exterior water protrusion issues would be addressed for buildings 400 and 500. Additionally, the existing pedestrian foot bridge connecting buildings 100 and 300 would undergo façade improvements. Temporary closure of the pedestrian foot bridge is anticipated during improvements within the parking lot where the bridge begins on campus.

Table 2-1
OVERVIEW OF WHOLE SITE MODERNIZATION IMPROVEMENTS

Building/Facility	Uses	Proposed WSM Improvements
Campus-Wide		New campus banners; building identification graphics;
		surveillance cameras; clocks and speakers;
		interior/exterior lighting improvements; replacement of
		emergency public address system; and security fencing
100	Main Office;	Façade improvements; building addition (approx. 700 sf);
	Classrooms	roof replacement; HVAC replacement; window additions
		and replacements; accessibility and interior building
		reconfiguration; seismic upgrades; PV replacement;
		façade improvements to bridge connecting to building
		300; realignment of building electrical and plumbing
200	Gymnasium; Support	HVAC installation; plumbing realignment
	Spaces	
300	Kitchen/Custodial;	Storefront addition; HVAC realignment; interior building
	Medical; Classrooms;	demolition/reconfiguration (including counselor's office
	Library	renovation); realignment of building plumbing; new
400		library projector and screen
400	Classroom; Performing	Interior building reconfiguration and upgrades; fix water
500	Arts Center	intrusion
500	Classrooms	HVAC installation; window replacement; exterior paint;
		interior building reconfiguration; realignment of
		plumbing; fix water intrusion; new paving, fencing, and canopy on east side of building
600	Classrooms (JROTC ¹)	HVAC installation; exterior paint; interior building
000		reconfiguration; realignment of plumbing
700	Classrooms	Emergency public address system
800	Classrooms	HVAC installation; plumbing realignment
900	Classrooms	Roof replacement for mechanical enclosures; repair
500		exterior steel coating; HVAC replacement
1000	Science Lab	Roof replacement for mechanical enclosures; repair
		exterior steel coating; HVAC replacement
1100	Classrooms	Replace emergency public address system
Relocatables	Classrooms	None
Athletic Fields		Replacement bleachers, batting cages, and turf and
		irrigation systems; new dugouts, a concessions/restroom
		building, fencing, an LED scoreboard, and graphic signage
Balboa Stadium		None
Parking (West)		None
Parking (around		Demolish, grade, pave and align parking lot entrance
Balboa Stadium)		with 16 th Street; replace underground utility line and
		backflow; a net loss of approximately 50 parking spaces
Student Quad (Upper)		Demolish and construct new student quad with exterior
		features, lighting, and food kiosk
Student Quad (Lower)		Demolish and construct new student quad with exterior
1 IPOTC - Junior Poconyo (features, lighting, and food kiosk

¹ JROTC = Junior Reserve Officers' Training Corps

HVAC = heating, ventilation, and air conditioning; PV = photovoltaic; WSM = Whole Site Modernization

The outdoor student quad area (approximately 61,430 sf consisting of a lower and upper level) would be demolished and replaced with an updated student quad area. Specifically, a lower level student quad would be east of building 100 and south of building 300 and an upper level student quad would be north of building 400 and south of building 800. The student quad area would be constructed with an architectural design created to accommodate code accessibility compliance. Each student quad would include new ramps, stairs, lighting, signage, food kiosks, landscaping, irrigation, and underground storm drain and sewer lines. The two new food kiosks would be equipped with serving lines, support areas, storage, preparation areas, restrooms, and HVAC systems.

Athletics

The baseball and softball athletic fields in the northern part of the campus would be upgraded as part of the WSM improvements. Specifically, new dugouts, a concessions stand and restrooms, and a scoreboard would be installed, along with replaced turf and irrigation, perimeter fencing, and batting cages. When completed, the softball field would accommodate up to approximately 100 spectators; however, attendance at baseball and softball events is not anticipated to increase due to the replacement of existing bleachers. Upgrades at the athletic fields would not involve improvements related to a public address system or nighttime field lighting.

Access and Parking

Parking lot improvements along the east and north side of the campus would include the demolition and replacement of the existing pavement, site walls, landscaping, irrigation, and exterior lighting. Before the parking lot is restored and striped, the area would be graded to accommodate code accessibility compliance. As part of the upgrades to the east parking lot, the southern entrance into the parking lot would be realigned with 16th Street. The approximately 300 spaces in the eastern parking lot would be reduced by an estimated 50 spaces as a result of the parking improvements, for a proposed total of about 250 spaces at the eastern parking lot and 100 spaces at the western parking lot upon completion of the WSM improvements. Temporary closure of the pedestrian foot bridge that spans I-5 is anticipated during repaving of the parking lot, during which time students would cross the I-5 along Park Boulevard.

2.2.3 Long-Range Facilities Master Plan Improvements

The LRFMP identifies future improvements over the life of the proposed lease renewal, which would grant the District permission to continue to utilize the Project site for school use for an additional 99 years. The timing and phasing of the LRFMP projects are not known and the details of the proposed improvements are conceptual; however, no change in enrollment or student capacity is anticipated with the proposed LRFMP improvements. The specific LRFMP improvements are described below, summarized in Table 2-2, *Overview of Long-Range Facilities Master Plan Improvements*, and depicted on Figure 2-4, *Site Plan (Long-Range Facilities Master Plan)*. The LRFMP improvements would primarily involve the demolition of three school buildings (buildings 400, 600, and 700) and the construction of seven school building 400, food service and custodial building 700, field house, and aquatic center). Other improvements would involve upgrades at Balboa Stadium, new campus entrances/exits via Park Boulevard and Russ Boulevard, and site enhancements consisting of landscape and hardscape improvements west of building 100 near the corner of Russ Boulevard and Park Boulevard.

Building/Facility	Туре	Proposed LRFMP Improvements
100	Main Office; Classrooms	None
200	Gymnasium; Support Spaces	None
300	Kitchen/Custodial; Medical; Classrooms; Library	None
400	Classroom; Performing Arts Center	Demolish and replace with new classroom building with lower level parking with 100 spaces off Russ Boulevard
500	Classroom	None
600	Classroom (JROTC ¹)	Demolish and do not replace (repave site)
700	Classroom	Demolish and replace with food service and custodial building
800	Classroom	None
900	Classroom	None
1000	Science Lab	None
1100	Classroom	None
Relocatables	Classrooms	Remove from the campus
Performing Arts Building		Construct performing arts building
Auxiliary Gymnasium		Construct auxiliary gymnasium and remove approximately 50 parking spaces
Basketball Courts		Construct blacktop basketball courts
Parking (West)		Construct parking structure with 100 spaces and tennis courts above
Parking (East and North)		None
Athletic Fields		None
Balboa Stadium		Construct new field house
Aquatic Center		Construct new aquatic center
Site Access		Addition of entrance/exits from Park Boulevard and Russ Boulevard
Site Enhancement		Provide frontage enhancements near Russ and Park Boulevard intersection

 Table 2-2

 OVERVIEW OF LONG-RANGE FACILITIES MASTER PLAN IMPROVEMENTS

¹ JROTC = Junior Reserve Officers' Training Corps.

LRFMP = Long-Range Facilities Master Plan

School Buildings

The LRFMP improvements would involve building demolition and construction throughout the campus. Building demolition of buildings 400, 600, and 700 would occur to accommodate a new building 400 and a new custodial and food service building that would serve the high school campus. Of the seven proposed school buildings as part of the LRFMP improvements, three are proposed in the westerncentral part of the campus and four are proposed along Russ Boulevard. The three proposed buildings in the western-central part of campus would consist of a performing arts building, parking structure with tennis courts above, and auxiliary gymnasium. The performing arts building would replace the existing performing arts center at building 400 and would be constructed where several blacktop basketball courts and relocatables occur. The performing arts building would consist of an approximately 30,000 sf space dedicated to dance, music, and theater performances. The performing arts building would include approximately 500 seats and would be used during and after school hours. For events occurring after school hours, it is anticipated that events would occur during any given day of the year until 11:00 p.m., similar to existing operations at the current performing arts center at building 400. New blacktop basketball courts would be constructed just east of the performing arts building and would replace existing handball courts. The proposed auxiliary gymnasium would support the existing gymnasium at building 200 and would include an approximately 11,000 sf structure up to about 25 feet in height. Hardtop tennis courts would be constructed on top of the proposed parking structure (to replace the existing surface tennis courts) and would be secured with fencing.

Athletics

Improvements at Balboa Stadium would include upgraded ticket booths, concessions, and seating, including a new path of travel into the stadium for the visitors' side. Upgrades at Balboa Stadium would not increase the capacity of the stadium. Improvements related to a public address system or nighttime field lighting would not be included in the work done for Balboa Stadium. The proposed field house building would be located at the south end of the football field at Balboa Stadium and would consist of a 17,500 sf structure, 32 feet in height, and would include lockers/showers, equipment storage, a weight room adaptive room, team rooms, and support spaces (e.g., mechanical and electrical).

In the southeastern part of the campus, a 10,000-sf privately-funded aquatic center is proposed that would include a 25 yard by 35 meter swimming pool¹, restrooms, changing rooms, pool equipment room, storage room, and concessions. The pool area would include a pool deck, bleachers, spectator area, diving board, pool lighting, and pool fencing and gates. The capacity of the aquatic center is estimated to accommodate up to 439 persons and would be a shared facility between the school and the public. It should be noted that no funding source for the privately-funded aquatic center has been identified as of the preparation of this EIR. The anticipated aquatic center schedule is provided below in Table 2-3, Aquatic Center Schedule, and is modeled after the recently-approved District/City Joint Use Agreement for the new Standley Park aquatic facility currently under construction. Final operational details of the proposed aquatic center will be further defined as a funding source is identified. As shown, public use is expected in the early mornings on weekdays, on Saturday mornings, and on Sunday afternoons for most of the year (i.e., 37 weeks during the school year and four weeks winter and spring breaks). For seven weeks in the summer when school is not in session, school use would not occur and public use would be expanded to weekday morning and afternoons, Saturday mornings and afternoons, and Sunday afternoons. The aquatic center would be closed for four weeks leading up to the end of the school year. Staffing at the aquatic center is anticipated to include two employees during school hours and up to 10 employees during peak use on weekends.

¹ Pool lengths are measured in meters and yards to allow for different types of swimming competitions.

	Public	SDHS
School Year (37 weeks)		
Weekdays	7:00 a.m. – 9:30 a.m.	9:30 a.m. – 6:00 p.m.
Saturdays	7:00 a.m. – 11:00 a.m. ¹	7:00 a.m. – 11:00 a.m. ¹
Sundays	12:00 – 3:00 p.m.	None
Winter and Spring Breaks (4 weeks)		
Weekdays	7:00 a.m. – 9:30 a.m.	10:00 a.m. – 4:00 p.m.
Saturdays	7:00 a.m. – 11:00 a.m.	None
Sundays	12:00 – 4:00 p.m.	None
Summer Break (7 weeks)		
Weekdays	7:00 a.m 7:00 p.m.	None
Saturdays	7:00 a.m. – 4:00 p.m.	None
Sundays	12:00 – 4:00 p.m.	None

Table 2-3 AQUATIC CENTER SCHEDULE

¹ Pool use on Saturdays during the school year is anticipated up to 6 times by the SDUSD and up to 31 times by the public.

Access and Parking

As part of the LRFMP improvements, two new campus entrance/exit points on Russ Boulevard would be constructed to access the proposed custodial and food service building and a lower level parking garage at the proposed classroom building replacing building 400. A new campus entrance/exit would be constructed for vehicular access from Park Boulevard to the campus near the proposed performing arts building and would align with the combined SR 163 off-ramp and I-5 on-ramp. Regarding changes to parking at SDHS, LRFMP improvements would involve an increase of about 150 parking spaces. Specifically, the parking created at the performing arts building and replacement 400 building would each include 100 new parking spaces (for a combined total of 200 parking spaces) and construction of the auxiliary gymnasium would result in the loss of approximately 50 parking spaces. Combined with the reduction of 50 parking spaces at SDHS during the WSM improvements, the combined change in parking spaces for the WSM and LRFMP improvements would result in a net increase of about 100 parking spaces.

2.2.4 Construction

Construction of the WSM improvements is anticipated to begin in 2021 and be completed by the end of 2023 (less than 36 months). Construction timing for the LRFMP improvements is uncertain; however, they would occur after the WSM improvements, between the years of 2024 and 2035. All construction activities and staging would occur within the boundaries of the Project site, except for the proposed campus entrance/exit as part of the LRFMP implementation, which would involve off-site construction within Park Boulevard at the combined SR 163 off-ramp and I-5 on-ramp within Caltrans right-of-way. Estimates of soil disturbance during the WSM improvements include 4,315 cubic yards (cy) of soil export and 4,000 cy of soil import. Soil disturbance depths are anticipated to extend to about 11 feet beneath the ground surface. For the LRFMP improvements, no soil import or export is anticipated.

Construction may occur during the school year. Construction would be limited to the hours of 7 a.m. to 7 p.m. to comply with the City's noise ordinance. Notices would be disseminated to surrounding

educational uses prior to construction activities to inform staff and students of construction timing and protocols to leave windows and doors shut, as feasible, during noisy construction events.

Prior to construction, the District would be required to notify the FAA in compliance with FAA Part 77, Subpart B due to the Project's location near the San Diego International Airport (SDIA). Notification would involve completing FAA Form 7460-1 "Notice of Proposed Construction or Alteration" and submitting to the FAA for review. During construction, the District would implement standard operating procedures or contractor specifications to comply with federal and state environmental regulations, including the Migratory Bird Treaty Act (MBTA), the California Building Code, and the Construction General Permit. Table 2-4, Construction Standard Operating Procedures and Specifications, includes a list of specific measures that the District implements for all construction projects. Stormwater best management practices (BMPs) limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. The Storm Water Pollution Prevention Plan (SWPPP) requires a description of the Project site, identification of sources of sediment and other pollutants that may affect the quality of stormwater discharges, a list of BMPs to provide sediment and erosion control, waste-handling measures and non-stormwater management. The specific BMPs that would be implemented for both the WSM and LRFMP improvements would be identified during preparation of a SWPPP, which is required prior to construction. Typical construction BMPs include soil cover of inactive areas and the use of gravel bags and fiber rolls.

Measure	Description
CM-1 – Compliance with	When feasible, vegetation removal will occur outside of the breeding season
Migratory Bird Treaty Act	(February 1 through August 15). For all construction activities, including
	vegetation removal, that occur between February 1 and August 15:
	 A preconstruction survey shall be conducted within 50 feet of vegetation no more than 7 calendar days prior to construction occurring and immediately before construction commences.
	2. A qualified biologist shall assess the site.
	3. If nests are observed, an appropriate buffer in compliance with the Migratory Bird Treaty Act shall be established. The qualified biologist shall also visit the site weekly until it is determined that the fledglings are no longer dependent on the nest. Construction would be delayed, or an appropriate buffer established until the end of the breeding season, or until the fledglings are no longer dependent on the nest.
CM-2 – Compliance with California Building Code	 Implementation of the Proposed Project shall comply with the California Building Code including all applicable seismic safety development requirements that would minimize seismic ground shaking effects in the event of a major earthquake as well as potential seismic or geologic hazards.
CM-3 – Compliance with General Construction	 A Storm Water Pollution Prevention Plan shall be developed prior to construction.
Permit	 Site Design, Source Control, and Treatment Control Best Management Practices shall be implemented per the City's Stormwater Standards Manual.

 Table 2-4

 CONSTRUCTION STANDARD OPERATING PROCEDURES AND SPECIFICATIONS

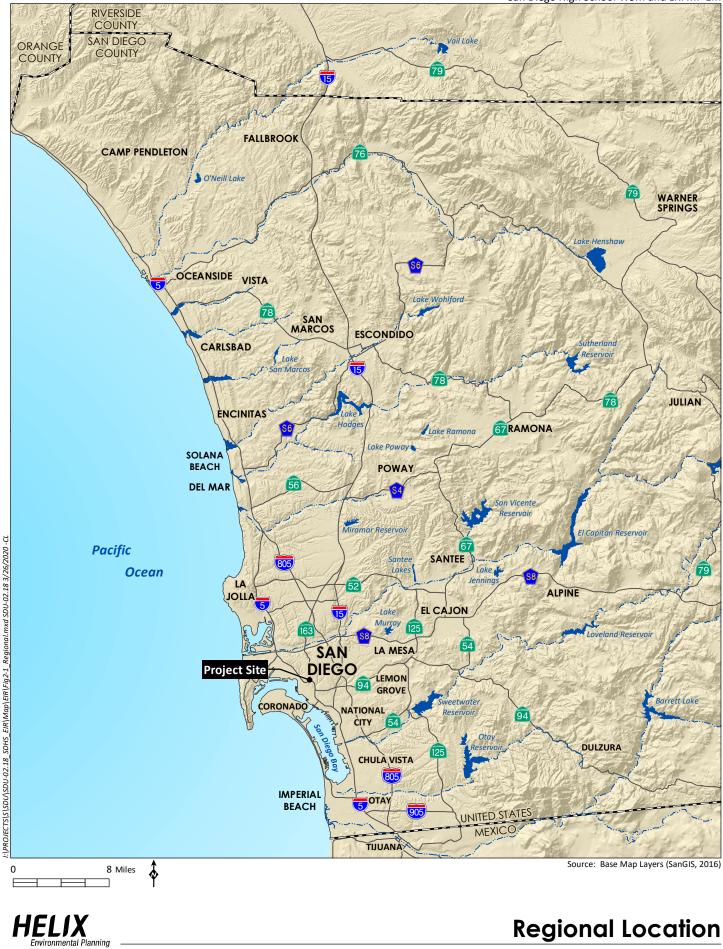
2.2.5 Project Design Features

Project design features have been incorporated into the Proposed Project to meet the Division of the State Architect requirements for school construction, including implementing energy code requirements of Title 24-2013 Part 6, and promoting the goals of programs such as the Collaborative for High Performance Schools (CHPS) program, which is a national movement to improve student performance and the entire educational experience by building the best possible schools.

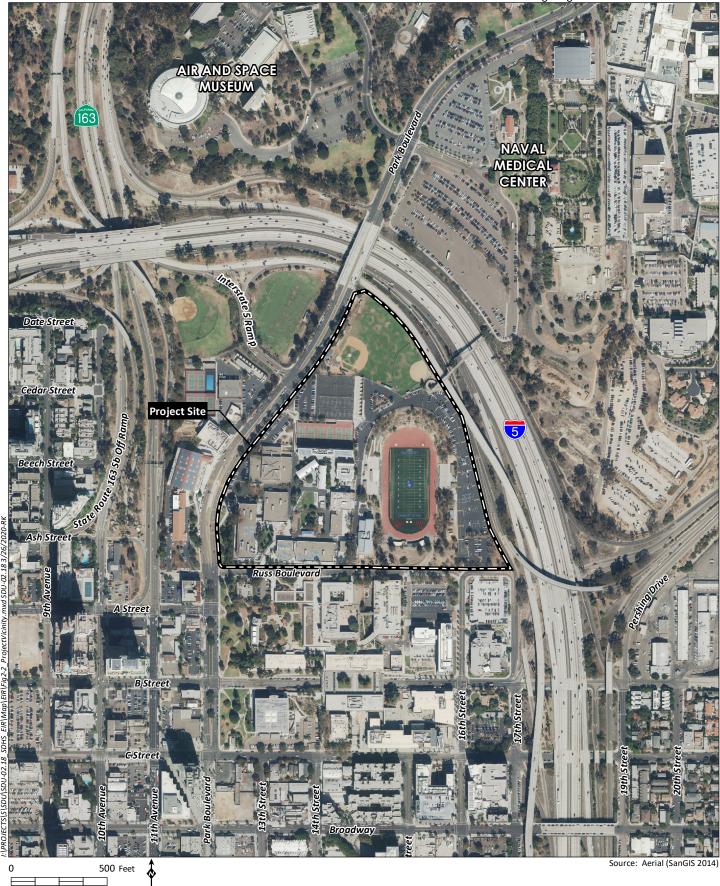
For the proposed HVAC improvements, all mechanical systems would be analyzed to ensure they are cost effective, energy efficient, fully commissioned, and able to meet the environmental sustainability requirements for the facility. Some of the energy efficiency key features for the HVAC system are as follows:

- Optimum thermal zoning to take advantage of building layout and system operation. The building envelope will meet requirements of the 2016 California Energy Code (or later, as applicable) for minimum thickness of roof and wall insulation.
- Optimize thermal glazing performance for equipment sizing.
- Use of airside economizers for units exceeding 2,000 cubic feet per minute to take advantage of free cooling during temperate climate conditions.
- Use of carbon dioxide sensors for optimum outside air demand control for high occupancy spaces.

San Diego High School WSM and LRFMP EIR



Regional Location





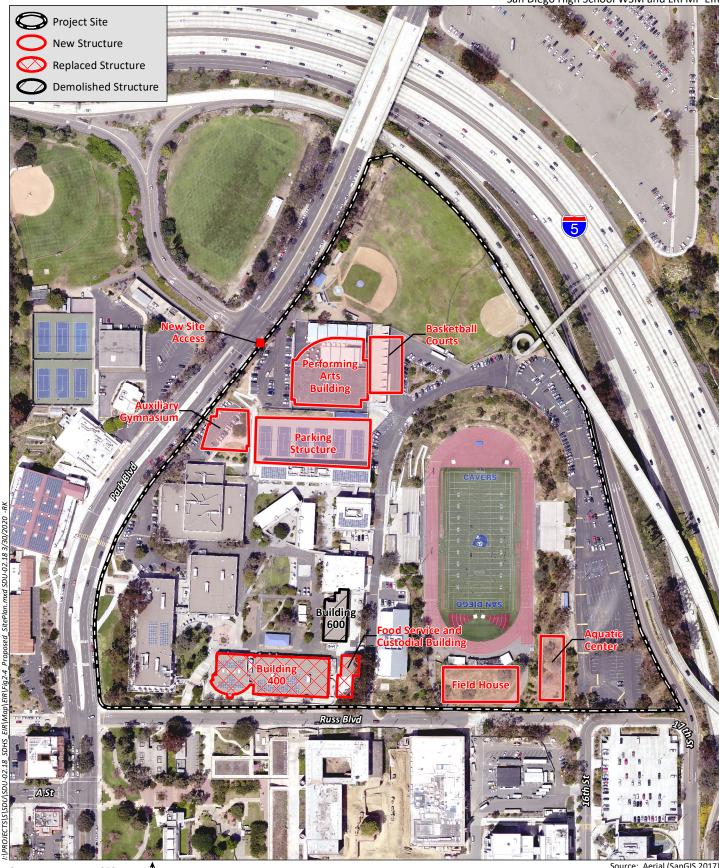
Project Vicinity



250 Feet

Existing Campus Layout





¢ 250 Feet

Source: Aerial (SanGIS 2017)



G

Site Plan (Long-Range Facilities Master Plan)

3.0 ENVIRONMENTAL ANALYSIS

3.1 AIR QUALITY

This section describes the existing conditions and regulatory setting for air quality and presents the results of an assessment of potential air quality impacts associated with construction and operation of the Proposed Project. This section is based on the analysis presented in the Air Quality and Greenhouse Gas Emissions Technical Report prepared for the Proposed Project (HELIX 2020a), included as Appendix B. Impacts related to greenhouse gases (GHG) and climate change are described in EIR Section 3.4, *Greenhouse Gas Emissions*.

3.1.1 Existing Conditions

3.1.1.1 Climate and Meteorology

The climate in southern California, including the San Diego Air Basin (SDAB) in which the Proposed Project is located, is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. Precipitation is mostly limited to a few storms during the winter season. The predominant wind direction in the vicinity of the Proposed Project is from the west and the average wind speed is approximately seven miles per hour (Iowa Environmental Mesonet [IEM] 2019).

The weather station closest to the Project site is the San Diego Lindbergh Field Station, which is approximately two miles to the west. The annual average maximum temperature in the Project area is approximately 70 degrees Fahrenheit (°F), and the average minimum temperature is approximately 57°F. Total precipitation at the field station averaged approximately 10.1 inches between 1939 and 2016. Precipitation occurs mostly during the winter and relatively infrequently during the summer (Western Regional Climate Center [WRCC] 2020).

Due to its climate, the SDAB experiences frequent temperature inversions (temperature increases as altitude increases, which is the opposite of general patterns). Temperature inversions prevent air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere, creating a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and nitrogen dioxide (NO₂) react under strong sunlight, creating smog. Light daytime winds, predominantly from the west, further aggravate conditions by driving the air pollutants inland, toward the foothills. During the fall and winter, air quality problems are created due to carbon monoxide (CO) and NO₂ emissions. High NO₂ levels usually occur during fall or winter on days with summer-like conditions.

3.1.1.2 Pollutants of Concern

Criteria Pollutants

Criteria pollutants are defined by state and federal law as a risk to the health and welfare of the general public. Federal and state governments have established air quality standards for criteria pollutants, including the following compounds:

- CO
- Sulfur dioxide (SO₂)
- Respirable particulate matter (PM₁₀) and fine particulate matter (PM_{2.5})
- Lead (Pb)
- Ozone (O₃)
- NO₂
- Reactive organic gases (ROGs) or volatile organic compounds (VOCs)

Air pollutants are categorized into primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Primary criteria pollutants are: CO; SO₂; PM₁₀; PM_{2.5}; and Pb. Secondary pollutants are formed in the atmosphere through chemical and photochemical reactions of pollutant precursors. Secondary criteria pollutants are O₃, NO₂, PM₁₀, and PM_{2.5} formed by reactions of the principal pollutant precursors ROG, nitrogen oxides (NO_x), and sulfur oxides (SO_x). Note that PM₁₀ and PM_{2.5} can be both primary pollutants and secondary pollutants.

Adverse health effects to specific individuals or population groups induced by criteria pollutant emissions are highly dependent on interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and characteristics of exposed individuals [e.g., age, gender]). Criteria pollutant precursors (ROG and NO_x) affect air quality on a regional scale, typically after significant delay and distance from the pollutant source emissions. Health effects related to O₃, NO₂, and secondary PM are, therefore, the product of emissions generated by numerous sources throughout a region. As such, specific health effects from these criteria pollutant emissions cannot be directly correlated to the incremental contribution from a single project. The following specific descriptions of health effects for each of the air pollutants potentially associated with Project construction and operation are based on information provided by the United States Environmental Protection Agency (USEPA; 2007) and California Air Resources Control Board (CARB; 2009).

Carbon Monoxide. CO is a product of fuel combustion. It is an odorless, colorless gas. Relatively high concentrations of CO are typically found near crowded intersections and along heavily used roadways carrying slow-moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within a relatively short distance (300 to 600 feet) of heavily traveled roadways. Vehicle traffic emissions can cause localized CO impacts, and severe vehicle congestion at major signalized intersections can generate elevated CO levels, called "hot spots," which can be hazardous to human receptors adjacent to the intersections. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues. CO can cause health effects to those with cardiovascular disease and can also affect mental alertness and vision.

Sulfur Dioxide. SO₂ is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil and by other industrial processes. Generally, the highest concentrations of SO₂ are found near large industrial sources. SO₂ is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to SO₂ can cause respiratory illness and aggravate existing cardiovascular disease.

Respirable Particulate Matter and Fine Particulate Matter. Particulate matter refers to a wide range of solid or liquid particles in the atmosphere, including smoke, dust, aerosols, and metallic oxides. Respirable particulate matter, or PM₁₀, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or PM_{2.5}, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in these size ranges has been determined to have the potential to lodge in the lungs and contribute to respiratory problems. PM₁₀ and PM_{2.5} arise from a variety of sources, including road dust, diesel exhaust, fuel combustion, tire and brake wear, construction operations, and windblown dust. PM₁₀ and PM_{2.5} can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis. PM_{2.5} is considered to have the potential to lodge deeper in the lungs. Daily fluctuations in PM_{2.5} concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with preexisting respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM₁₀ and PM_{2.5}. Control of fugitive PM₁₀ and PM_{2.5} is primarily achieved through the control of dust at construction and industrial sites, the cleaning of paved roads, and the wetting or paving of frequently used unpaved roads.

Lead. Pb in the atmosphere occurs as particulate matter. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the largest amounts of lead emissions. Lead has the potential to cause gastrointestinal, central nervous system, kidney, and blood diseases upon prolonged exposure. Lead is also classified as a probable human carcinogen (i.e., with potential to be cancer causing). Because emissions of lead are found only in projects that require permits from the San Diego Air Pollution Control District (SDAPCD) and are generally large manufacturing facilities, lead is not an air pollutant of concern for the Project.

Ozone. O₃ is considered a photochemical oxidant, which is a chemical that is formed when VOCs and NO_x, both by-products of fuel combustion, react in the presence of ultraviolet light. Sources of VOCs and NO_x include gasoline- and diesel-powered vehicle tailpipe emissions; the evaporation of solvents, paints, and fuels; and biogenic sources. O₃ is considered a respiratory irritant and is a principal cause of lung and eye irritation in the urban environment. Individuals exercising outdoors, children, and people with preexisting lung diseases, such as asthma and chronic pulmonary lung disease, are considered the most susceptible subgroups for ozone effects. Short-term O₃ exposure can reduce lung function in children, make persons susceptible to respiratory infection, and produce symptoms that cause people to seek medical treatment for respiratory distress. Long-term exposure can impair lung defense mechanisms and lead to emphysema and chronic bronchitis. O₃ can also damage plants and trees and materials such as rubber and fabrics. An increased risk for asthma has been found in children who participate in multiple sports and live in communities with high O₃ levels.

Nitrogen Dioxide. NO₂ is a reddish-brown gas. It is a by-product of fuel combustion and is formed both directly as a product of combustion and in the atmosphere through the reaction of nitric oxide (NO) with oxygen. NO₂ is a respiratory irritant and may affect those with existing respiratory illness, including asthma. NO₂ can also increase the risk of respiratory illness. Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children, is associated with long-term exposure to NO₂ at levels found in homes with gas stoves, which are higher than ambient levels found in southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO₂ in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these subgroups.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness or that may pose a present or potential hazard to human health. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation (a cough), runny nose, throat pain, and headaches. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For carcinogenic TACs, there is no level of exposure that is considered safe and impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

3.1.1.3 Existing Air Quality Conditions

Attainment Designations

The USEPA has classified air basins (or portions thereof) as being in "attainment," "maintenance," "nonattainment," or "unclassified" for each criteria air pollutant, based on whether or not areas meet state or federal standards (California Ambient Air Quality Standards [CAAQS] and National Ambient Air Quality Standards [NAAQS]) for a particular pollutant. The four designations are defined as follows.

- **Attainment**—assigned to areas where pollutant concentrations meet the standard in question over a designated period of time.
- **Maintenance**—assigned to areas where monitored pollutant concentrations exceeded the standard in question in the past but are no longer in violation of that standard.
- **Nonattainment**—assigned to areas where monitored pollutant concentrations consistently violate the standard in question.
- **Unclassified**—assigned to areas were data are insufficient to determine whether a pollutant is violating the standard in question.

The attainment designations for the SDAB are shown in Table 3.1-1, *San Diego Air Basin Attainment Status*.

Criteria Pollutant	Federal Designation	State Designation
O₃ (1-hour)	(No federal standard)	Nonattainment
O₃ (8-hour)	Moderate Nonattainment	Nonattainment
CO	Attainment (Maintenance)	Attainment
PM10	Unclassified	Nonattainment
PM _{2.5}	Unclassified/Attainment	Nonattainment
NO ₂	Unclassified/Attainment	Attainment
SO ₂	Attainment	Attainment
Lead	Unclassified/Attainment	Attainment
Sulfates	(No federal standard)	Attainment
Hydrogen Sulfide	(No federal standard)	Unclassified
Visibility	(No federal standard)	Unclassified

Table 3.1-1SAN DIEGO AIR BASIN ATTAINMENT STATUS

Source: CARB 2018; USEPA 2019

 O_3 = ozone; CO = carbon monoxide; PM_{10} = particulate matter with a diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with a diameter of 2.5 microns or less; NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide

As shown in Table 3.1-1, the SDAB is classified as a moderate nonattainment area for the 8-hour NAAQS for O_3 . The SDAB is classified as a nonattainment area under the CAAQS for O_3 (1-hour and 8-hour), PM₁₀, and PM_{2.5}. The SDAB is an attainment (maintenance) area for CO, and an attainment area or unclassified for all other criteria pollutants.

Monitored Air Quality

The SDAPCD operates a network of ambient air monitoring stations throughout San Diego County. The purpose of the monitoring stations is to measure ambient concentrations of criteria pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The nearest monitoring station to the Project site that has been recording data in recent years with similar climatic conditions is the Chula Vista monitoring station, approximately eight miles southeast of the Project site. Table 3.1-2, *Air Quality Monitoring Data*, presents a summary of the most recent ambient pollutant concentrations monitored at the Chula Vista air quality monitoring station from 2016 through 2018.

Pollutant Standards	2016	2017	2018
Ozone (O₃)			
Maximum concentration 1-hour period (ppm)	0.073	0.085	0.076
Maximum concentration 8-hour period (ppm)	0.068	0.074	0.064
Days above 1-hour state standard (>0.09 ppm)	0	0	0
Days above 8-hour state/federal standard (>0.070 ppm)	0	1	0
Nitrogen Dioxide (NO ₂)			•
Maximum 1-hour concentration (ppm)	0.054	0.057	0.052
Days above state 1-hour standard (0.18 ppm)	0	0	0
Days above federal 1-hour standard (0.100 ppm)	0	0	0
Annual average (ppm)	0.009	*	0.009
Exceed annual federal standard (0.053 ppm)	No	No	No
Exceed annual state standard (0.030 ppm)	No	No	No
Suspended Particulates (PM ₁₀)			
Maximum 24-hour concentration (μg/m ³)	48.0	61.0	45.0
Measured Days above 24-hr state standard (>50 μg/m ³)	0	1	0
Measured Days above 24-hr federal standard (>150 µg/m ³)	0	0	0
Annual average (μg/m ³)	21.8	21.7	*
Exceed state annual standard (20 µg/m ³)	Yes	Yes	*
Suspended Particulates (PM _{2.5})	•	•	·
Maximum 24-hour concentration (µg/m ³)	23.9	42.7	41.9
Days above 24-hour federal standard (>35 μg/m ³)	0	1	1
Annual average (μg/m ³)	8.7	*	10.0
Exceed state and federal annual standard (12 µg/m ³)	No	*	No

Table 3.1-2 AIR QUALITY MONITORING DATA

Source: CARB 2020. Data collected at the Chula Vista air quality monitoring station.

ppm = parts per million; μ g/m³ = micrograms per cubic meter; * = insufficient data

As shown in Table 3.1-2, monitoring data at the Chula Vista station between 2016 and 2018 showed acceptable levels of the criteria air pollutant NO₂. Violations of the federal 8-hour standard for ozone occurred in 2016 and 2017. Additionally, the federal 24-hour standard for PM_{2.5} was exceeded in 2017 and 2018. The state annual average PM₁₀ standard was exceeded in 2016 and 2017 while the state 24-hour standard was exceeded once in 2017.

3.1.1.4 Sensitive Receptors

CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005, OEHHA 2015). Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers.

The closest existing sensitive receptor to the Project site is San Diego City College, located approximately 80 feet south of the Project site across Russ Boulevard. Additionally, the site itself is a school and is therefore considered a sensitive receptor.

3.1.2 Regulatory Setting

The agencies of direct importance to the Proposed Project for air quality are the USEPA, CARB, and SDAPCD. The USEPA has established federal air quality standards for which CARB and SDAPCD have primary implementation responsibility. CARB and SDAPCD are also responsible for achieving state air quality standards. The following federal, state, and local regulations and policies are applicable to the Proposed Project.

3.1.2.1 Federal

Federal Clean Air Act

Air quality is defined by ambient air concentrations of specific pollutants identified by the USEPA to be of concern with respect to health and welfare of the public. The USEPA is responsible for enforcing the Federal Clean Air Act (CAA), first enacted in 1963 and amended numerous times in subsequent years (1965, 1967, 1970, 1977, and 1990). The CAA mandates the USEPA to establish NAAQS, which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several criteria pollutants, which are introduced above. Table 3.1-3, *Ambient Air Quality Standards*, shows the federal and state ambient air quality standards for these pollutants.

Pollutant	Averaging Time	California Standards	Primary Federal Standards ¹	Secondary Federal Standards ²
O ₃	1 Hour	0.09 ppm (180 μg/m ³)	-	-
	8 Hour	0.070 ppm	0.070 ppm	Same as Primary
		(137 μg/m³)	(137 μg/m³)	
PM10	24 Hour	50 μg/m ³	150 μg/m ³	Same as Primary
	AAM	20 µg/m³	-	Same as Primary
PM _{2.5}	24 Hour	-	35 μg/m³	Same as Primary
	AAM	12 μg/m ³	12.0 μg/m ³	15.0 μg/m ³
CO	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	-
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	-
	8 Hour	6 ppm (7 mg/m ³)	-	-
	(Lake Tahoe)			
NO ₂	1 Hour	0.18 ppm (339 μg/m ³)	0.100 ppm	-
			(188 µg/m³)	
	AAM	0.030 ppm (57 μg/m ³)	0.053 ppm	Same as Primary
			(100 μg/m³)	
SO ₂	1 Hour	0.25 ppm (655 μg/m ³)	0.075 ppm	-
			(196 µg/m³)	
	3 Hour		_	0.5 ppm
				(1,300 μg/m ³)
	24 Hour	0.04 ppm (105 μg/m ³)	-	-

Table 3.1-3 AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Primary Federal Standards ¹	Secondary Federal Standards ²
Lead	30-day Avg.	1.5 μg/m ³	-	-
	Calendar	_	1.5 μg/m³	Same as Primary
	Quarter			
	Rolling	-	0.15 μg/m ³	Same as Primary
	3-month Avg.			
Visibility	8 Hour	Extinction coefficient	No Federal	No Federal
Reducing		of 0.23 per km –	Standards	Standards
Particles		visibility ≥ 10 miles		
		(0.07 per km – ≥30		
		miles for Lake Tahoe)		
Sulfates	24 Hour	25 μg/m³	No Federal	No Federal
			Standards	Standards
Hydrogen	1 Hour	0.03 ppm (42 μg/m ³)	No Federal	No Federal
Sulfide			Standards	Standards
Vinyl Chloride	24 Hour	0.01 ppm (26 μg/m³)	No Federal	No Federal
			Standards	Standards

Table 3.1-3 (cont.) AMBIENT AIR QUALITY STANDARDS

Source: HELIX 2020a

Notes:

¹ National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

² National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

AAM = Annual Arithmetic Mean; CO = carbon monoxide; km = kilometer; mg/m³ = milligrams per cubic meter; NO₂ = nitrogen dioxide; O₃ = ozone; ppm = parts per million; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = particulate matter with a diameter of 2.5 microns or less; SO₂ = sulfur dioxide; – = No Standard; μ g/m³ = micrograms per cubic meter

As discussed in EIR subsection 3.1.1.3, areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be "nonattainment areas" for that pollutant. The SDAB is classified as a moderate nonattainment area for the 8-hour NAAQS for O_3 and as a nonattainment area under the CAAQS for O_3 , PM_{10} , and $PM_{2.5}$. The SDAB is an attainment (maintenance) area for CO, and either an attainment area or unclassified for all other criteria pollutants.

3.1.2.2 State

California Clean Air Act

The federal CAA allows states to adopt ambient air quality standards and other regulations if they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the

federal government and the local air districts. The state standards attainment status for the SDAB is listed in Table 3.1-1, above.

Toxic Air Contaminants

California's air toxics control program began in 1983 with the passage of the Toxic Air Contaminant Identification and Control Act, better known as AB 1807 or the Tanner Bill. When a compound becomes listed as a TAC under the Tanner process, CARB normally establishes minimum statewide emission control measures to be adopted by local air pollution control districts (APCDs). Later legislative amendments (AB 2728) required CARB to incorporate all 189 federal hazardous air pollutants (HAPs) into the state list of TACs.

Supplementing the Tanner process, AB 2588 (the Air Toxics "Hot Spots" Information and Assessment Act of 1987) currently regulates over 600 air compounds, including the Tanner-designated TACs. Under AB 2588, specified facilities must quantify emissions of regulated air pollutants and report them to the local APCD. If the APCD determines that a potentially significant public health risk is posed by a given facility, the facility is required to perform a health risk assessment (HRA) and notify the public in the affected area if the calculated risks exceed specified criteria.

On August 27, 1998, CARB formally identified diesel particulate matter (DPM) emitted by diesel-fueled engines as a TAC (CARB 2010). The particles emitted by diesel engines are coated with chemicals, many of which have been identified by the USEPA as HAPs and by CARB as TACs. CARB's Scientific Advisory Committee has recommended a unit risk factor (URF) of 300 in 1 million over a 70-year exposure period for diesel particulate. In September 2000, CARB approved the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (Diesel Risk Reduction Plan; CARB 2000). The Diesel Risk Reduction Plan outlined a comprehensive and ambitious program that included the development of numerous new control measures over the next several years aimed at substantially reducing emissions from new and existing on-road vehicles (e.g., heavy-duty trucks and buses), off-road equipment (e.g., graders, tractors, forklifts, sweepers, and boats), portable equipment (e.g., pumps), and stationary engines (e.g., stand-by power generators). These requirements are enforced on a statewide basis.

3.1.2.3 Local

San Diego Air Pollution Control District

The Project is in San Diego County and air quality in the County is regulated by the SDAPCD. As a regional agency, the SDAPCD works directly with local governments and cooperates actively with federal and state government agencies. The SDAPCD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces measures through educational programs or fines, when necessary. The following SDAPCD rules and regulations would apply to the construction of the Project:

- Rule 50: Visible Emissions. Establishes limits to the opacity of emissions within the SDAPCD.
- **Rule 51: Nuisance**. Prohibits emissions that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health, or safety of any such persons or the public; or which cause injury or damage to business or property.

- **Rule 52: Particulate Matter**. Establishes limits to the discharge of any particulate matter from non-stationary sources.
- **Rule 54: Dust and Fumes**. Establishes limits to the amount of dust or fume discharged into the atmosphere in any single hour.
- **Rule 55: Fugitive Dust**. Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site.
- **Rule 67: Architectural Coatings**. Requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Air Quality Plans

The SDAPCD is the local agency responsible for the administration and enforcement of air quality regulations for San Diego County. The SDAPCD and San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. SDAPCD has prepared the 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone (Attainment Plan) demonstrating how the SDAB will further reduce air pollutant emissions to attain the current NAAQS for ozone (SDAPCD 2020). The Attainment Plan was approved by the SDAPCD Board on October 14, 2020 and by CARB on November 19, 2020. The plan has been submitted to the USEPA as a revision to the SIP. The SIP relies on the same information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin.

3.1.3 Impact Significance Criteria

The following significance criteria are based on State CEQA Guidelines, Appendix G, and provide the basis for determining the significance of impacts associated with air quality resulting from implementation of the Proposed Project. The Project would result in a significant environmental impact on air quality if it would result in any of the following:

- 1. Conflict with or obstruct implementation of the applicable air quality plan.
- 2. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non- attainment under an applicable federal or state ambient air quality standard.
- 3. Expose sensitive receptors to substantial pollutant concentrations.
- 4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Issue 1 related to conflicting or obstructing the implementation of an air quality plan and Issue 4 related to other emissions, such as odors, are both discussed in the Initial Study prepared for the Project as resulting in a "no impact" determination (Appendix A). A summary of why these issues did not warrant

additional evaluation is provided in EIR Section 4.3, *Effects Found Not to be Significant*. As a result, the analysis below addresses Issues 2 and 3.

3.1.3.1 Methodology

Criteria pollutant emissions for Project construction and operation were calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The input data and subsequent construction and operation emission estimates for the Proposed Project are discussed below.

Construction

As described above, construction emissions for both WSM and LRFMP improvements were estimated using CalEEMod. The model uses OFFROAD2011 and EMFAC2014 emission factors from CARB's models for off-road equipment and on-road vehicles, respectively. The construction analyses for the two sets of improvements included modeling of the projected construction equipment that would be used during each construction activity and quantities of earth and debris to be moved. The model calculates emissions of CO, PM₁₀, PM_{2.5}, SO₂, in addition to the ozone precursors ROG and NO_x.

Construction input data for CalEEMod include, but are not limited to, (1) the anticipated start and finish dates of construction activity; (2) inventories of construction equipment to be used; (3) areas to be excavated and graded; and (4) volumes of materials to be exported from and imported to the Project area. The analysis considers total annual emissions from individual construction activities. Construction activities for the WSM improvements would include demolition, site preparation, grading, building construction, paving, and architectural coatings. Construction activities for the LRFMP improvements would include demolition, paving, and architectural coatings. Construction, paving, and architectural coatings. Construction equipment estimates are based on CalEEMod defaults, adjusted for anticipated Project-specific site improvement activities.

Construction of the WSM improvements involving demolition, site preparation, grading, building construction, paving, and architectural coatings are estimated to occur when school is not in session in the summers of 2021, 2022, and 2023. As a result, construction emission estimates are based on CalEEMod defaults and are adjusted to fit within the estimated summer season. For modeling purposes, it was conservatively assumed all WSM improvements would be completed within the first summer season; therefore, emissions associated with the WSM improvements were modeled to begin on June 1, 2021 and completed by approximately August 30, 2021.

The construction schedule for the LRFMP improvements is uncertain; however, they would occur after the WSM improvements, and are anticipated between the years of 2024 and 2035. Therefore, the construction schedule for the LRFMP improvements is based on CalEEMod defaults, with a start date of January 1, 2024. The CalEEMod default setting estimated Project completion at the end of 2025;

however, construction of the LRFMP improvements may not occur concurrently, and may occur anytime between the years of 2024 and 2035.

The quantity, duration, and the intensity of construction activity influence the amount of construction emissions and their related pollutant concentrations that would occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on a default construction scenario wherein a relatively large amount of construction is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted and are not expected to be greater than forecasted. If construction is delayed or occurs over a longer time period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix than assumed in the CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval). A complete listing of the assumptions used in the analysis and model output for construction of the WSM and LRFMP improvements is provided in Appendix B of this EIR.

CalEEMod has the capability to calculate reductions in construction emissions from the effects of dust control, diesel-engine classifications, and other selected emissions reduction measures. Emissions calculations assume application of water on all exposed areas during construction in compliance with SDAPCD Rule 55, *Fugitive Dust Control*. Based on CalEEMod version 2016.3.2, the control efficiency for watering two times per day is 55 percent. Additionally, the emissions calculations for the architectural coatings phase assume the use of low-VOC coatings in compliance with Rule 67, *Architectural Coatings*.

Operation

Operational use of the Proposed Project would be like existing conditions as there would be no net change to student enrollment on campus. The only Project component that would differ from existing operational emissions would be the addition of the aquatic center as part of the LRFMP improvements. Therefore, the only operational impacts analyzed were the operational emissions associated with the aquatic center. Operational impacts were estimated using CalEEMod, as discussed above. Model output data sheets associated with the aquatic center are included in Appendix B. Modeled operational sources of pollutant emissions include area, energy, mobile (transportation), solid waste, and water and wastewater. The sources and assumption used in the modeling are described below.

- Area Sources Operational emissions from area sources include pump tank emissions from the pool maintenance equipment. CalEEMod default values were used for area sources.
- Energy Sources Operational emissions of criteria pollutants from energy sources include the use of natural gas for hot water and building heat. CalEEMod default values were used for energy sources.
- Mobile Sources Operational emissions from mobile sources are associated with Project-related vehicle trip generation and trip length. Per the Project Trip Generation Memorandum, the total Project trip generation would be approximately 140 average daily trips (ADT) associated with the aquatic center (Kimley Horn 2020). The CalEEMod default trip distances were used.

- Solid Waste Operational emissions of GHGs from solid waste sources are associated with emissions from the decomposition of waste in landfills. CalEEMod default values were used for solid waste sources.
- Water and Wastewater Operation emissions of GHGs would result from the use of water and generation of wastewater. The aquatic center is assumed to be approximately 10,000 sf. CalEEMod defaults were utilized to estimate water and wastewater use.

3.1.4 Impact Analysis

Issue 2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non- attainment under an applicable federal or state ambient air quality standard?

Impact Discussion

WSM and LRFMP

The Project would result in the generation of criteria pollutants in the short-term during construction activities and in the long-term during operation. Operational emissions would be similar to existing conditions, with the exception of the addition of the aquatic center. To determine whether the Project would result in emissions that would violate an air quality standard or contribute substantially to an existing or projected air quality violation, the Project's emissions are evaluated based on the quantitative emission thresholds established by the SDAPCD.

Construction

Construction of the Project would result in temporary increases in air pollutant emissions during both the WSM and LRFMP improvements. These emissions would be generated in the form of fugitive dust emissions (PM₁₀ and PM_{2.5}) and ozone precursor emissions (NO_x and ROG). The Project's construction emissions were estimated using CalEEMod as described in EIR subsection 3.1.3.1. Additional details of phasing, selection of construction equipment, and other input parameters, including CalEEMod data, are included in Appendix B. The results of the calculations for construction of the WSM improvements are shown in Table 3.1-4, *WSM Improvements Construction Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the thresholds.

Construction Phase	ROG*	NOx*	CO*	SOx*	PM10*	PM2.5*
Demolition	2.3	27.6	16.8	<0.1	4.7	1.6
Site Prep	1.6	17.4	7.8	<0.1	3.4	2.1
Grading	2.9	68.1	20.4	0.2	6.8	2.9
Building Construction	1.8	13.6	12.9	<0.1	0.7	0.7
Paving	0.8	7.8	9.2	<0.1	0.5	0.4
Architectural Coatings	3.5	1.5	1.8	<0.1	0.1	0.1
Maximum Daily Emissions	3.5	68.1	20.4	0.2	6.8	2.9
Threshold	75	250	550	250	100	55
Significant Impact?	No	No	No	No	No	No

Table 3.1-4 WSM IMPROVEMENTS CONSTRUCTION EMISSIONS

Source: Appendix B

* Maximum Daily Pollutant Emissions (pounds per day)

WSM = Whole Site Modernization; ROG = reactive organic gas; NO_x = nitrogen oxides; CO = carbon monoxide;

 SO_X = sulfur oxides; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

As shown in Table 3.1-4, emissions of criteria pollutants and precursors related to construction of the WSM improvements would be below the significance thresholds. Therefore, impacts from criteria pollutants and precursors generated during construction of the WSM improvements would be less than significant and no mitigation would be required.

The results of the calculations for construction of the LRFMP improvements are shown in Table 3.1-5, *LRFMP Improvements Construction Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the thresholds.

Construction Phase	ROG*	NO _x *	CO*	SO _x *	PM ₁₀ *	PM _{2.5} *
Demolition	2.3	22.4	20.6	<0.1	2.2	1.1
Site Prep	2.7	27.2	18.7	<0.1	9.5	5.6
Grading	1.7	17.1	15.1	<0.1	3.8	2.2
Building Construction	1.6	15.3	17.9	<0.1	1.3	0.8
Paving	0.9	7.6	12.6	<0.1	0.5	0.4
Architectural Coating	71.5	1.2	2.0	<0.1	0.2	<0.1
Maximum Daily Emissions	71.5	27.2	20.6	<0.1	9.5	5.6
Threshold	75	250	550	250	100	55
Significant Impact?	No	No	No	No	No	No

 Table 3.1-5

 LRFMP IMPROVEMENTS CONSTRUCTION EMISSIONS

Source: Appendix B

* Maximum Daily Pollutant Emissions (pounds per day)

LRFMP = Long-Range Facilities Master Plan; ROG = reactive organic gas; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

As shown in Table 3.1-5, emissions of criteria pollutants and precursors related to the construction of LRFMP improvements would be below the significance thresholds. Therefore, impacts from criteria pollutants and precursors generated during construction of the LRFMP improvements would be less than significant and no mitigation would be required.

Operation

The operational emissions associated with the proposed aquatic center were estimated using CalEEMod as described in EIR subsection 3.1.3.1. Operational emission calculations and model outputs are provided in Appendix B. Table 3.1-6, *Aquatic Center Operational Criteria Pollutant and Precursor Emissions*, presents the summary of operational emissions for the aquatic center.

Category	ROG*	NOx*	CO*	SO _x *	PM 10*	PM2.5*
Area	0.3	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile	0.1	0.5	1.1	<0.1	0.5	0.1
TOTAL DAILY EMISSIONS ¹	0.4	0.5	1.1	<0.1	0.5	0.1
Threshold	75	250	550	250	100	55
Significant Impact?	No	No	No	No	No	No

Table 3.1-6 AQUATIC CENTER OPERATIONAL CRITERIA POLLUTANT AND PRECURSOR EMISSIONS

Source: Appendix B

¹ Totals may not sum due to rounding.

* Pollutant Emissions (pounds per day)

ROG = reactive organic gas; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides;

PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

As shown in Table 3.1-6, emissions of criteria pollutants and precursors during long-term operation of the aquatic center would not exceed the daily thresholds. Emissions of criteria pollutants and precursors during long-term operation of the other Project components would be similar to existing conditions and would not cause significant impacts related to emission of criteria pollutants. Therefore, impacts from criteria pollutants generated during Project operation, combined with operational emissions that may occur after the aquatic center is operational, would be less than significant and no mitigation would be required.

Level of Significance Prior to Mitigation

Impacts associated with air quality standard violations during construction and operation of the WSM and LRFMP improvements would be less than significant.

Mitigation Measures

As no significant impacts would occur, no mitigation measures would be required.

Level of Significance After Mitigation

Impacts associated with air quality standard violations during construction and operation of the WSM and LRFMP improvements would remain less than significant.

Issue 3: Would the Project expose sensitive receptors to substantial pollutant concentrations?

Impact Discussion

WSM and LRFMP

The two main pollutants that would serve as potential health risks for sensitive receptors would be TACs and CO hotspots. An analysis related to sensitive receptors' exposure to these pollutants is discussed below.

Construction

Toxic Air Contaminants

Project construction activities would result in the generation of DPM emissions associated with the use of off-road diesel equipment required for demolition, site grading, excavation, and other construction activities. DPM is the primary toxic air contaminant that would be emitted during construction. Healthrelated risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The amount to which the receptors could be exposed, which is a function of concentration and duration of exposure, is the primary factor used to determine health risk. The generation of TAC emissions during construction would be variable and sporadic due to the nature of the Project and the large size of the campus. The most intense use of construction equipment would be during site preparation/grading activities, which is a small portion of the overall construction process. Additionally, construction activities are not anticipated to occur concurrently; construction of the WSM improvements would occur between 2021 and 2023, and the LRFMP improvements would occur intermittently between 2024 and 2035. Furthermore, the improvements would occur throughout the campus and would not be concentrated along Russ Boulevard, adjacent to the closest sensitive receptors. On-site students of SDHS would not be significantly affected because construction would largely occur outside of school hours or at distances great enough to avoid significant health risks. Therefore, due to the intermittent nature of construction activities and the highly dispersive properties of DPM, Project-related TAC emissions during construction would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

Operation

Carbon Monoxide Hotspots

Vehicle exhaust is the primary source of CO in California. In an urban setting, the highest CO concentrations are generally found near congested intersections. Under typical meteorological conditions, CO concentrations tend to decrease as distance from the emissions source (i.e., congested intersection) increases. Project-generated traffic has the potential of contributing to localized "hot spots" of CO off-site. Because CO is a byproduct of incomplete combustion, exhaust emissions are worse when fossil-fueled vehicles are operated inefficiently, such as in stop-and-go traffic or through heavily congested intersections.

SANDAG's Transportation Forecast Information Center website includes estimates of traffic volumes along the portions of Park Boulevard and Russ Boulevard for the year 2020. Near the Project site, the forecast volumes for Park Boulevard range from 13,100 ADT to 16,900 ADT, and the forecast volumes for Russ Boulevard range from 1,200 ADT to 1,400 ADT (SANDAG 2013). The net increase in daily trips

associated with daily operation of the Project would be nominal compared to these traffic volumes (approximately 140 additional trips per day). Therefore, the Project would neither cause new severe congestion nor significantly worsen existing congestion. There would be no potential for a CO hotspot or exposure of sensitive receptors to substantial, Project-generated, local CO emissions. The impact would be less than significant.

Level of Significance Prior to Mitigation

Impacts associated with exposing sensitive receptors to substantial pollutant concentrations during construction and operation of the WSM and LRFMP improvements would be less than significant.

Mitigation Measures

As no significant impacts would occur, no mitigation measures would be required.

Level of Significance After Mitigation

Impacts associated with exposing sensitive receptors to substantial pollutant concentrations during construction and operation of the WSM and LFRMP improvements would remain less than significant.

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3.2 CULTURAL RESOURCES

This section describes the existing conditions and applicable laws and regulations for cultural resources, followed by an analysis of the Proposed Project's potential to result in a substantial adverse change in the significance of a historical or archaeological resource. This section is based on a Cultural Resources Technical Report prepared for the Project (HELIX 2020b), included as Appendix C.

3.2.1 Existing Conditions

3.2.1.1 Cultural Setting

Ethnographic Setting

The Project site is located within the traditional territory of the Kumeyaay. At the time of Spanish contact, Yuman-speaking Kumeyaay bands occupied southern San Diego and southwestern Imperial counties and northern Baja California. The Kumeyaay are a group of exogamous, patrilineal territorial bands that lived in semi-sedentary, politically autonomous villages or rancherias. Most rancherias were the seat of a clan, although it is thought that, aboriginally, some clans had more than one rancheria and some rancherias contained more than one clan (Luomala 1978). Several sources indicate that large Kumeyaay villages or rancherias were in river valleys and along the shoreline of coastal estuaries (Luomala 1978; Kroeber 1925). They subsisted on a hunting and foraging economy, exploiting the region's diverse ecology throughout the year; coastal bands exploited marine resources while inland bands might move from the desert, ripe with agave and small game, to the acorn- and pine nut-rich mountains in the fall (Cline 1984; Kroeber 1925; Luomala 1978).

At the time of Spanish colonization in the late 1700s, several major Kumeyaay villages were located in the Project vicinity, including the village of *Cosoy* located along the south side of the San Diego River near the location of the San Diego Presidio and the first location of the Mission de Alcalá and the village of *Jamo* (Rinconada), located to the northwest of the Project site along the west side of Rose Canyon, where the Rose Canyon drainage enters into Mission Bay (Carrico 1977, 1998; Cooley et al. 1992; Winterrowd and Cardenas 1987). These village locations were documented as inhabited at the inception of Spanish colonization when they were visited by the Spanish during the Portolá expedition in 1769 (Carrico 1977). South of the Project site, the village of *Ehpaa* (Las Chollas) was located at the mouth of Las Chollas Creek along San Diego Bay, and a village was mapped and labeled as "La Punta" near the salt ponds and the mouth of the Otay River by Juan Pantoja in 1782 (Carrico 1998; Schoenherr 2014).

It is likely that the Kumeyaay people used the San Diego River valley and other significant east-west trending water courses as travel corridors from interior coastal plain areas to and from villages located along, and at the mouth of, the river, such as *Cosoy and Jamo*, as well as other villages along the coast to the north and south of the river and the Project site (Carrico 1998; Trafzer and Carrico 1992:53). Some native speakers referred to river valleys as *oon-ya*, meaning trail or road, describing one of the main routes linking the interior with the coast. For example, the floodplain from the San Diego Mission de Alcalá to the ocean was *hajir* or *qajir* (Harrington 1925).

Historical Background

A small pueblo, now known as Old Town San Diego, developed below the San Diego Presidio, established in 1769. While under Mexican rule, San Diego submitted a petition to Governor Figueroa

asking for formal recognition as a pueblo, and in 1834, was granted permission to establish a municipal government. However, partially due to the establishment of the ranchos in the back-county areas and the subsequent population shift to the ranchos, the pueblo's population shrunk from nearly 500 people in 1834 to 150 people in 1841 (Crane 1991). Consequently, the town council was replaced by a justice of the peace in 1838. A few years later, in 1845, the town was allowed a governor-appointed sub-prefect, Santiago Arguello, who commissioned a survey of the pueblo lands; the resulting map was signed by Governor Pio Pico in 1846, establishing the pueblo as over 48,000 acres of land.

On May 26, 1868, 1,400 acres of the pueblo land was set aside for a public park by the City Board of Trustees. For much of the remainder of the nineteenth century, the area then known as "City Park" remained a mostly wild land preserve of hilltops, canyons, and arroyos. By the late nineteenth century, San Diego's population was growing, and the Board of Trustees decided to use a portion of the park land for a new school. Russ School, named after Joseph Russ, who donated the wood to construct the school, was completed in 1882. A high school program was established at Russ School in 1888. The school became entirely a high school in 1893, known as Russ High School (City 1992). The high school, now known as SDHS, is the oldest school in the City (City 2020a).

In 1902, a landscape architect Samuel Parsons was hired to prepare a comprehensive plan for the public park, and by 1910 the park began to look much as it does today. The name "Balboa Park" was selected during a naming contest in honor of the famous Spanish explorer, Vasco Nunez de Balboa. The continued development of Balboa Park owes much to the two world fairs of the early twentieth century, the Panama-California Exposition of 1915-1916, and the California Pacific International Exposition of 1935-36. These two events marked the beginning and the continued development of Balboa Park's cultural center that exists today (City 2020b).

The population at SDHS continued to grow, and in 1907, a new main school building was constructed. The school became known as the "Gray Castle," as the building resembled on old European castle with ivy-covered towers and turrets. Additional buildings, also designed in the Gothic Revival style, were added in 1913 to house home economics, fine arts, and technology classrooms. Balboa Stadium, seating 23,000, opened during the Panama-California Exposition in May 1915 (SDUSD 2020). The 1920s saw the addition of boys' and girls' gymnasiums (1923), Russ Auditorium (1926), and the Main Gymnasium (1928).

Additional classrooms (buildings 500, 600, and 700) were built between 1938 and 1950, and an upper deck was added to Balboa Stadium in 1960, bringing its capacity to 40,000. The 1933 Long Beach earthquake damaged or destroyed many school buildings in southern California, prompting the passing of the Field Act, which established earthquake safety standards for new construction. However, renovation of pre-1933 structures was spotty until the San Fernando earthquake of 1971 (Amero n.d.). At SDHS, demolition of pre-Field Act structures began with the Russ Auditorium in 1973 and proceeded to the Gray Castle main building. Replacement buildings 100 to 400 were constructed in 1975 to 1976. Balboa Stadium was demolished and replaced with a much smaller venue in 1978. The new campus was designed by local architect Richard George Wheeler, an SDHS alumni from the Class of 1935 (Williamson 1976). Wheeler stated in a newspaper article in 1976 that his team tried to "give the new buildings a feeling of strength and solidarity like the old school had. We tried to build a strong, contemporary school and give it the appearance of sitting on a pedestal with a wall around it, resulting in the appearance of a castle" (Williamson 1976). Portions of Gray Castle campus buildings were either relocated or incorporated into the 1975-1976 construction, including the wooden entry doors on building 100, the gargoyles from Russ Auditorium on the adjacent planter, and the fountain from the Gray Castle courtyard. Other artifacts preserved and incorporated into the new campus included a World War I stone memorial and a World War II plaque.

Other additions to the SDHS campus have occurred since 1976. New classrooms (building 800) and second story walkways were added in 1995, more new classrooms (buildings 900 and 1000) in 2003, and the campus entrance was switched from Park Boulevard to Russ Boulevard. In 2004, SDHS was reorganized into six autonomous small schools on a single campus (SDUSD 2020). Additional classrooms (building 1100) were constructed in 2011.

3.2.1.2 Identification of Cultural Resources within the Project Site

A record search of the California Historical Resources Information System (CHRIS) at the South Coastal Information Center (SCIC) was conducted by HELIX staff on December 4, 2019. The SCIC identified 45 previously recorded cultural resources within a quarter mile of the Project site, but none has been recorded within the boundaries of the SDHS campus. All previously recorded cultural resources are from the historic period, including the following: 33 historic built-environment resources; 10 historic archaeological sites or isolates consisting of at- or below-ground features such as cisterns, foundations, privies, and wells accompanied by trash scatters or deposits, and isolated refuse items; a historic object (a portion of the San Diego flume system); and a historic district (the Cabrillo Freeway National Register Historic District). No prehistoric resources have been recorded within the record search limits.

A Sacred Lands File Search was requested from the Native American Heritage Commission (NAHC) on April 28, 2020. The NAHC indicated in a response dated May 7, 2020 that no known sacred lands or Native American cultural resources are within the Project site, but that the absence of specific site information in the Sacred Lands File does not indicate the absence of cultural resources at a project site.

An archaeological survey of the Project site was conducted on January 20, 2020 by HELIX archaeologist Julie Roy and Kumeyaay Native American monitor Shuuluk Linton (Red Tail Environmental). The pedestrian field survey involved observing areas that exhibited the bare ground throughout the campus and looking for historic period or prehistoric cultural material or features. No archaeological or tribal cultural resources were identified during the pedestrian field survey. The Project site is underlain by fill and San Diego Formation materials and has been heavily developed, with little to no native ground surface remaining.

Historic built environment surveys were conducted by Doug Mengers and Kris Reinicke of PanGIS, Inc. on January 20, 2020, April 3, 2020, and August 11, 2020. Field investigation consisted of examination and photography of the exterior of the buildings, structures, features, and landscaping within the SDHS campus. Field notes included resource descriptions, details of architectural style and sub-style, modern modifications and additions, and information on current condition and integrity.

An overview of modern and historic-age buildings, features, and historic landscaping at the Project site is provided in Figure 3.2-1, *San Diego High School Historic Resources*. As shown, the SDHS campus currently contains 11 buildings (buildings 100-1100), including four that are modern (they are not 45 years or older, nor approaching 45 years in age), and seven buildings and one structure¹ that are of historic age (e.g., over 45 years in age or approaching 45 years in age). In addition, there are seven historic features located on campus. Modern buildings on SDHS campus include building

¹ Balboa Stadium was constructed in 1978 and will become 45 years in age during the Proposed Project timeline in 2023.

800 constructed in 1995, building 900 constructed in 2003, building 1000 constructed in 2003, and building 1100 constructed in 2011. Other modern structures and features are athletic facilities including tennis courts, handball courts, and baseball fields; and various parking lots, sidewalks, and connecting landscaping. The seven historic buildings, one historic structure, and seven historic features documented within the SDHS campus are listed in Table 3.2-1, *Historic Buildings, Structures, and Features within SDHS Campus*, and described below.

Resource Name	Construction Date	Style	Architect/Artist
Building 100	1974-1975	Brutalist	Richard George
			Wheeler
Building 200	1974-1975	Brutalist	Richard George
			Wheeler
Building 300	1974-1975	Brutalist	Richard George
			Wheeler
Building 400	1974-1975	Brutalist	Richard George
			Wheeler
Building 500	1950	International sub-style	Frank Lewis Hope, Jr.
Building 600	1940	International sub-style	Frank Lewis Hope, Jr.
Building 700	1938	International sub-style	Quayle Brothers
			Architects
Balboa Stadium	1978	Vernacular	Richard George
			Wheeler
Gargoyle Planter	Gargoyles circa 1926 on	Gothic Revival	Unknown
(Feature 1)	Russ Auditorium/installed		
	on current planter circa		
	1976		
Gray Castle Courtyard	Circa 1907 within Gray	Gothic Revival	Unknown
Fountain	Castle Courtyard/moved to		
(Feature 2)	current location circa		
	1975-1976		
World War I Memorial	1919-1922/moved to	N/A	Unknown
(Feature 3)	current location circa		
	1975-1976		
Gray Castle Doors	1907 on Gray Castle/	Gothic Revival	Frank Shaver Allen
(Feature 4)	moved to Building 100		(Gray Castle)/Richard
	circa 1975-1976		George Wheeler
			(Building 100)
Landscaping	Circa 1902-1990s	N/A	Unknown
(Feature 5)			
World War II Plaque	1948-1949/moved to	WPA	Isabelle Schultz
(Feature 6)	current location circa		Churchman/San Diego
	1975-1976		Board of Education
Balboa Stadium	1914	N/A	Quayle Brothers
Terracing			Architects and Charles
(Feature 7)			Cressey

Table 3.2-1				
HISTORIC BUILDINGS, STRUCTURES, AND FEATURES WITHIN SDHS CAMPUS				

Building 100

Building 100 forms the southwest corner of campus. It was designed by Richard George Wheeler and constructed from 1974 to 1975. It was originally called Building A and houses administration offices and classrooms. Building 100 is a Brutalist style, two-story rectangular structure with three exterior, partially recessed staircases. Cladding consists of predominantly fluted concrete blocks with cast-in-place concrete slabs above slender bays of recessed windows and doors. The roof is flat with a short parapet.

The primary entrance of the building faces Park Boulevard; the entrance alcove is dominated by a wall of cobalt blue glazed rectangular tiles located immediately south of the entry doors. The main entry doors are repurposed from the Gray Castle main building (Feature 4). These consist of two pairs of carved wooden doors with bronze hardware, in the same Gothic style of the structure from which they were removed. A massive, two-story irregular hexagonal pillar with fluted concrete block cladding stands diagonally across from the entryway and extends to the roof. The west and south façades are surrounded by a wide concrete walk on top of a concrete retaining wall. The retaining wall cladding mimics the façade of the building with a wider ribbed pattern. A second-story bridge on the east façade connects to the library at building 300.

Building 200

Building 200 (gymnasium) forms the northwest corner of the student quad area. It was designed by Richard George Wheeler and constructed in 1974. Originally named Building D, it is a Brutalist style single-story building with a simple, rectangular ground plan with a projection on the north façade. Cladding is predominantly fluted concrete blocks with cast-in-place concrete slabs above slender bays of recessed windows and doors. The roof is flat with a short parapet and a raised central portion of tilt-up concrete panels to account for the height of an indoor basketball court. The primary entrance to the gymnasium is on the south façade and consists of sets of metal doors leading to a foyer. On a concrete panel above the east doors is a mural which reads "San Diego High School" painted on a blue ribbon with a depiction of the original Gray Castle school building. The north and west façades are surrounded by a concrete walk on top of a concrete retaining wall with a metal and wood banister.

Building 300

Building 300 forms the west side of the student quad area. It was designed by Richard George Wheeler and constructed in 1974. It was originally called Building B and houses the library, the Innovation Center, and the cafeteria. Building 300 is a Brutalist style, two-story rectangular structure constructed on a west-facing slope with a staircase each on its north, west, and south-facing façades. Cladding is predominantly fluted concrete blocks with cast-in-place concrete slabs above slender bays of recessed windows and doors. The roof is flat with a short parapet. Two massive, two-story irregular hexagonal pillars with fluted concrete block cladding stand on the building's southeast and southwest corners and extend to the roof. The main entrance to the building is on the upper story of the south façade, with double metal doors in a wall of floor-to-ceiling windows. The lower floor of the south façade is a recessed loggia with two large cafeteria windows, windows to the counseling offices, and two sets of metal double doors. The south façade also has a staircase and two elevators that project from the building. The original elevator is centered on the façade and is clad in fluted concrete. The newer ADA-compliant elevator is to the west of the original and was constructed from concrete block between 2006 and 2007. The north end of the east façade has a recessed ticket counter with marquee above. The remainder of the east, north, and west façades include exterior and subterranean concrete staircases and metal doors giving access to upper and lower floor classrooms and offices. Several narrow fluted concrete columns support the second story walkway and bridge.

Building 400

Building 400 forms the south side of the student quad area. It was designed by Richard George Wheeler and constructed in 1974. Originally named Building C, it is a Brutalist-style, single-story rectangular structure with a semi-circular theater attached to the west façade by a vestibule. Cladding is predominantly fluted concrete blocks with cast-in-place concrete slabs above slender bays of recessed windows and doors. The roof is flat with a short parapet. The primary entrance is through the connecting vestibule and faces north onto the main plaza. Two sets of metal double doors, each with glass glazing, lead into the vestibule. There is a 4.5-inch metal accordion separation joint between the vestibule and the rectangular classroom building. The entryway is covered by a tattered, blue canvas Bostonian awning with the words, "Lois Perkins Performing Arts Theatre." The north façade of the theater has a blue horizontal rolling security gate to the scene shop and an adjacent metal door to a dressing room. The west façade of the theater has a set of double metal doors to a corridor behind the stage and a single metal door leading to a dressing room. A small 16-foot by 13-foot control room is off the south façade of the theater. There are double metal and glass doors on the south side of the vestibule between the theater and the arts building.

A mural covers the upper portion of the north and west sides of the theater. The mural is acrylic paint applied directly onto the fluted concrete exterior of the building in such a way that two different images are visible, depending on the viewer's point of view, centered on the northwest corner of the building. The mural, measuring 140 feet wide by 15 feet high, is titled "Multicultural Motion" and was designed by muralist Lorena Loaiza of Mexico City. Dedicated on May 28, 1992, the mural was painted by Loaiza and more than 40 SDHS art students, with funding provided by SDHS Young at Art Program, the Maxwell H. Gulk Foundation, the Pastel Society of San Diego, and other donors.

Building 500

Building 500 sits on the north end of the east side of the student quad area. It was designed by San Diego architect Frank Lewis Hope, Jr., as the Technical Arts building and was constructed in 1950. The two-story building has a nearly rectangular floorplan, with the main entrance on the second floor of the north side. The building has all the primary character-defining features of the International sub-style with a flat roof, minimal applied ornamentation, horizontal bands of flush windows, and asymmetrical façades, and some of the secondary features such as square corners and concrete exterior. The north end of the east façade is a small loading dock or maintenance access area. It has two wide metal roll-up doors behind a chain link fence and an aluminum shade covering half of the area. The west half of the south façade is flush with building 600; the remaining half forms a rear courtyard shared by building 500 and building 600. Modern additions to the building include the stairs and a connecting ramp on the north side and exterior utilities including lighting, electrical, and security. Replacements include all second floor and some first-floor windows and doors.

Building 600

Building 600 is situated on the south end of the east side of the student quad area. Designed by Frank Lewis Hope, Jr., as the Science/JROTC building, it was constructed in 1940. The two-story building has a nearly rectangular floorplan, with the main entrance on the second floor of the north side where it

connects to building 500. The building has all the primary character-defining features of the International sub-style with a flat roof, minimal applied ornamentation, horizontal bands of flush windows, and asymmetrical façades, and some of the secondary features such as square corners and concrete exterior. The building's exterior detailing, including banding and corner bevels, matches the adjacent building 500, which was designed by the same architect a decade later. The north façade is flush with building 500. The east façade of building 500 and the south façade of building 600 form a rear courtyard shared by both buildings. Modern additions or replacements include all doors and windows on the first and second floors, hand railings, and exterior utilities including lighting, electrical, and security fixtures.

Building 700

Building 700 lies at the southeast corner of the student quad area. It was designed by Quayle Brothers Architects (Charles and Edward Quayle) of San Diego as the Choral and English Building and was constructed in 1938. The floorplan consists of two offset rectangles, both of poured concrete construction. The southern portion is a tall single story with an end gable roof. Main entrances are on the east façade and northwest corner. Tall narrow windows are separated by wide mullions on the west, south, and east façades, giving the appearance of a chapel. The northern portion is two stories with a flat roof. Exterior staircases lead to entrances on each floor. Combined, the building portions possess the primary character-defining features of the International sub-style, with a flat roof, minimal applied ornamentation, horizontal bands of flush windows, and asymmetrical façades, and some of the secondary features such as square corners and concrete exterior. Modern additions include metal stairs on the northern portion, railings, and exterior utilities including lighting, electrical, and security fixtures. Most doors and windows in both portions have been replaced. At least some adjacent concrete sidewalks and stairs are likely original, along with the glass block windows on the west side of the building's southern portion.

Balboa Stadium

Balboa Stadium sits on the east side of campus. It was designed by Richard George Wheeler to replace the original 1914 Balboa Stadium on the same site and was constructed in 1978. The stadium is composed of seven permanent structures, a football field, track, and two sets of concrete bleachers. The structures are all very simple in design and construction and are of a vernacular style. The cladding throughout is cream-colored stucco over wire mesh and wood frame construction. The roofs are mostly flat or shed roofs with a very low pitch and wood facia. All doors are metal and painted a deep cobalt blue. The west concourse is the Home side, and the east concourse is the Visitor side. Each concourse has a landing that is 20 feet wide, made of several 4-inch-thick concrete slabs. The Home side has concrete ADA-compliant ramps that were added between 2003 and 2005. One 75-foot long ramp with one switch-back connects the access road west of the stadium to the Home concourse, and a second, longer ramp of 415 feet goes from the concourse to the field level with three switchbacks. The bleachers on both the Home and Visitor sides are concrete. The Home side has three bays of bleachers with 19 rows and a total of 2,280 seats. Two imperial staircases (with 5 steps) start at field level and lead up between the bays of bleachers. The Visitor side has two bays of bleachers with 18 rows and a total of 1,440 seats. One imperial staircase leads to the staircase between the bays of seats.

Several buildings constructed of stucco cladding with wood facia are associated with the stadium, including the restroom buildings on both the Home and Visitor sides, the custodian and garden storage room, concession stands on both the Home and Visitor sides, a press box on the Home side, and small

ticket booths on the Home and Visitor sides. Other features include stadium lighting (installed in 1984 according to a dedication plaque on the Home concession stand); tall chain link fences surrounding the stadium area, with pedestrian and vehicle gates; goal posts, turf, and other field improvements; a scoreboard and flagpole at the south end of the field; and fenced storage areas.

Gargoyle Planter (Feature 1)

The gargoyle planter is located along Park Boulevard, near the main entrance doors to building 100. The gargoyles are decorative elements salvaged from the Russ Auditorium prior to its demolition in 1973. During campus redevelopment in 1975-1976, a conceptual design was planned for the gargoyles to be installed on a new fountain designed by Richard George Wheeler; however, this design never came to fruition. By 1981, the gargoyles were installed on the current planter. The construction date of the planter is unclear based on available sources, but it appears to have been circa 1976. The cast concrete gargoyles depict academic subjects including geography, mathematics, and writing, and are anchored by baseball and football athletes on the corners. The gargoyles are mounted to a modern poured concrete planter surrounded by non-native landscaping.

Gray Castle Courtyard Fountain (Feature 2)

This resource is a concrete fountain on a concrete base enclosed by a metal railing. It is situated in a round brick patio between buildings 300 and 400 on the southeast side of campus. The fountain has two tiers, each of which has a concrete bowl atop a square pillar, with the upper tier smaller in scale than the lower. The fountain sits on a round concrete base set within a diamond shape pool, approximately 6 feet by 6 feet and currently dry. The pool is surrounded by a circular planter approximately 15 feet in diameter, divided by 12-inch-wide concrete crib walls. The planter is surrounded by a three-foot-high painted metal railing. The fountain, and possibly the diamond-shaped enclosure, appear to be original. The fountain was originally constructed in the early twentieth century, likely as part of the original construction of the Gray Castle in 1907. Early photographs show it as the centerpiece of "Fountain Court," in the interior courtyard of the main Gray Castle building. Here, the fountain and diamond-shaped pool were surrounded by a rectangular pool approximately 15 feet by 20 feet. The fountain was moved approximately 100 feet west to its current location when the campus was reconstructed in 1975-1976 and the crib walls, railing, and brick surround were added.

World War I Memorial (Feature 3)

The World War I memorial is located on the northwest side of the student quad area, adjacent to a southwest-northeast sidewalk. It consists of a granite obelisk, approximately 18 inches square and three feet high, resting on a poured concrete base. The southeast facing side of the memorial is engraved: "DEDICATED TO THE S.D.H.S. STUDENTS WHO GAVE THEIR LIVES IN THE WAR/BY THE CLASS OF JUNE 1919/STUDENT BODY OF 1921/THE CLASS OF JAN. 1922." The top and engraved side are smooth; the remaining sides are rough granite. The memorial is oriented 45 degrees from the surrounding buildings. The current location of the memorial was previously occupied by the Gray Castle main building footprint; it was moved to this location during the mid-1970s campus reconstruction, likely from within a Gray Castle courtyard. The beveled concrete base appears to have been added when it was relocated.

Gray Castle Doors (Feature 4)

The main entry doors on building 100 are from the Gray Castle main building, built in 1907 and designed by Frank Shaver Allen. They were installed during construction of building 100 in 1974-1975 by Roel

Construction Company and consist of two pairs of carved wooden doors with bronze hardware, in the same Gothic Revival style of the structure from which they were removed. Modern elements of the doorway include a black aluminum frame and sill, a narrow single separating the door pairs, a tall wood lintel, ADA-compliant signage on the exterior, and push bars, kick-plates, and pneumatic hinges on the interior.

Landscaping (Feature 5)

Most pre-1975 sidewalks, plazas, recreational facilities, and landscaping features were destroyed during major 1970s reconstruction phases; there are only a few areas that contain remnant landscaping dating from between circa 1902 to the demolition of Gray Castle in 1975-1976. These areas include the eucalyptus trees on the southeast side of building 700, the pine trees between building 100 and building 400, and some eucalyptus trees along the edge of the campus.

Three mature eucalyptus trees surround the southern portion of building 700. All three are on the steep slope to the south and east of the building, along with the cut stumps of ten or more additional trees. The pine trees between building 100 and building 400 are likely remnant historic landscaping elements from the earlier Gray Castle campus. A newspaper article from 1976 states that a "stand of Torrey Pine trees planted on the West side of campus by graduating senior classes has been preserved" during the 1975-1976 campus redevelopment. Parts of the area have been heavily modified, especially the southeast portion, where a wide concrete staircase and sidewalk were added in 2003 when the main campus entrance was moved to this area.

World War II Plaque (Feature 6)

The World War II plaque is located inside building 100, on the north wall of the reception lobby, just inside the main entrance doors. It consists of four carved Philippine mahogany wooden panels separated by three columns of names, with a dedication plaque at the bottom of the middle column. The dedication plaque reads: "THESE SONS OF SAN DIEGO HIGH SCHOOL/GAVE THEIR LIVES IN THE/SACRED CAUSE OF FREEDOM/FREEDOM OF SPEECH/FREEDOM FROM WANT/FREEDOM OF RELIGION/FREEDOM FROM FEAR/EVERYWHERE IN THE WORLD/DEDICATION MAY 28, 1948." The plaque includes a total of 158 names engraved on metal slates. The names are presented in alphabetical order. The World War II plaque was originally displayed in SDHS' Russ Auditorium from 1948 to circa 1973, when Russ Auditorium was demolished. After the Russ Auditorium was demolished in 1973, the plaque was reinstalled in its current location in the building 100 lobby circa 1975. A wooden framework connects the panels from behind and attaches them to the concrete block wall. The base of the frame appears to be a modern addition, likely added when it was installed in its current location.

Former Balboa Stadium Terracing (Feature 7)

Terracing on the north end of the stadium is a remnant of the original 1914 Balboa Stadium left over after the 1978 demolition. The remnant terracing is currently covered with landscaping vegetation. The original Balboa Stadium was designed by Quayle Brothers Architects and Charles Cressey and was opened in May 1915 as part of the Panama-California Exposition. Balboa Stadium originally seated 23,500 on concrete seats poured within cut terracing on the west, north, and east sides of the field. When completed, it was the largest stadium ever constructed in the United States. The south end was flanked by three-story towers with a row of columns in between, and a semi-circular loggia containing dressing rooms and a service entrance extended towards Russ Boulevard. An upper deck was added to the stadium in 1960, bringing capacity to 40,000 when it became the first home of the San Diego Chargers football team. The original stadium hosted civic as well as high school events, including visits by Presidents Wilson, Roosevelt, and Kennedy, as well as concerts including the Beatles.

The terracing on the north end of the stadium and the modified hillside on the south end are the only remnants of the 1914 Balboa Stadium. No structures, foundations, or features were observed during the historic built-environment survey.

3.2.2 Regulatory Setting

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. Significant resources are those resources which have been found eligible for listing in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), or any local register as applicable. The City's Historical Resources Register (CSDHRR) is the applicable local register for this Project.

3.2.2.1 State

California Environmental Quality Act

Under CEQA, 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. Historical resource is a term with a defined statutory meaning, discussed in PRC 21084.1, and State CEQA Guidelines Section 15064.5, as:

Resource(s) listed or determined eligible by the State Historical Resources Commission for listing in the CRHR (14 CCR Section 15064.5[a][1]);

Resource(s) either listed in the NRHP or in a "local register of historical resources" or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, unless "the preponderance of evidence demonstrates that it is not historically or culturally significant" (14 CCR Section 15064.5[a][2]); or

Resources determined by the Lead Agency to meet the Criteria for listing on the CRHR (14 CCR Section 15064.5[a][3]).

Under 14 CCR Section 15064.5(a)(4), a resource may also be considered a "historical resource" for the purposes of CEQA at the discretion of the lead agency.

National Register of Historic Places

In order to qualify for the NRHP, a property must be significant at the local, state, or national level, under one or more of four criteria. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history;
- B. That are associated with the lives of persons significant in our past;

- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one of more of the above criteria, a NRHP-eligible property must also retain sufficient integrity to convey its significance and be at least 50 years of age or of extraordinary importance. Integrity is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. In an archaeological deposit, integrity is assessed with reference to the preservation of material constituents and their culturally and historically meaningful spatial relationships. A resource must also be judged with reference to the particular criteria under which it is proposed for nomination. Certain kinds of historic properties are not usually considered for listing in the NRHP including religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties achieving significance within the past 50 years.

California Register of Historical Resources

The criteria for listing in the CRHR are consistent with the NRHP criteria. In order to qualify for the CRHR, an historical resource must be significant at the local, state, or national level, under one or more of the following four criteria:

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

In addition to meeting one or more of the above criteria, a CRHR-eligible property must also retain sufficient integrity to convey its significance. Unlike the NRHP, a CRHR-eligible property need not be 50 years of age to be eligible if it can be demonstrated that sufficient time has passed to understand its historical importance.

CEQA Public Resources Code Sections 21083.2(g) and (h)

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

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

As defined in PRC Section 21083.2(h), a "non-unique archaeological resource" means an archaeological artifact, object, or site which does not meet the criteria in subdivision (g) above. A non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the Lead Agency if the agency so elects.

Health and Safety Code Section 7050.5/Public Resources Code Section 5097.9

Health and Safety Code Section 7050.5 addresses the protection of human remains discovered in any location other than a dedicated cemetery and makes it a misdemeanor for any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law, except as provided in PRC Section 5097.99. It further states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions concerning investigation of the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in PRC Section 5097.98. If the coroner determines that the remains are not subject to his or her authority and recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact the NAHC by telephone within 24 hours. Whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, they shall immediately notify those people believed to be the most likely descendants of the deceased Native American. The descendants may inspect the site where the remains were discovered and make recommendations on the removal or reburial of the remains.

3.2.2.2 Local

City of San Diego Municipal Code/Historical Resources Regulations

The purpose of the City's Historical Resources Regulations (HRR; San Diego Municipal Code [SDMC] Chapter 14, Article 3, Division 2) is to protect, preserve and, where damaged, restore the historical resources of San Diego, which include historical buildings, historical structures, or historical objects, important archaeological sites, historical districts, historical landscapes, and traditional cultural properties. These regulations are intended to assure that development occurs in a manner that protects the overall quality of historical resources. The regulations apply to proposed development when the following historical resources are present on the site, whether or not a Neighborhood Development Permit or Site Development Permit is required: designated historical resources; historical buildings; historical districts; historical landscapes; historical objects; historical structures; important archaeological sites; and traditional cultural properties. Where any portion of a premises contains historical resources, the regulations shall apply to the entire premises.

City of San Diego Historical Resources Guidelines

The purpose and intent of the City's Historical Resources Guidelines (HRG), located in the City's Land Development Manual (LDM; City 2001) is to protect, preserve and, where damaged, restore the historical resources of San Diego. These guidelines are designed to implement the City's HRRs in compliance with applicable local, state, and federal policies and mandates, including, but not limited to, the City's General Plan, CEQA, and Section 106 of the National Historic Preservation Act (NHPA). The intent of the guidelines is to achieve consistency in the management of the City's historical resources, including identification, evaluation, preservation/mitigation, and development. The HRG states that if a project will potentially impact a resource 45 years or older, the resource's significance must be determined, even if it is not listed in or previously considered eligible for the CRHR or a local register (LDM Section II.D.5).

In order to be designated as historic and potentially listed in the CSDHRR, one or more of the following criteria must be met:

- A. Exemplifies or reflects special elements of the City's, a community's, or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping or architectural development;
- B. Is identified with persons or events significant in local, state, or national history;
- C. Embodies distinctive characteristics of a style, type, period, or method of construction or is a valuable example of the use of indigenous materials or craftsmanship;
- D. Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist, or craftsman;
- E. Is listed or has been determined eligible by the National Park Service (NPS) for listing on the NRHP or is listed or has been determined eligible by the California State Office of Historic Preservation (OHP) for listing on the CRHR; and/or
- F. Is a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest, or aesthetic value or which represent one or more architectural periods or styles in the history and development of the City.

In addition to meeting one or more of the above Criteria, a CSDHRR-eligible resource must also retain sufficient integrity to convey its significance. Although the City's municipal code uses a 45-year threshold to review resources which may be adversely impacted by development, a resource need not be 45 years of age to be eligible for listing on the City's register. Eligible resources, which may include an improvement, building, structure, sign, interior element and fixture, feature, site, place, district, area, or object, are designated to the CSDHRR by the City's Historical Resources Board (HRB) at a publicly noticed hearing.

3.2.3 Impact Significance Criteria

The following significance criteria are based on State CEQA Guidelines, Appendix G and provide the basis for determining significance of impacts associated with cultural resources resulting from implementation of the Proposed Project. The Project would result in a significant impact to cultural resources if the Proposed Project would:

- 1. Cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines Section 15064.5;
- 2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5; or
- 3. Disturb any human remains, including those interred outside of formal cemeteries.

3.2.3.1 Methodology

The impact analysis in this section focuses on determining potential impacts to cultural resources; it addresses historic buildings, structures, objects, or sites, prehistoric and historic archaeological resources, and human remains. Impacts to Tribal Cultural Resources are addressed in EIR Section 3.8, *Tribal Cultural Resources*.

3.2.4 Impact Analysis

Issue 1: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines Section 15064.5?

3.2.4.1 Impact Discussion

WSM and LRFMP

Construction

State CEQA Guidelines Section 15064.5(b)(1) defines a substantial adverse change as one that would materially impair the significance of a historical resource. According to Section 15064.5(2)(C), "the significance of a historic resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA."

Within the Proposed Project site, 15 historic built environment resources have been identified, including seven buildings, one structure, and seven features. These buildings, structure, and features were evaluated for historic significance and eligibility for listing on the NRHP, CRHR, and the CSDHRR. None of the documented historic resources meets the criteria for inclusion in the CRHR or the NRHP. However, eight resources, including buildings 500, 600, and 700, and Features 1 (gargoyle planter), 2 (Gray Castle courtyard fountain), 3 (World War I memorial), 4 (Gray Castle doors), and 6 (World War II plaque) are eligible for listing in the CSDHRR (Table 3.2-2, *NRHP/CRHR/CSDHRR Eligibility of the Historic Buildings, Structures, and Features within SDHS Campus*). As such, these eight resources are considered historical

resources. Detailed evaluations for the 15 historic built environment resources and their potential for impact are provided below.

Resource Name	NRHP/CRHR Eligibility	CSDHRR Eligibility	Period(s) of Significance	Proposed Project Actions
Building 100	Not eligible	Not eligible	N/A	WSM (improvements)
Building 200	Not eligible	Not eligible	N/A	WSM (improvements)
Building 300	Not eligible	Not eligible	N/A	WSM (improvements)
Building 400	Not eligible	Not eligible	N/A	WSM (improvements) & LRFMP (demolition)
Building 500	Not eligible	Eligible (Criterion C)	1950	WSM (improvements)
Building 600	Not eligible	Eligible (Criterion C)	1940	WSM (improvements) & LRFMP (demolition)
Building 700	Not eligible	Eligible (Criterion C)	1938	WSM (improvements) & LRFMP (demolition)
Balboa Stadium	Not eligible	Not eligible	N/A	LRFMP (improvements)
Gargoyle Planter (Feature 1)	Not eligible	Eligible (Criteria A, C, and F)	1926/ 1975-1976	None
Gray Castle Courtyard Fountain (Feature 2)	Not eligible	Eligible (Criteria A and F)	1975-1976	WSM (student quad demolition)
World War I Memorial (Feature 3)	Not eligible	Eligible (Criteria A and F)	1975-1976	WSM (student quad demolition)
Gray Castle Doors (Feature 4)	Not eligible	Eligible (Criteria A, C, and F)	1907/ 1975-1976	WSM (building 100 addition)
Landscaping (Feature 5)	Not eligible	Not eligible	N/A	WSM (student quad demolition)
World War II Plaque	Not eligible	Eligible	1948-1949/	WSM (building 100
(Feature 6)		(Criteria A, D, and F)	1975-1976	addition)
Balboa Stadium Terracing (Feature 7)	Not eligible	Not eligible	N/A	None

Table 3.2-2				
NRHP/CRHR/CSDHRR ELIGIBILITY OF THE HISTORIC BUILDINGS, STRUCTURES,				
AND FEATURES WITHIN SDHS CAMPUS				

*Bold resources are considered historical resources.

Buildings 100, 200, 300, and 400

Buildings 100, 200, 300, and 400 were designed by the same architect (Richard George Wheeler), with a common style (Brutalist sub-style of Modern architecture) and built during the same construction period (1974-1975). While buildings 100, 200, 300, and 400 are associated with broad patterns in education and school construction in California and the United States, they are not associated with specific events that have made a significant contribution to these patterns and are not significant under NRHP/CRHR/CSDHRR Criterion A/1/A. Buildings 100, 200, 300, and 400, as part of SDHS campus, are associated with the lives of people important to state and local history; however, that association is simply one of attendance during childhood or employment during adulthood. Persons associated with the buildings must be individually significant and their association must be documented by accepted methods of historical research; no significant associations between buildings 100 through 400 and the

productive lives of former students, faculty, or staff who attended school or worked in the buildings have been identified. As such, buildings 100, 200, 300, and 400 have been evaluated as not significant under NRHP/CRHR/CSDHRR Criterion B/2/B.

Buildings 100 through 400 have all of the primary and secondary character-defining features of Brutalism but are not exceptional examples of the style nor do they represent an evolution of the Brutalist sub-style or modern architectural style. The buildings are not mentioned in lists of important Brutalist architecture in San Diego (City 2007). Wheeler is listed in the Contributing Designers section in the *San Diego Modernism Historic Context Statement* (City 2007) but is not listed on the San Diego HRB list of Master Architects (City 2011). While many of his designs have only recently reached the 45-year threshold and have not yet come under review for modification or demolition, buildings 100 through 400 are not considered significant elements of Wheeler's work, as they do not express a particular phase in the development of his career, an aspect of his work, or a particular idea or theme in his craft. Therefore, buildings 100 through 400 have been evaluated as not significant under NRHP/CRHR/CSDHRR Criteria C/3/C and D.

Buildings 100 through 400 have not yielded, and are not likely to yield, information important in the history of San Diego, California, or the nation. Therefore, buildings 100 through 400 have been evaluated as not significant under NRHP/CRHR Criterion D/4. The buildings have also not been listed or previously determined eligible for listing on the NRHP or the CRHR, nor are they a component of a listed or proposed Historic District; therefore, buildings 100 through 400 have been evaluated as not significant under SDHRR Criteria E and F.

As buildings 100 through 400 do not meet NRHP Criteria A-D, CRHR Criteria 1-4, or CSDHRR Criteria A-F, they are not considered historical resources. As a result, the proposed WSM improvements at buildings 100 through 400 would not result in a significant impact to historical resources. No modifications to buildings 100 through 300 are included with the LRFMP improvements and while building 400 would be demolished during the LRFMP improvements, impacts would be less than significant.

Buildings 500 and 600

Buildings 500 and 600 were designed by San Diego architect Frank Lewis Hope, Jr. in the International sub-style of Modern architecture; building 600 was constructed in 1940, and building 500 was constructed 10 years later, in 1950. The two buildings are connected at the main entrance on the north side of building 600. The buildings are not associated with a specific event that has made a significant contribution to broad patterns in education and school construction in California and the United States, nor is there a significant association between buildings 500 and 600 and the productive lives of former students, faculty, or staff who attended school or worked in the buildings; as such, the buildings have been evaluated as not significant under NRHP/CRHR/CSDHRR Criteria A/1/A and B/2/B.

Hope, Jr. is listed on the San Diego HRB list of Master Architects (City 2011). However, buildings 500 and 600 are not considered a significant element of his body of work. The buildings do not express a particular phase in the development of his career, an aspect of his work, or a particular idea or theme in his craft and are not mentioned in lists of important International architecture in San Diego (City 2007). Additionally, while the buildings have all the primary character-defining features and some secondary features of the International sub-style, they are not an exceptional example of the style, nor do they represent an evolution of the International sub-style or modern architectural style. However, the *San*

Diego Modernism Historic Context Statement states that "examples of this style in San Diego are limited; therefore, retention of good examples is important" (City 2007). As such, while not exceptional examples rising to the level of state or national significance, since buildings 500 and 600 exhibit all of the primary and some of the secondary character-defining features of the style and retain sufficient integrity, they are considered a good example in the City. Therefore, building 500 and 600 have been evaluated as not significant under NRHP, CRHR, and CSDHRR Criterion C/3/D, but are significant under CSDHRR Criterion C (International Style) as limited examples of this style in San Diego, with 1940 (building 600) and 1950 (building 500), the years of construction, as the periods of significance.

Buildings 500 and 600 have not yielded, and are not likely to yield, information important in the history of San Diego, California, or the nation, and have been evaluated as not significant under NRHP/CRHR Criterion D/4. The buildings have not been listed or previously determined eligible for listing on the NRHP or the CRHR, nor are they a component of a listed or proposed Historic District; therefore, buildings 500 and 600 have been evaluated as not significant under CSDHRR Criteria E and F.

Because buildings 500 and 600 have been evaluated as significant under CSDHRR Criterion C and eligible for listing on the CSDHRR, they are considered historical resources. Buildings 500 and 600 would be modified as part of the WSM improvements and impacts would be significant (Impact CUL-1). Also, building 600 would be demolished during the LRFMP improvements and impacts would be significant (Impact CUL-2).

Building 700

Building 700, constructed in 1938, was designed by Quayle Brothers Architects (Charles and Edward Quayle) of San Diego as the Choral and English Building in the International sub-style of Modern architecture. The building is not associated with a specific event that has made a significant contribution to broad patterns in education and school construction in California and the United States, nor is there a significant association between the building and the productive lives of former students, faculty, or staff who attended school or worked in the buildings; as such, building 700 has been evaluated as not significant under NRHP/CRHR/CSDHRR Criteria A/1/A and B/2/B.

The Quayle Brothers are listed on the San Diego HRB list of Master Architects (City 2011). However, building 700 is not considered a significant element of the Quayle Brothers body of work. Building 700 was designed very late in the career of the Quayle Brothers and very early in the period of significance of the International Style in San Diego. The Quayle Brothers typically worked in revival and Deco styles for their civic building designs. As such, building 700 does not express a particular phase in the development of their career or a particular idea or theme in their craft. Therefore, building 700 has been evaluated as not significant under NRHP, CRHR, and CSDHRR Criterion C/3/D. However, as with buildings 500 and 600, and stated in the *San Diego Modernism Historic Context Statement*, examples of the International Style are limited, and retention of good examples is important (City 2007). Since the International level but does represent the style's development at the local level in the City. Therefore, building 700 is recommended significant under CSDHRR Criterion C (International Style), with 1938, the year of construction, as the period of significance.

Building 700 has not yielded, and is not likely to yield, information important in the history of San Diego, California, or the nation, and has been evaluated as not significant under NRHP/CRHR Criterion D/4. The building has not been listed or previously determined eligible for listing on the NRHP or the CRHR, nor is

it a component of a listed or proposed Historic District; therefore, Building 700 has been evaluated as not significant under CSDHRR Criteria E and F.

Because building 700 has been evaluated as significant under CSDHRR Criterion C and eligible for listing on the CSDHRR, it is considered an historical resource. Building 700 would be modified as part of the WSM improvements and impacts would be significant (Impact CUL-1). Also, building 700 would be demolished during the LRFMP improvements and impacts would be significant (Impact CUL-2).

Balboa Stadium

Balboa Stadium, constructed in 1978, was designed by Richard George Wheeler to replace the original 1914 Balboa Stadium on the same site. While the stadium is associated with broad patterns in education and school construction in California and the United States, it is not associated with specific events that have made a significant contribution to these patterns, nor is there a significant association between the stadium and the productive lives of former students, faculty, or staff who attended events at the stadium; as such, the stadium has been evaluated as not significant under NRHP/CRHR/CSDHRR Criterion A/1/A and B/2/B. Balboa Stadium was designed in a vernacular style of architecture; the structures in the stadium complex are all of strictly utilitarian design, with no stylistic flourishes and are not recognized as important examples of vernacular architecture, or the history or development of vernacular architecture in the City. The stadium is not considered a significant element of Wheeler's work and does not express a particular phase in the development of his career or a particular idea or theme in his craft. Therefore, Balboa Stadium has been evaluated as not significant under NRHP/CRHR/CSDHRR Criteria C/3/C and D. Balboa Stadium has not yielded, and is not likely to yield, information important in the history of San Diego, California, or the nation, and has been evaluated as not significant under NRHP/CRHR Criterion D/4. The stadium has not been listed or previously determined eligible for listing on the NRHP or the CRHR, nor is it a component of a listed or proposed Historic District; therefore, it has also been evaluated as not significant under CSDHRR Criteria E and F.

As Balboa Stadium does not meet NRHP Criteria A-D, CRHR Criteria 1-4, or CSDHRR Criteria A-F, it is not considered a historical resource. The Proposed Project does not involve WSM improvements at Balboa Stadium and no impacts would occur. The proposed field house as part of the LRFMP improvements would be located on the south side of the stadium; however, the introduction of a field house would not result in a significant impact on an historical resource and impacts would be less than significant.

Features 1 (Gargoyle Planter), 2 (Gray Castle Courtyard Fountain), and 4 (Gray Castle Doors)

The Gray Castle courtyard fountain (Feature 2) was originally constructed in 1907 within an outdoor courtyard designed by Frank Shaver Allen. The Gray Castle doors (Feature 4) were salvaged from the main Gray Castle building, also designed by Allen, and originally constructed in 1907. The Gothic Revival style concrete gargoyles (Feature 1) are decorative elements salvaged from the Russ Auditorium that was built in 1926. During the redevelopment of the campus in the 1970s, Wheeler intentionally paid homage to the Gray Castle in his designs; the redevelopment of the campus allowed for small preservation projects including the construction of the gargoyle planter and the re-installation of the Gray Castle courtyard fountain and the Gray Castle main doors. The gargoyles were integrated into a planter located along Park Boulevard, the fountain was placed within an outdoor enclosure within the student quad area, and the Gray Castle doors were relocated on building 100. Implementation of these small preservation projects, while not rising to the level of significance under Criterion A of the NRHP or

Criterion 1 of the CRHR, is a historically significant event at the local level in the City. As such, these features have been evaluated as significant under CSDHRR Criterion A as a representation of the SDHS community's preservation effort and as a reflection of the Gray Castle campus from the early and mid-twentieth century.

There is no direct association between the gargoyle planter, Gray Castle doors, or Gray Castle courtyard fountain and the lives of people important to state and local history; as such, they have been evaluated as not significant under NRHP/CRHR/CSDHRR Criterion B/2/B.

The design of the gargoyle planter is a simple and utilitarian support structure for the gargoyle figures, which are unique in their representation of athletic and academic subjects. While the planter does not represent the work of an identifiable master, the gargoyles possess high artistic value and represent an important example of the Gothic Revival style at the local level. That the gargoyles have been removed from their original location significantly impacts their historic integrity, making them not eligible for listing in the NRHP/CRHR under Criterion C/3. However, they have been evaluated as significant under CSDHRR Criterion C (high artistic value). Likewise, the Castle doors embody the characteristics of the Gothic Revival style in which they were designed and have been evaluated as significant under CSDHRR Criterion C (high artistic value). On the other hand, while the design and material of the original Gray Castle courtyard fountain reflect those of the Gothic-Revival style, it is not an exceptional example of the style, nor does it possess high artistic value, represent the work of an identifiable master, or represent an important example of building practices circa 1910 or 1975; as such, it has been evaluated as not significant under Criteria C/3/C and D.

The gargoyle planter, Gray Castle courtyard fountain, and Gray Castle doors have not yielded, and are not likely to yield, information important in the history of San Diego, California, or the nation, and are not listed or previously determined eligible for listing on the NRHP or the CRHR. As such, the objects been evaluated as not significant under NRHP/CRHR Criterion D/4 and CSDHRR Criterion E.

The gargoyle planter, Gray Castle courtyard fountain, and Gray Castle doors are included in a finite group of resources which are related to one another in a clearly distinguishable way. The gargoyle planter, Gray Castle courtyard fountain, and the Gray Castle doors, along with the World War I memorial (Feature 3) and the World War II plaque (Feature 6) discussed below, were all intentionally salvaged from the Gray Castle campus and reinstalled within the redeveloped SDHS campus between 1975 and 1976. Therefore, these five resources have been evaluated as significant under Criterion F.

In summary, Feature 1 (gargoyle planter) has been evaluated as significant under CSDHRR Criteria A and F, with a circa 1975-1976 period of significance (further research might be able to clarify the exact construction date of the planter), and as eligible under CSDHRR Criterion C, with a 1926 (the year Russ Auditorium was constructed) period of significance,. Feature 2 (Gray Castle courtyard fountain) has been evaluated as eligible under CSDHRR Criteria A and F with a 1975-1976 period of significance, when the fountain was salvaged and reinstalled. Feature 4 (Gray Castle doors) has been evaluated as eligible under CSDHRR Criteria A and F, with a 1975-1976 (when the doors were salvaged and reinstalled on building 100) period of significance, and as eligible under CSDHRR Criterion C, with a 1907 (the year Gray Castle was constructed) period of significance. As such, Features 1, 2, and 4 are eligible for listing on the CSDHRR and are considered historical resources. Of these three features, Feature 2 (Gray Castle courtyard fountain) is situated within the student quad area that is proposed for demolition during the WSM improvements and impacts to the feature would be significant (Impact CUL-1). Also Feature 4 (Gray Castle doors) could be impacted during the proposed building 100 addition and impacts to this

feature would be significant (Impact CUL-1). No changes to Feature 1 are proposed during the WSM or LRFMP improvements and impacts would not occur.

Features 3 (World War I Memorial) and 6 (World War II Plaque)

The World War I memorial (Feature 3) was commissioned by the student bodies of 1919, 1920, and 1921; the memorial is dedicated to the SDHS students who gave their lives in the war. The World War II Plaque (Feature 6) was commissioned by members of the San Diego Board of Education and includes hand-carved relief panels created by local San Diego artist, Isabelle Schultz Churchman. The plaque was displayed in Russ Auditorium from 1948 to circa 1973, when Russ Auditorium was demolished. The World War I memorial was salvaged during the redevelopment of the campus in 1975-1976 and both the World War I memorial and World War II plaque were reinstalled within the new campus: the memorial in the student quad area and the plaque within building 100. As noted above with regard to Features 1, 2, and 4, implementation of these small preservation projects, while not rising to the level of significance under Criterion A of the NRHP or Criterion 1 of the CRHR, is a historically significant event at the local level in the City. As such, these features have been evaluated as significant under CSDHRR Criterion A as a representation of the SDHS community's preservation effort and as a reflection of the Gray Castle campus from the early and mid-twentieth century.

There is no direct association between the World War I memorial and the lives of people important to state and local history. No individual names are listed on the monument, either those to whom it is dedicated, or those of the dedicated groups. While individual names are listed on World War II plaque, specific actions or events are not, and the focus of the plaque is the collective sacrifice of the individuals in service of the ideals described. As such, the resources have been evaluated as not significant under NRHP/CRHR/CSDHRR Criterion B/2/B.

Research was unable to determine who designed or constructed the World War I memorial. The simple design, plain engraving, and common material do not embody distinctive characteristics of a type, period, or method of construction. The memorial does not represent an important example of building practices circa 1920 or the use of indigenous materials or craftsmanship. Therefore, the World War I memorial has been evaluated not significant under NRHP/CRHR/CSDHRR Criteria C/3/C and D.

The decorative portion of the World War II plaque consists of four wood carved relief panels which were designed by local artist, Isabelle Schultz Churchman in 1947-1949. The panels represent President Roosevelt's *Four Freedoms* (Freedom of Speech, Freedom of Religion, Freedom from Want, Freedom from Fear) for which the war was fought. The images on the panels feature Works Progress Administration (WPA) style scenes of religious practitioners, animal husbandry, agriculture, childhood, and academics. During the 1930s New Deal era, Churchman was a state-sponsored artist under the State Emergency Relief Administration (SERA), who created dioramas depicting episodes of San Diego history under the WPA Curriculum Project of the San Diego City Schools. It appears that her experience as a WPA artist influenced her design for these panels; however, they are not considered WPA art. The panels were not a government funded project nor was it a part of the San Diego City Schools Curriculum Project in the 1930s and early 1940s. However, Churchman is considered a locally significant San Diego based artist during the twentieth century. She is known mostly for her sculptures, and these panels are a rare example of her wood relief work. Though not rising to national or state significance under the NRHP and the CRHR, the panels have been evaluated as significant under Criterion D of the CSDHRR as notable work of a local master artist, Isabelle Schultz Churchman.

The World War I memorial and World War II Plaque have not yielded, and are not likely to yield, information important in the history of San Diego, California, or the nation, and are not listed or previously determined eligible for listing on the NRHP or the CRHR. As such, the objects been evaluated as not significant under NRHP/CRHR Criterion D/4 and CSDHRR Criterion E.

As with the gargoyle planter, Gray Castle courtyard fountain, and Gray Castle doors, the World War I memorial and the World War II plaque are included in a finite group of resources which are related to one another in a clearly distinguishable way. The resources were all intentionally salvaged from the Gray Castle campus and reinstalled within the redeveloped SDHS campus between 1975 and 1976. Therefore, these five resources have been evaluated as significant under Criterion F.

In summary, Feature 3 is evaluated as eligible under CSDHRR Criteria A and F with a 1975-1976 period of significance, when the memorial was salvaged and reinstalled in the student quad area. The World War II plaque is evaluated as significant under CSDHRR Criteria A and F with a 1975-1976 period of significance, when the plaque was salvaged and reinstalled in building 100, and as eligible under CSDHRR Criterion D, with a 1948-1949 period of significance, when the plaque and panels were completed by Churchman. As such, Features 3 and 6 are eligible for listing on the CSDHRR, and are considered historical resources. Feature 3 (World War I Memorial) is situated within the student quad area, proposed for demolition during the WSM improvements, and impacts to the feature would be significant (Impact CUL-1). Feature 6 (World War II plaque) could be impacted during the proposed building 100 addition and impacts to this feature would be significant (Impact CUL-1).

Feature 5 (Historic Landscaping)

Research could not date any of the landscaping present on the SDHS campus to a specific period. At best, the landscaping was planted between 1902, when the City began planting at SDHS, and the mid-1970s, when some of it was marked as "existing" on as-built diagrams. Research did not identify an association between campus landscaping and historically significant people or events. A few of the extant pine trees are possibly the Torrey Pines that were planted by graduating senior classes, but research did not confirm their exact location. The extant landscaping within SDHS do not represent a cohesive landscape designed by an identified person or group, nor can the extant trees be identified to a specific era or date. For these reasons, the landscaping elements extant within the SDHS campus do not constitute a historic landscape, and a formal evaluation was not undertaken. The historic landscaping remnants within SDHS campus have been recommended not historically significant and not eligible for listing in the NRHP, CRHR, and CSDHRR. As such, while this feature would be impacted during the WSM improvements, Project impacts would be less than significant.

Feature 7 (Former Balboa Stadium Terracing)

The original Balboa Stadium was demolished in 1978, with only the remnants of the stadium remaining. The original Balboa Stadium was designed by Quayle Brothers Architects and Charles Cressey and was opened in May 1915 as part of the Panama-California Exposition. The remnant terracing, while being associated with the original Balboa Stadium, is not directly associated with a specific historic event, pattern, or trend that occurred within the stadium and no significant association between stadium and the productive lives of former students, staff, or community members who attended events at the stadium has been established; as such the remnant Balboa Stadium terracing has been evaluated as not significant under the NRHP, CRHR, or CSDHRR Criteria A/1/A and B/2/B. The remnant terracing is all that remains of the original Balboa Stadium and does not convey the significant design of the stadium or the master work of the Quayle Brothers Architects and Charles Cressey. Therefore, the remnant Balboa Stadium terracing has been evaluated as not significant under Criteria C/3/C and D.

The former Balboa Stadium terracing has not yielded, and is not likely to yield, information important in the history of San Diego, California, or the nation. Additionally, the original Balboa Stadium has not been listed or previously determined eligible for listing on the NRHP or the CRHR, nor is it a component of a listed or proposed Historic District; therefore, the resource has been evaluated as not significant under NRHP/CRHR Criterion D/4 and CSDHRR Criteria E and F.

As Feature 7 (former Balboa Stadium terracing) does not meet NRHP Criteria A-D, CRHR Criteria 1-4, or CSDHRR Criteria A-F, it is not considered an historical resource. No changes to Feature 7 are proposed during the WSM or LRFMP improvements and impacts would not occur.

Operation

Once the WSM and LRFMP improvements are constructed, no modifications to an historical resource would occur during Project operations and impacts on historic resources would not occur.

Level of Significance Prior to Mitigation

Impact CUL-1: The Proposed Project has the potential to result in significant impacts to historical resources during construction of the WSM improvements as a result of the proposed upgrades to buildings 500, 600, and 700; demolition of the student quad area, which contains Features 2 (Gray Castle courtyard fountain) and 3 (World War I memorial); and the building 100 addition, which contains Features 4 (Gray Castle doors) and 6 (World War II plaque).

Impact CUL-2: The Proposed Project has the potential to result in significant impacts to historical resources during construction of the LRFMP improvements as a result of the proposed demolition of buildings 600 and 700.

Operational impacts on a historical resource would not occur once the WSM and LRFMP improvements are constructed.

Mitigation Measures

MM CUL-1 Prior to the implementation of the WSM improvements, design measures following the Secretary of the Interior's Standards for the Treatment of Historic Properties shall be developed to preserve the character-defining features of buildings 500, 600, and 700, Features 2 (Gray Castle courtyard fountain) and 3 (World War I memorial), and Features 4 (Gray Castle doors) and 6 (World War II plaque). A preservation architect or architectural historian meeting the Secretary of the Interior's Professional Qualifications Standards in historic architecture and/or architectural history shall participate in Project planning (i.e., design) and construction monitoring activities which shall adhere to the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Also, environmentally sensitive areas and, potentially, barriers shall be established as needed to protect historical resources during Project construction activities. The protection of environmentally sensitive area(s) shall be reviewed by a preservation architect or architectural historian meeting the Secretary of the Interior's Professional

Qualifications Standards in historic architecture and/or architectural history prior to the implementation of WSM improvements and environmentally sensitive area(s) established shall be outlined on Project plans/engineering drawings. The preservation architect or architectural historian shall provide an environmental training to construction crews so that they will be made aware of restrictions and requirements for protecting historical resources. A qualified professional meeting the Secretary of the Interior's Qualification Standards (historic architecture and/or architectural history) shall be retained to monitor Project construction activities to adhere to said restrictions as needed.

MM CUL-2a Prior to the implementation of the LRFMP improvements, photographic documentation of buildings 600 and 700 shall occur. Such documentation shall adhere to standards and guidelines for Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), and Historic American Landscapes Survey (HALS) documentation, as outlined in the updated HABS/HAER/HALS Guidelines set by the Heritage Documentation Programs instituted by the National Parks Service (NPS 2020). HABS-like documentation shall consist of measured drawings (or reproductions of historic drawings), photographs, and written data (e.g., historic context, building descriptions) that provide a detailed record that reflects the historical significance of the resources. Following completion of the HABS-like documentation, the materials shall be placed on file with the City, San Diego History Center (SDHC), and the San Diego Central Library.

Also, environmentally sensitive areas and, potentially, barriers shall be established as needed to protect historical resources during Project construction activities. The protection of environmentally sensitive area(s) shall be reviewed by a preservation architect or architectural historian meeting the Secretary of the Interior's Professional Qualifications Standards in historic architecture and/or architectural history prior to the implementation of LRFMP improvements and environmentally sensitive area(s) established shall be outlined on Project plans/engineering drawings. The preservation architect or architectural historian shall provide an environmental training to construction crews so that they will be made aware of restrictions and requirements for protecting historical resources. A qualified professional meeting the Secretary of the Interior's Qualification Standards (historic architecture and/or architectural history) shall be retained to monitor Project construction activities to adhere to said restrictions as needed.

MM CUL-2b Prior to the implementation of the LRFMP improvements, interpretive signage or display panels shall be developed and installed in a publicly visible location within the SDHS campus that describe the history and significance of SDHS. The interpretive signage shall include historic photographs and a brief narrative describing the history of SDHS and the significance of the resources. In addition, educational/interpretive information which describes the history and significance of SDHS and the historical resources shall be made available to the public in a readily accessible format, such as a printed brochure and/or electronic format such as a webpage. This educational/interpretive material shall be available to schools, museums, archives and curation facilities, libraries, nonprofit organizations, the public, and other interested agencies. The interpretive signage/display and educational/interpretive materials shall be based on the

photographs produced in the HABS/HAER documentation and the historic archival research previously prepared in the Cultural Resources Technical Report for the Project.

Level of Significance After Mitigation

Implementation of MM CUL-1 would involve either avoidance or maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation, or reconstruction of the historical resources conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, as well as result in the protection of historical resources during construction of the WSM improvements. As a result, potentially significant impacts to historical resources related to Impact CUL-1 during construction of the WSM improvements would be reduced to less than significant. Once constructed, operational impacts on historical resources associated with the WSM improvements would not occur.

Implementation of MM CUL-2a would provide a record of Buildings 600 and 700 as well as result in the protection of historical resources during Project construction activities and MM CUL-2b would provide a record of, and highlight, the history and significance of SDHS. The use of drawings, photographs, and/or displays would not mitigate the physical impact on the environment caused by demolition or destruction of a historical resource (State CEQA Guidelines Section 15126.4(b)). However, CEQA requires that all feasible mitigation be carried out, even if it does not mitigate Project impacts to less than significant. Recordation and the use of interpretive signage and materials serves an archival and educational purpose and would eliminate the loss of historical resources related to Impact CUL-2 would be reduced; however, impacts associated with the removal of building 600 and 700 during construction of the LRFMP improvements would remain significant and unavoidable. Once constructed, operational impacts on historical resources associated with the LRFMP improvements would not occur.

Issue 2: Would the Project directly or indirectly cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5?

3.2.4.2 Impact Discussion

WSM and LRFMP

Construction

No archaeological resources have been identified within the SDHS campus. The records search of the CHRIS resulted in the identification of 45 previously recorded cultural resources within a quarter-mile radius of the Project site, all of which date to the historic period. As mentioned above, the Project site is underlain by fill and San Diego Formation materials and has been developed, with little to no native ground surface remaining. The likelihood of encountering intact subsurface prehistoric archaeological deposits that meet the definition of a historical resource as defined in State CEQA Guidelines Section 15064.5, or unique archaeological resource pursuant to PRC Section 21083.2(g), are essentially non-existent. As such, the Project site has a low potential for the presence of prehistoric archaeological sites. However, development and redevelopment of the campus has occurred over an almost 140-year period, since Russ School was initially constructed on the campus site in 1882, and historic archaeological artifacts or resources related to the development of the school may be encountered during WSM construction activities (Impact CUL-3) and during LRFMP construction activities (Impact CUL-4).

Operation

Once the WSM and LRFMP improvements are constructed, operations at the Project site would not involve ground-disturbing activities. Operational impacts associated with the Project would not occur.

Level of Significance Prior to Mitigation

Impact CUL-3: The Proposed Project has the potential to result in the disturbance of historic archaeological resources during the construction of WSM improvements involving ground-disturbing activities.

Impact CUL-4: The Proposed Project has the potential to result in the disturbance of historic archaeological resources during the construction of LRFMP improvements involving ground-disturbing activities.

Operational impacts on a historic archaeological resources would not occur once the WSM and LRFMP improvements are constructed.

Mitigation Measures

MM CUL-3 Prior to the implementation of WSM improvements, a qualified archaeological Principal Investigator shall be retained to oversee an archaeological monitoring program during demolition and ground disturbing actives within the student quad area and/or parking lot. As part of the archaeological monitoring program, a qualified archaeologist shall be present at the pre-construction meeting to establish procedures for archaeological discovery notification and monitoring protocols. The archaeologist shall explain the procedures for temporarily halting or redirecting work to permit the sampling, identification, evaluation, and salvage of archaeological resources, as appropriate. An archaeologist shall be present to monitor initial ground disturbance for the demolition and/or other improvement activities within the student quad area and/or parking lot areas in order to inspect the subsurface for archaeological features or materials. Monitoring shall cease in areas determined to strictly contain fill and San Diego Formation materials.

In the event that archaeological artifacts or features are discovered during grounddisturbing activities, all work in the vicinity of the materials shall be halted and the resource assessed for significance according to State CEQA Guidelines Section 15064.5. If any archaeological resource is determined to be significant, the District, in consultation with the Principal Investigator, and a Kumeyaay Native American monitor in the case of prehistoric resources, shall determine the appropriate avoidance or treatment or measures (e.g., data recovery). Significant cultural materials recovered shall be, as necessary, subject to documentation, scientific analysis, and/or curation, according to current professional standards.

MM CUL-4 Prior to the implementation of the LRFMP improvements, a qualified archaeological Principal Investigator shall be retained to review Project engineering/grading plans and determine if monitoring is required. If it is determined that monitoring is necessary, the monitoring program protocols outlined in MM CUL-3 shall be followed. If it is determined that monitoring is not necessary, in the event that archaeological artifacts

or features are inadvertently discovered during ground-disturbing activities, all work within 30 feet of the materials shall be halted and the District shall consult with the Principal Investigator to assess the significance of the find according to State CEQA Guidelines Section 15064.5. If any resource is determined to be significant, the District and the archaeologist shall determine the appropriate avoidance or treatment or measures (e.g., data recovery). Significant cultural materials recovered shall be, as necessary, subject to documentation, scientific analysis, and/or curation, according to current professional standards. A Cultural Resources Monitoring Report shall be completed by the Principal Investigator and submitted to the District describing the methods and results of the monitoring program.

Level of Significance After Mitigation

Implementation of mitigation measures MM CUL-3 and MM CUL-4 would reduce potentially significant impacts related to historic archaeological resources during construction of the WSM and LRFMP improvements to less than significant. Impacts associated with archaeological resources during operation of the WSM and LRFMP improvements would not occur.

Issue 3: Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?

3.2.4.3 Impact Discussion

WSM and LRFMP

Construction

No existing religious or sacred use site, or indications of human remains were identified by Sacred Lands File search, records search, or pedestrian field survey. The NAHC indicated in a response dated May 7, 2020 that no known sacred lands are within the Project site. The Proposed Project would have no impact to existing religious or sacred uses site within the SDHS campus.

There are no formal cemeteries within the Project site, and there is no evidence indicating the possible presence of human remains in the Project site. The SDHS campus site is underlain by fill and San Diego Formation materials and has been extensively developed over the last 140 years, with little to no native ground surface remaining. Therefore, it is not expected that implementation of the Proposed Project would disturb any human remains, including those interred outside of dedicated cemeteries, and impacts would not occur.

However, if human remains are discovered, State Health and Safety Code Section 7050.5 requires that further disturbances and activities will cease in any area or nearby area suspected to overlie remains and that the County Coroner be contacted. Pursuant to PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission, who will then notify the Most Likely Descendant. Further provisions of PRC Section 5097.98 are to be followed as applicable. Therefore, through compliance with existing regulations, the construction and operation of the Proposed Project would not disturb any human remains, including those interred outside of formal cemeteries. No impact on human remains would occur and no mitigation is necessary. Impacts would be less than significant.

Operation

Once the WSM and LRFMP improvements are constructed, operations at the Project site would resume similar to existing conditions and would not involve ground-disturbing activities. Operational impacts related to the disturbance of human remains associated with the Project are not anticipated and would not occur.

Level of Significance Prior to Mitigation

Impacts associated with the disturbance of human remains associated with construction and operation of the WSM or LRFMP improvements would be less than significant.

Mitigation Measures

As no significant impacts would occur, no mitigation measures would be required.

Level of Significance After Mitigation

Impacts associated with the disturbance of human remains during construction and operation of the WSM and LRFMP improvements would remain less than significant.

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San Diego High School WSM and LRFMP



Source: Aerial (SanGIS, 2017)



San Diego High School Historic Resources

Figure 3.2-1

3.3 GEOLOGY AND SOILS

This section includes an assessment of potential impacts related to geology and soils, including paleontological resources. The technical information summarized in this section is based on several geotechnical studies completed at the Project site by Ninyo & Moore between 2019 and 2020. These studies include a *Geotechnical Evaluation*, including the results of site testing; and two *Fault Hazard Evaluations*, which evaluate the potential for faulting at buildings 400 and 700. These reports are included as appendices to this EIR and are identified as Appendix D1, D2, and D3, respectively.

3.3.1 Existing Conditions

3.3.1.1 Site Topography

The SDHS campus generally slopes to the south and southwest, with elevations ranging from 110 feet above mean sea level (amsl), near Russ Boulevard in the southern part of the campus, to approximately 180 feet amsl at the athletic fields in the northern part of campus. Balboa Stadium, in the eastern part of the campus, is surrounded by a terrace with heights ranging between 20 and 50 feet on the eastern, northern, and western sides.

3.3.1.2 Geologic Setting

The Project site is situated in the coastal foothill section of the Peninsular Ranges Geomorphic Province (Province), which encompasses an area that extends approximately 900 miles between the Transverse Range and the Los Angeles Basin on the north to the southern tip of Baja California on the south. The Province varies in width from approximately 30 to 100 miles and consists of rugged mountains underlain by Jurassic metavolcanics and metasedimentary rocks and Cretaceous igneous rocks of the southern California batholith.

The geologic units beneath the Project site that were encountered during previous subsurface evaluations (i.e., borings and exploratory trenching) include fill, topsoil/colluvium, terrace deposits, and the San Diego Formation. Subsurface explorations conducted in November 2018 at the Project site involved a total of 21 borings (including 10 small-diameter borings and 11 hand auger borings). Boring depths ranged between 1.5 and 41.5 feet below ground surface (bgs) and encountered fill and San Diego Formation materials, in addition to subsurface pavement sections consisting of asphalt concrete. Soil expansion was tested as low to moderate with an expansion index between 29 and 79. Generalized descriptions of the geologic units known to exist beneath the campus are provided below. The geology of the site and the vicinity is shown on Figure 3.3-1, *Geologic Units at San Diego High School and Surrounding Areas*.

Fill

Fill materials were identified in 19 of the 21 borings at the ground surface or underlying pavement and continued to depths of up to eight feet. The fill materials generally consisted of light brown, brown, and yellowish brown, dry to wet, loose to dense, clayey and silty sand and silty gravel, and very stiff, sandy clay. Gravel, cobbles, and debris were also encountered in the fill materials.

Topsoil/Colluvium

Topsoil/colluvium has been observed in previous subsurface explorations at SDHS; however, neither was encountered in the 21 borings conducted in 2018. These materials are assumed to underlie the Project site and are described as brown, sandy clay and silty and clayey sand.

Terrace Deposits

Terrace deposits have been observed in previous subsurface explorations at SDHS dating back to 1973; however, none were encountered during the borings conducted in 2018. These materials are assumed to underlie the Project site and are described as various shades of brown, dense to very sense, silty sand with cobbles and layers of gravel. Layers of brown, hard, sandy clay were also encountered within the terrace deposits.

San Diego Formation

San Diego Formation materials were encountered in 15 of the 21 borings near the ground surface (as close as within one foot bgs) and underlying the pavement and fill. These materials generally consisted of various shades of yellow, gray, and brown, dry to wet, weakly to moderately cemented, silty and clayey sandstone. Strongly-cemented zones, gravel, and cobbles were also encountered. Hand auger refusal occurred in four borings.

3.3.1.3 Faulting and Seismicity Hazards

The Peninsular Ranges Province is traversed by a group of sub-parallel faults and fault zones trending roughly northwest. Faults are categorized as active faults or potentially active faults. Active faults exhibit evidence of ground displacement in the last 11,000 years (also referred to as within the Holocene period) while inactive faults are those that have moved between 11,000 years and 2 million years (also referred to as the Quaternary period). As listed in Table 3.3-1, *Principal Active Faults*, several principal faults in the region are considered to be active. The Elsinore, San Jacinto, and San Andreas faults are active faults are active faults west of the Project site. The Rose Canyon, Coronado Bank, San Diego Trough, and San Clemente faults are active faults west of the Project site. Major tectonic activity associated with these and other faults within this regional tectonic framework consists primarily of right-lateral, strike-slip movement. Two smaller faults, the Florida Canyon and Texas Street faults, are also identified near the Project site; however, these smaller faults do not have earthquake forecasting data available.

There is one active fault and two potentially active faults near the Project site and local geologic hazards are depicted on Figure 3.3-2, *Geologic Hazards*. As shown, the nearest known active fault is the Rose Canyon Fault, located approximately 4,750 feet to the west. Potentially active smaller faults near the Project site include the Florida Canyon Fault and the Texas Street Fault, located about 1,000 and 5,000 feet east of the campus, respectively. The Project site is located adjacent to (but not within) a State of California Earthquake Fault Zone, and active faults related to the Rose Canyon Fault are mapped as close as 450 feet southwest of the campus (see cross-hatched areas on Figure 3.3-2). Further, the campus is identified within the City's Downtown Special Fault Zone. As a result, the Project site is in an area that is seismically active and there is the potential for strong ground motion and ground surface rupture to occur during a seismic event at the Project site.

Strong Ground Motion

Strong ground motion or ground shaking is the seismic effect that results in most of the damage associated with earthquakes. The principal seismic hazard that could affect the Project site is ground motion associated with earthquake events along one or more regional active faults. Ground motion can affect the integrity of facilities and buildings either directly from vibration-related damage to structures, or indirectly through associated hazards including liquefaction. Ground motion related to seismic activity is commonly measured in terms of horizontal peak ground acceleration (PGA) that corresponds to the maximum considered earthquake (MCE). Two types of MCE values are referred to in the California Building Code (CBC) to determine seismic loads and structural safety considerations in building design. The first value is MCE_R, which is the estimated PGA value in consideration of the maximum earthquake magnitudes capable of being produced along individual faults. The second value is MCE_G, which represents the geometric mean PGA value assuming there is a two percent chance over a 50-year period that the MCE_R value will be exceeded. Based on the Geotechnical Evaluation prepared for the Project (Appendix D2), the MCE_R and MCE_G values for the Project site are calculated at 0.49g and 0.55g, respectively. All of San Diego County, including the Project site, is located within Seismic Zone 4 (as defined by Section 1629.4.1 of the CBC), which is the zone with the most potential for ground shaking.

Fault	Distance to SDHS (miles)	Maximum Moment of Magnitude
Rose Canyon	0.90	6.9
Coronado Bank	13	7.4
Newport-Inglewood	34	7.0
Elsinore (Julian Segment)	41	7.4
Elsinore (Temecula Segment)	44	7.1
Earthquake Valley	46	6.8
Elsinore (Coyote Mountain)	51	6.9
Palos Verdes	59	7.3
San Jacinto (Coyote Creek Segment)	62	7.0
Elsinore (Glen Ivy Segment)	63	6.9
San Jacinto (Borrego Mountain Segment)	64	6.8
San Jacinto (Anza Segment)	65	7.3
Source: Ninvo & Moore 2019	•	·

Table 3.3-1 PRINCIPAL ACTIVE FAULTS

Source: Ninyo & Moore 2019 SDHS = San Diego High School

Ground Surface Rupture

As noted above, the entire SDHS campus is designated by the City's 2008 Seismic Safety Study as within the Downtown Special Fault Zone. There is the potential for ground surface rupture at the Project site to occur, which could involve lurching or cracking at or below the ground surface and could affect existing structures, foundations, or underground utilities.

Groundwater and Infiltration

Groundwater was not encountered at any of the borings performed at the Project site, which extended up to 41.5 feet bgs and is not evidenced in the previous borings reviewed at the site. However, seepage was encountered in one boring at a depth of 5 feet and high moisture content was also encountered

within the San Diego Formation in several borings. According to data on local groundwater monitoring wells about 500 feet southwest of the Project site, groundwater in the Project vicinity is anticipated at depths greater than 100 feet bgs.

Infiltration tests were performed in seven of the borings in 2018 to evaluate the infiltration rates of the underlying soils. Testing was conducted in accordance with the City's 2018 Best Management Practices Design Manual. The results indicated that infiltration rates at the Project site range between 0.36 and 4.9 inches per hour.

3.3.1.4 Paleontological Resources

Based on the known fossil productivity of individual geologic units in San Diego County, levels of paleontological resource potential and sensitivity have been developed (Deméré and Walsh 2011). For the purposes of establishing the likely presence of paleontological resources, geologic units are assigned a paleontological sensitivity of high, moderate, low, or no potential. Paleontological sensitivity is defined by the following:

- **High Sensitivity.** High paleontological sensitivity is assigned to geologic units known to contain paleontological localities with rare, well-preserved, critical fossil materials for stratigraphic or paleoenvironmental interpretation, and fossils providing important information about the paleoclimatic, paleobiological, and/or evolutionary history (phylogeny) of animal and plant groups. In general, geologic units with high sensitivity are considered to have the highest potential to produce unique invertebrate fossil assemblages or vertebrate fossil remains.
- **Moderate Sensitivity.** Moderate paleontological sensitivity is assigned to geologic units known to contain paleontological localities. These geologic units are judged to have a strong, but sometimes unproven, potential for producing unique and/or significant fossil remains (Deméré and Walsh 2011).
- Low Sensitivity. Low paleontological sensitivity is assigned to geologic units that, based on their relatively young age and/or high-energy depositional history, are judged unlikely to produce unique fossil remains. Low-sensitivity geologic units rarely produce fossil remains of scientific significance and are considered to have low sensitivity. However, when fossils are found in these formations, they are often very significant additions to our geologic understanding of the area.
- No Sensitivity. No paleontological sensitivity is assigned to geologic units that are entirely igneous in origin and therefore have no potential for producing fossil remains. This rating is also assigned to artificial fill materials that have lost the original stratigraphic/geologic context of any contained organic remains (e.g., fossils).

As stated above, fill, topsoil/colluvium, terrace deposits, and the San Diego Formation underlie the Project site and have varying paleontological sensitivities. Fill is considered to have no paleontological sensitivity. Topsoil/colluvium is considered to be younger material and not formational, and also is not paleontologically sensitive.

Terrace deposits are related to river and marine systems; however, marine terrace deposits south of I-8 only occur at Border Field State Park and are not known to exist beneath SDHS (Deméré and Walsh 2011). As such, the terrace deposits beneath the Project site are anticipated to be unnamed river terrace deposits from the late Pleistocene (approximately 10,000 to 500,000 years ago). Fossils within

unnamed river terrace deposits have been discovered in the San Diego region at the south side of Sweetwater Valley (e.g., pond turtle, passenger pigeon, hawk, mole, gopher, squirrel, rabbit, and horse), along the South Bay Freeway (SR 54) (e.g., ground sloth, shrew, mole, mice, wolf, camel, deer, horse, mastodon, and mammoth), and in the San Dieguito Valley (e.g., ground sloth). Terrace deposits, including areas beneath the Project site, have revealed important vertebrate remains, and a moderate resource sensitivity is assigned.

The San Diego Formation is a sedimentary rock unit deposited in an open marine embayment during the late Pliocene and early Pleistocene (approximately 3 to 1.5 million years ago). It is exposed from the International Border north to Mission Valley, and in isolated outcrops at Tecolote Canyon, Balboa Avenue, Rose Canyon, and the southern slopes of Mount Soledad. The San Diego Formation has produced scientifically important remains of marine vertebrates (especially marine mammals, such as walrus, fur seal, sea cow, dolphin, and baleen whale), sea birds, sharks, bony fishes, and marine mollusks, crustaceans, and echinoderms. Also recovered from this geologic unit are rare remains of terrestrial mammals (e.g., cat, horse, camel, gomphothere, ground sloth) and plants (e.g., palm, pine, oak, sycamore, avocado). The San Diego Formation, including areas beneath the Project site, is assumed to contain important information on Fossils recovered from these deposits include skeletal remains of reptiles, birds, small mammals, and large-bodied "Ice-Age" mammals such as mammoth, bison, horse, and camel.

3.3.2 Regulatory Setting

3.3.2.1 Federal

Occupational Safety and Health Administration Regulations

The Occupational Safety and Health Administration's (OSHA) Excavation and Trenching standard, Title 29 of the Code of Federal Regulations (CFR), Part 1926.650, covers requirements for excavation and trenching operations. OSHA requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching the sides of the excavation, supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area. All contractors are required to comply with OSHA regulations.

3.3.2.2 State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to protect structures for human occupancy from the hazard of surface faulting. In accordance with the act, the State Geologist has established regulatory zones—called earthquake fault zones—around the surface traces of active faults and has published maps showing these zones. Buildings for human occupancy cannot be constructed across surface traces of faults that are determined to be active. Because many active faults are complex and consist of more than one branch that may experience ground surface rupture, earthquake fault zones extend approximately 200 to 500 feet on either side of the mapped fault trace.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was passed in 1990 following the Loma Prieta earthquake to reduce threats to public health and safety, and to minimize property damage caused by earthquakes. This act

requires the State Geologist to delineate various seismic hazard zones, and cities, counties, and other local permitting agencies to regulate certain development projects within these zones. For projects that would locate structures for human occupancy within designated Zones of Required Investigation, the Seismic Hazards Mapping Act requires project applicants to perform a site-specific geotechnical investigation to identify the potential site-specific seismic hazards and corrective measures, as appropriate, prior to receiving building permits. The California Geological Survey's (CGS') Guidelines for Evaluating and Mitigating Seismic Hazards (Special Publication 117A) provides guidance for evaluating and mitigating seismic hazards (CGS 2008). The CGS produced official maps for the San Diego region based on United States Geological Survey topographic quadrangles in 2008, as required by the act.

California Building Code

The CBC, which is codified in Title 24 of the CCR, Part 2, was promulgated to safeguard the public health, safety, and general welfare by establishing minimum standards related to structural strength, means of ingress and egress to facilities (entering and exiting), and general stability of buildings. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all buildings and structures within its jurisdiction. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under State law, all building standards must be centralized in Title 24 or they are not enforceable. The provisions of the CBC apply to the construction, alteration, movement, replacement, location, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

The 2019 edition of the CBC is based on the 2018 International Building Code published by the International Code Council, which replaced the Uniform Building Code. The code is updated triennially, and the 2019 edition of the CBC was published by the California Building Standards Commission on July 1, 2019 and became effective starting January 1, 2020. Seismic design provisions of the building code generally prescribe minimum lateral forces applied statically to the structure, combined with the gravity forces of the dead and live loads of the structure, which the structure then must be designed to withstand. The prescribed lateral forces are generally smaller than the actual peak forces that would be associated with a major earthquake. Consequently, structures should be able to: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage but with some nonstructural damage; and (3) resist major earthquakes without collapse, but with some structural as well as nonstructural damage. Conformance to the current building code recommendations does not constitute a guarantee that significant structural damage would not occur in the event of a maximum magnitude earthquake. However, it is reasonable to expect that a structure designed in accordance with the seismic requirements of the CBC should not collapse in a major earthquake.

The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, all of which are used to determine a seismic design category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site; SDC ranges from A (very small seismic vulnerability) to E/F (very high seismic vulnerability and near a major fault). Seismic design specifications are determined according to the SDC in accordance with Chapter 16 of the CBC. Chapter 18 of the CBC covers the requirements of geotechnical investigations (Section 1803); excavation, grading, and fills (Section 1804); load-bearing of soils (Section 1806); foundations (Section 1808); shallow foundations (Section 1809); and deep foundations (Section 1810). For SDCs D, E, and F, Chapter 18 requires analysis of slope instability, liquefaction, and surface rupture attributable to faulting or lateral spreading, plus an

evaluation of lateral pressures on basement and retaining walls, liquefaction and soil strength loss, and lateral movement or reduction in foundation soil-bearing capacity. It also addresses measures to be considered in structural design, which may include ground stabilization, selecting appropriate foundation type and depths, selecting appropriate structural systems to accommodate anticipated displacements, or a combination of these measures. The potential for liquefaction and soil strength loss must be evaluated for site-specific peak ground acceleration magnitudes and source characteristics consistent with the design earthquake ground motions.

California Field Act

The Field Act (Education Code Sections 17280–17317 and 17365–17374) was passed following the 1933 Long Beach earthquake that caused severe damage to school buildings. The Field Act requires more stringent structural design and construction oversight requirements for public schools than those for other types of facilities specified in the CBC. The DSA is responsible for enforcing the Field Act per the CBC.

Categories containing stricter structural requirements for public schools beyond the CBC requirements include bleachers, dynamic analysis, foundation strength, elevators, classroom floor loads, concrete walls, seismic and wind importance factors, masonry construction, and wood construction (California Seismic Safety Commission [CSSC] 2004). In addition to more stringent building code requirements, the Field Act requires that:

- Public school building construction plans are prepared by qualified California licensed structural engineers and architects.
- Designs and plans must be checked by the DSA for compliance with the Field Act before contracts for construction can be awarded.
- Qualified inspectors must continuously inspect construction and verify compliance with the approved plans.
- Responsible architects and/or structural engineers must observe the construction periodically.
- Architects, engineers, inspectors, and contractors must file reports, under penalty of perjury, that verify that actual construction complies with approved plans (CSSC 2007).

California Excavation Notification Requirements

California Code of Regulations Section 4216 requires that construction contractors report a project that involves excavation 48 hours prior to breaking ground. This program allows owners of buried installations to identify and mark the location of their facilities before any nearby excavation projects commence. Adherence to this law by contractors of projects reduces the potential of inadvertent pipeline and utility damage and leaks. All contractors are required to comply with California excavation notification requirements.

California Occupational Safety and Health Administration Regulations

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. In California, the California Division of Occupational

Safety and Health (Cal/OSHA) and the federal OSHA are the agencies responsible for ensuring worker safety in the workplace.

The OSHA Excavation and Trenching standard (29 CFR 1926.650), described above under Federal Regulations, covers requirements for excavation and trenching operations, which are among the most hazardous construction activities. Cal/OSHA is the implementing agency for both state and federal OSHA standards. All contractors are required to comply with OSHA regulations.

3.3.3 Impact Significance Criteria

The following significance criteria are based on State CEQA Guidelines, Appendix G, and provide the basis for determining significance of impacts associated with geology and soils resulting from implementation of the Proposed Project. The Project would result in a significant environmental impact related to geology and soils if it would result in any of the following:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of as known fault. Refer to Division of Mines and Geology Special Publication 42;
- 2. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking;
- 3. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction;
- 4. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides;
- 5. Result in substantial soil erosion or the loss of topsoil;
- 6. 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;
- 7. 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;
- 8. 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; or
- 9. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

Issues 3 through 8 were determined in the Initial Study to not have the potential to result in significant environmental impacts associated with Project implementation. Brief discussions of less than significant impacts are provided in EIR Section 4.3, *Effects Found Not to be Significant*. The impact analysis below involves a discussion for Issues 1 and 2 together, and separately for Issue 9. Because the District does

not have specific thresholds for paleontological resources, the City's CEQA Significance Determination Thresholds (City 2016) are used for determining the significance of paleontological resources impacts. The City's Significance Determination Thresholds define when significant impacts on paleontological resources could occur and identifies when paleontological monitoring is required. An answer in the affirmative to any of these questions would indicate that significant impacts on paleontological resources would occur and mitigation would be required to reduce these impacts to less-than-significant levels.

Would the Project:

- 1. Require over 1,000 cubic yards of excavation and excavation extending over 10 feet deep in an area underlain by a geologic unit considered to have high paleontological sensitivity?
- 2. Require over 2,000 cubic yards of excavation and excavation extending over 10 feet deep in an area underlain by a geologic unit considered to have moderate paleontological sensitivity?
- 3. Require any amount of grading on a fossil recovery site or within 100 feet of the mapped location of a fossil recovery site?

The above depth threshold of 10 feet was developed by the City in consideration of the fact that modern soils and surface weathering processes often destroy fossils within 10 feet of the existing ground surface. However, in cases where prior construction-related earthwork activities (e.g., mass grading) have occurred (e.g., the existing school campus), the depth threshold may be greater than 10 feet (where artificial fill is present to depths greater than 10 feet below grade) or less than 10 feet (where previously undisturbed/unweathered formation is present at or near grade). In addition, the City recognizes that in certain situations the depth threshold should be modified. For example, in cases where a project site has been previously graded and/or unweathered geologic deposits/ formations/rock units are present at the surface. Such a determination is usually based on the results of a project-specific geotechnical investigation, where available.

3.3.4 Impact Analysis

Issue 1: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Issue 2: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Impact Discussion

WSM and LRFMP

Construction and Operation

The Project site is in a seismically active area in downtown San Diego and there is the potential for adverse effects associated with ground surface rupture and strong ground motion to result at the SDHS

campus. Active faults related to the Rose Canyon Fault are mapped as close as 450 feet southwest of the campus and the Project site is also identified within the City's Downtown Special Fault Zone. As a result, a Fault Hazard Evaluation was prepared by Ninyo & Moore to further investigate the presence or absence of faulting at the Project site (see EIR Appendix D3).

Based on the general north-south trend of active faults in the vicinity of the Project (i.e., San Diego Bay and the downtown area), the evaluation included the drilling and logging of 12 large-diameter (30-inch) exploratory borings within two geologic cross sections in Russ Boulevard. The depths of the borings were up to 58 feet deep and were drilled about 15 to 20 feet apart. All 12 borings occurred within Russ Boulevard, immediately south of existing buildings 400 and 700, which are proposed to be demolished and replaced with a classroom/parking structure and a food service and custodial building, respectively. The subsurface data obtained by the borings was analyzed to determine if the material was continuous (and therefore would not indicate faulting at the Project site) or discontinuous (which would confirm faulting at the Project site).

Evidence of faulting was observed within the San Diego Formation in both geologic cross sections examined in the Fault Hazard Evaluation. Specifically, the information collected at boring B-7 provided evidence that two calcium carbonate beds exhibited an "east-side down truncation" resulting from deformation or dragging associated with fault movement. Evidence of faulting was observed within boring B-7 between 12 and 17.5 feet bgs. Boring B-10 exhibited stratigraphic discontinuities beneath fill material between 8 and 33 feet bgs, as well as an 18-inch offset within a shell bed about 45 feet bgs. Several interpretations between borings also exhibited discontinuous properties. As a result, evidence of faulting was observed within the San Diego Formation adjacent and south of the Project site. Determination of the age of faulting was not possible due to the absence of organic material above the San Diego Formation material. Per the California Geology Survey Special Publication 42, ageundetermined faults within regulatory earthquake fault zones are considered Holocene-active (i.e., within the last 11,000 years) until proven otherwise.

The results of the Fault Hazard Evaluation indicate that a fault zone trends towards the Project site from Russ Boulevard and towards several Project improvements. As a result, WSM improvements associated with the construction and operation of the new student quad area, as well as LRFMP improvements associated with the replacement of buildings 400 and 700, the proposed parking structure, performing arts building, field house, and aquatic center could result in a significant impact related to fault rupture and strong seismic ground shaking, and mitigation would be required to reduce impacts to a level below significance (**Impacts GEO-1** and **GEO-2**).

Level of Significance Prior to Mitigation

Impact GEO-1: The Proposed Project has the potential to result in the placement of habitable structures on or near an active fault and people may be exposed to risks of loss, injury, or death during seismic events during the construction and operation of the WSM improvements.

Impact GEO-2: The Proposed Project has the potential to result in the placement of habitable structures on an active fault (e.g., new buildings) and people may be exposed to risks of loss, injury, or death during seismic events during the construction and operation of the LRFMP improvements.

Mitigation Measures

- **MM GEO-1** Prior to DSA approval of future campus improvement engineering drawings for the WSM improvements, the District shall complete the following:
 - Perform further geotechnical field evaluation to develop additional interpretation of the length, width, and projection of the fault zone as it relates to all new habitable structures to the satisfaction of the DSA;
 - Design new buildings with occupancy exceeding 2,000 person-hours per year to be offset 50 feet from the closest suspected fault location in accordance with the Alquist-Priolo Act and the California Geological Survey Special Publication 42 to the satisfaction of the DSA; and
 - Incorporate the recommendations of the Geotechnical Evaluation provided as Appendix D1 to this EIR into new building design to be confirmed by the DSA.
- **MM GEO-2** Prior to DSA approval of future campus improvement engineering drawings for the LRFMP improvements, the District shall complete the following:
 - Perform further geotechnical field evaluation to develop additional interpretation of the length, width, and projection of the fault zone as it relates to all new habitable structures to the satisfaction of the DSA;
 - Design new buildings with occupancy exceeding 2,000 person-hours per year to be offset 50 feet from the closest suspected fault location in accordance with the Alquist-Priolo Act and the California Geological Survey Special Publication 42 to the satisfaction of the DSA; and
 - Incorporate the recommendations of the Geotechnical Evaluation provided as Appendix D1 to this EIR into new building design to be confirmed by the DSA.

Level of Significance After Mitigation

Implementation of mitigation measures MM GEO-1 and MM GEO-2 would reduce potentially significant impacts related to earthquake faults and strong seismic ground shaking during the construction and operation of the WSM and LRFMP improvements to less than significant.

Issue 9: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact Discussion

WSM and LRFMP

Construction

The Project site at SDHS is underlain by the San Diego Formation/geologic unit, which has a high paleontological sensitivity. The primary type of activities that directly destroy a unique paleontological

resource or site are ground-disturbing activities. Activities that indirectly destroy unique paleontological resources typically include creating new points of access to a previously undeveloped area that increases visitation, potentially allowing for rock or fossil hunting.

The Proposed Project would involve disturbances within the San Diego Formation, which has high paleontological resource sensitivity and underlies the entire campus. During the WSM improvements, 4,315 cy of soil export and 4,000 cy of soil import are anticipated at depths up to 11 feet bgs. As San Diego Formation soils exist near the ground surface (as close as within one foot bgs), there is the potential for WSM improvements to disturb paleontological resources. Specific improvements that would involve soil disturbances into the San Diego Formation during the WSM improvements include the demolition and reconstruction of the student quad area (upper and lower) with new food kiosks, a building addition at building 100, construction of a new concessions/restroom building and new dugouts at the athletic fields, and parking improvements (Impact GEO-3). LRFMP improvements would also involve ground disturbance up to 11 feet in depth. Specific activities would include the demolition and replacement of buildings 400 and 700, demolition of building 600, and new construction of a performing arts building, auxiliary gymnasium, parking structure, field house, aquatic center, site access improvements, and basketball courts, all of which would have the potential to impact paleontological resources in the San Diego Formation (Impact GEO-4). Operational activities at SDHS associated with the Project would not involve ground disturbance or other activities that could affect paleontological resources.

Operation

Once construction is completed, no subsurface activities are identified during operation of the Proposed Project and no potential impacts to paleontological resources or unique geologic features would occur.

Level of Significance Prior to Mitigation

Impact GEO-3: The Proposed Project has the potential to result in the disturbance of paleontological resources in the San Diego Formation during the construction of WSM improvements.

Impact GEO-4: The Proposed Project has the potential to result in the disturbance of paleontological resources in the San Diego Formation during the construction of LRFMP improvements.

Operational impacts on a paleontological resource would not occur once the WSM and LRFMP improvements are constructed.

Mitigation Measures

- **MM GEO-3** Prior to the commencement of ground disturbing activities during construction of the WSM improvements, the District and/or its construction supervisor shall ensure the following measures are implemented:
 - A qualified paleontologist shall be retained to oversee the mitigation program.

A qualified paleontologist is defined as an individual with an M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of San Diego County, and who

has worked as a paleontological mitigation project supervisor in the county for at least one year.

In addition, a regional fossil repository shall be designated to receive any discovered fossils.

A fossil repository is defined as a scientific institution with permanent paleontological collections. Because the District lies within San Diego County, the recommended repository is the San Diego Natural History Museum (SDNHM).

- The qualified paleontologist shall attend the preconstruction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues.
- A paleontological monitor (working under the direction of the qualified paleontologist) shall be on site on a full-time basis during initial excavation activities that are anticipated to affect high or moderate paleontological sensitivity geologic units to inspect exposures for contained fossils. The Project-specific depth threshold identified in the City's Land Development Manual shall be used to determine where monitoring is required.

A paleontological monitor is defined as an individual selected by the qualified paleontologist who has experience in the collection and salvage of fossil materials.

Paleontological monitoring may be reduced (e.g., to part-time monitoring or spotchecking) or eliminated at the discretion of the qualified paleontologist and in consultation with appropriate agencies. Changes to the paleontological monitoring schedule shall be based on the results of the mitigation program as it unfolds during site development, and actual and anticipated conditions in the field.

- If fossils are discovered, the qualified paleontologist (or paleontological monitor) shall recover them and temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner.
- Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and catalogued.
- Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in the designated fossil repository. Donation of the fossils shall be accompanied by financial support for initial specimen storage, paid for by the District.
- Within 90 days of the completion of all ground-disturbing construction activities and fossil preparation and curation work (if fossils are discovered), a final paleontological mitigation report shall be completed by the qualified paleontologist that summarizes the results of the mitigation program. This report shall include discussions of the methods used and stratigraphic section(s) exposed, as well as fossils collected and significance of recovered fossils (if fossils are discovered and recovered).

- **MM GEO-4** Prior to the commencement of ground disturbing activities during construction of the LRFMP improvements, the District and/or its construction supervisor shall ensure the following measures are implemented:
 - A qualified paleontologist shall be retained to oversee the mitigation program.

A qualified paleontologist is defined as an individual with an M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of San Diego County, and who has worked as a paleontological mitigation project supervisor in the county for at least one year.

In addition, a regional fossil repository shall be designated to receive any discovered fossils.

A fossil repository is defined as a scientific institution with permanent paleontological collections. Because the District lies within San Diego County, the recommended repository is SDNHM.

- The qualified paleontologist shall attend the preconstruction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues.
- A paleontological monitor (working under the direction of the qualified paleontologist) shall be on site on a full-time basis during initial excavation activities that are anticipated to affect high or moderate paleontological sensitivity geologic units to inspect exposures for contained fossils. The Projectspecific depth threshold identified in the City's Land Development Manual shall be used to determine where monitoring is required.

A paleontological monitor is defined as an individual selected by the qualified paleontologist who has experience in the collection and salvage of fossil materials.

Paleontological monitoring may be reduced (e.g., to part-time monitoring or spotchecking) or eliminated at the discretion of the qualified paleontologist and in consultation with appropriate agencies. Changes to the paleontological monitoring schedule shall be based on the results of the mitigation program as it unfolds during site development, and actual and anticipated conditions in the field.

- If fossils are discovered, the qualified paleontologist (or paleontological monitor) shall recover them and temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner.
- Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and catalogued.
- Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in the designated fossil repository.

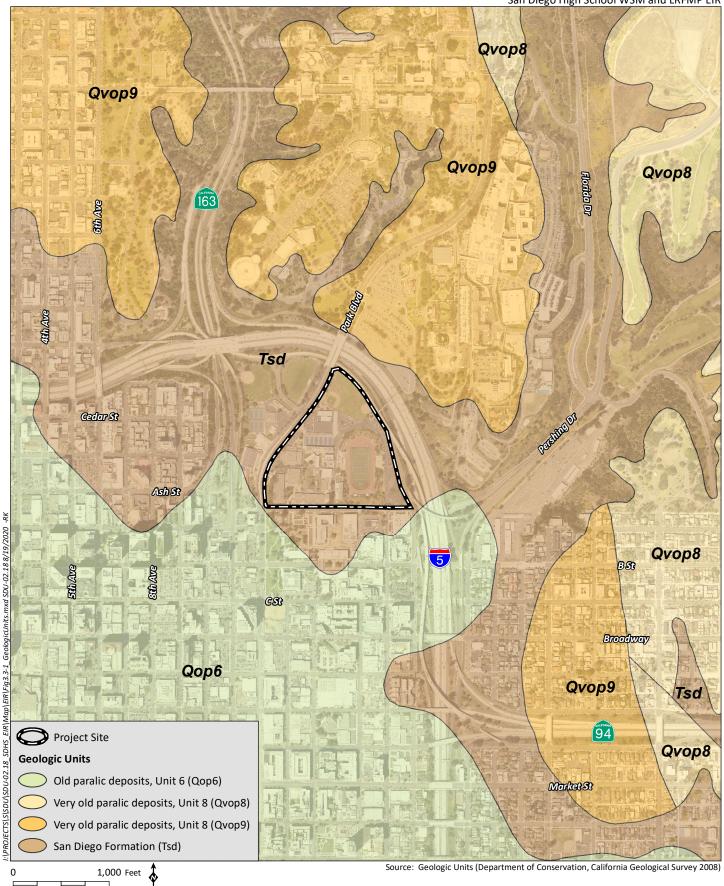
Donation of the fossils shall be accompanied by financial support for initial specimen storage, paid for by the District.

• Within 90 days of the completion of all ground-disturbing construction activities and fossil preparation and curation work (if fossils are discovered), a final paleontological mitigation report shall be completed by the qualified paleontologist that summarizes the results of the mitigation program. This report shall include discussions of the methods used and stratigraphic section(s) exposed, as well as fossils collected and significance of recovered fossils (if fossils are discovered and recovered).

Level of Significance After Mitigation

Implementation of mitigation measures MM GEO-3 and MM GEO-4 would reduce potentially significant impacts related to the destruction of paleontological resources during construction of the WSM and LRFMP improvements to less than significant. Once constructed, operational impacts on paleontological resources associated with the WSM and LRFMP improvements would not occur.

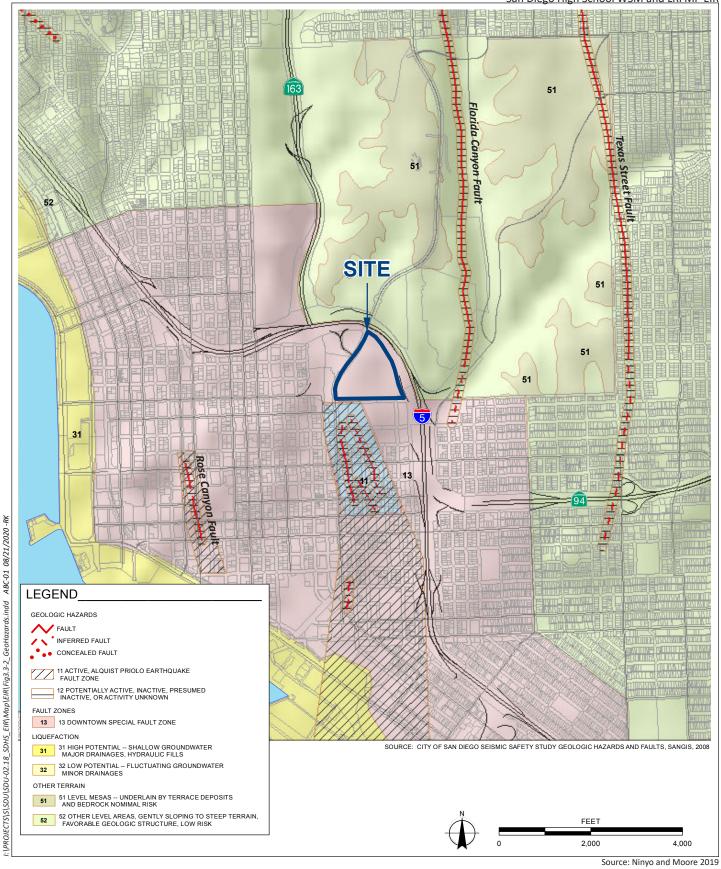
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HELIX Environmental Planning

Geologic Units at San Diego High School and Surrounding Areas

Figure 3.3-1



HELIX Environmental Planning

Geologic Hazards

Figure 3.3-2

3.4 GREENHOUSE GAS EMISSIONS

This section presents the results of an assessment of potential greenhouse gas emission impacts associated with the Project. This section is based on the analysis presented in the Air Quality and Greenhouse Gas Emissions Technical Report prepared for the Project (HELIX 2020a) included as Appendix B.

3.4.1 Existing Conditions

3.4.1.1 Overview of Global Climate Change

Global climate change refers to changes in average climatic conditions on Earth including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with: (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The temperature record shows a decades-long trend of warming, with 2018 ranked as the fourth warmest year on record with an increase of 1.5 degrees Fahrenheit compared to the 1951-1980 average. Globally, temperatures in 2018 rank behind the three warmest years on record: 2016, 2017 and 2015 (National Aeronautics and Space Administration [NASA] 2019). GHG emissions from human activities are the most significant driver of observed climate change since the mid-20th century (Intergovernmental Panel on Climate Change [IPCC] 2013). The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The statistical models show a "high confidence" that temperature increase caused by anthropogenic GHG emissions could be kept to less than two degrees Celsius relative to pre-industrial levels if atmospheric concentrations are stabilized at about 450 parts per million (ppm) carbon dioxide equivalent (CO₂e) by the year 2100 (IPCC 2014).

3.4.1.2 Types of Greenhouse Gases

The GHGs defined under California's Assembly Bill 32 include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Carbon Dioxide. CO₂ is the most important and common anthropogenic GHG. CO₂ is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of CO₂ include burning fuels, such as coal, oil, natural gas, and wood. Data from ice cores indicate that CO₂ concentrations remained steady prior to the current period for approximately 10,000 years. The atmospheric CO₂ concentration in 2010 was 390 ppm, 39 percent above the concentration at the start of the Industrial Revolution (approximately 280 ppm in 1750). As of February 2020, the CO₂ concentration exceeded 413 ppm, a 48 percent increase since 1750 (National Oceanic and Atmospheric Administration [NOAA], Earth System Research Laboratory 2020).

Methane. CH₄ is the main component of natural gas used in homes. A natural source of methane is from the decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from decay of organic material in landfills, fermentation of manure, and cattle digestion.

Nitrous Oxide. N₂O is produced by both natural and human-related sources. N₂O is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste. Primary human-related sources of N₂O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic (fatty) acid production, and nitric acid production.

Hydrofluorocarbons. Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the 1989 Montreal Protocol.

Sulfur Hexafluoride. SF₆ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF₆ is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.

3.4.1.3 Global Warming Potential and Greenhouse Gas Inventories

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHG emissions to disperse around the globe. Because GHG emissions vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO₂. For example, a gas with a GWP of 10 is 10 times more potent than CO₂ over 100 years. Because methane and N₂O are approximately 25 and 298 times more powerful than CO₂, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO₂ has a GWP of 1). CO₂e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO₂e.

A GHG inventory is a quantification of all GHG emissions and sinks within a selected physical and/or economic boundary. Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR). In 2007, IPCC updated the GWP values based on the latest science at the time in its Fourth Assessment Report (AR4). The updated GWPs in the IPCC AR4 have begun to be used in recent GHG emissions inventories. In 2013, IPCC again updated the GWP values based on the latest science in its Fifth Assessment Report (AR5) (IPCC 2013). However, the United Nations Framework Convention on Climate Change (UNFCCC) reporting guidelines for national inventories require the use of GWP values from the AR4. To comply with international reporting standards under the UNFCCC, official emission estimates for California and the U.S. are reported using AR4 GWP values. Therefore, statewide and national GHG emissions inventories have not yet updated their GWP values to the AR5 values. By applying the GWP ratios, Project-related CO₂e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of

CO₂ over a 100-year period is used as a baseline. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 3.4-1, *Global Warming Potentials and Atmospheric Lifetimes*.

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year Time Horizon)
Carbon Dioxide (CO ₂)	50-200	1
Methane (CH ₄)	12	25
Nitrous Oxide (N ₂ O)	114	298
HFC-134a	14	1,430
PFC: Tetraflouromethane (CF ₄)	50,000	7,390
PFC: Hexafluoroethane (C ₂ F ₆)	10,000	12,200
Sulfur Hexafluoride (SF ₆)	3,200	22,800

 Table 3.4-1

 GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES

Source: IPCC 2007

HFC: hydrofluorocarbon; PFC: perfluorocarbon

3.4.1.4 Impacts of Global Climate Change

Climate change is a complex phenomenon that has the potential to alter local climatic patterns and meteorology. Although modeling indicates that climate change will result in sea-level rise (both globally and regionally) as well as changes in climate and rainfall, among other effects, there remains uncertainty with regard to characterizing precise local climate characteristics and predicting precisely how various ecological and social systems will react to any changes in the existing climate at the local level. Regardless of this uncertainty, it is widely understood that substantial climate change is expected to occur in the future, although the precise extent will take further research to define. Consequently, the entire San Diego region, including the Proposed Project area, will be affected by changing climatic conditions.

The San Diego Foundation's (2013) *A Regional Wake-Up Call*, which summarizes the California Energy Commission's (CEC; 2009) Climate Change-Related Impacts in the San Diego Region by 2050 paper, provides a summary of potential climate change impacts in the region, which include the following.

- Increased temperatures The San Diego region will see hotter and drier days and more frequent, prolonged heat waves. Average annual temperatures are expected to increase 1.5 to 4.5°F (The San Diego Foundation 2013).
- **Reduction in air quality** Hotter and drier days create more air pollution by raising ozone levels, and this can exacerbate asthma and other respiratory and cardiovascular diseases (The San Diego Foundation 2013).
- Introduction of new public health issues Warmer temperatures year-round could lead to growing mosquito populations, increasing the regional occurrence of West Nile virus and potentially introducing tropical diseases such as malaria and dengue fever (The San Diego Foundation 2013).
- **Reductions in fresh water** Water and energy demand will increase, while extended and more frequent droughts will cause traditional sources of fresh water supplies to diminish. Reduced

local and regional precipitation could shrink water supplies by 20 percent or more, while water demand is expected to increase 37 percent. There could be an 18 percent water shortage by 2050 (The San Diego Foundation 2013).

- Increased rate of wildfires Drier weather may increase the frequency and size of wildfires, with an estimated 20 percent increase in days with ideal fire conditions (The San Diego Foundation 2013).
- Rising sea levels Projected sea level rise, coastal erosion, and increasing storm surges may cause fragile sea cliffs to collapse, shrink beaches, and destroy coastal property and ecosystems. Sea levels are projected to rise 2 to 12 inches by 2030, 5 to 24 inches by 2050, and 17 to 66 inches by 2100, relative to 2000 conditions for south of Cape Mendocino (California Coastal Commission 2015).

3.4.1.5 Existing Greenhouse Gas Emissions

In an effort to evaluate and reduce the potential adverse impact of global climate change, international, state, and local organizations have conducted GHG inventories to estimate their levels of emissions and removals. The following summarizes the results of these global, national, state, and local GHG inventories.

For 2014, total GHG emissions worldwide were estimated at 48,892 million metric tons (MMT) CO₂e (World Resources Institute 2020). The U.S. contributed the second largest portion of GHG emissions (behind China) at 13 percent of global emissions, with 6,319 MMT CO₂e in 2014. On a national level in 2013, approximately 27 percent of GHG emissions are associated with transportation and about 31 percent are associated with electricity generation (USEPA 2015).

CARB performs statewide GHG inventories. The inventory is divided into six broad sectors: agriculture and forestry, commercial, electricity generation, industrial, residential, and transportation. Emissions are quantified in MMT CO₂e. Table 3.4-2, *California Greenhouse Gas Emissions by Sector*, shows the estimated statewide GHG emissions for the years 1990, 2000, 2010, and 2017.

Sector	1990 Emissions (MMT CO ₂ e)	2000 Emissions (MMT CO ₂ e)	2010 Emissions (MMT CO ₂ e)	2017 Emissions (MMT CO ₂ e)
Agriculture and Forestry	18.9 (4%)	32.0 (7%)	34.6 (8%)	32.4 (8%)
Commercial	14.4 (3%)	14.3 (3%)	20.1 (5%)	23.3 (5%)
Electricity Generation	110.5 (26%)	105.4 (23%)	90.6 (20%)	62.6 (15%)
Industrial	105.3 (24%)	104.6 (22%)	101.1 (23%)	101.1 (24%)
Residential	29.7 (7%)	31.2 (7%)	31.3 (7%)	30.4 (7%)
Transportation	150.6 (35%)	179.5 (38%)	168.1 (38%)	174.3 (41%)
Unspecified Remaining	1.3 (<1%)	0.4 (<1%)	0.3 (<1%)	0.0 (0%)
TOTAL	433.3	467.2	446.1	424.1

 Table 3.4-2

 CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR

Source: CARB 2007 and CARB 2019

MMT = million metric tons; CO2e = carbon dioxide equivalent

As shown in Table 3.4-2, statewide GHG emissions totaled 433 MMT CO₂e in 1990, 467 MMT CO₂e in 2000, 446 MMT CO₂e in 2010, and 424 MMT CO₂e in 2017. Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions.

The City Climate Action Plan (CAP) 2018 Annual Report Appendix provides a community-wide GHG emissions inventory by sector for the year 2017, as shown in Table 3.4-3, *City of San Diego Greenhouse Gas Emissions by Sector* (City 2018). Similar to the state inventory, transportation was the largest source of GHG emissions in San Diego.

Sector	2017 Emissions (MT CO ₂ e)
On-Road Transportation	5,525,000 (54.4%)
Electricity	2,187,000 (21.5%)
Natural Gas	2,095,000 (20.6%)
Wastewater and Solid Waste	285,000 (2.8%)
Water	67,000 (0.7%)
ΤΟΤΑ	L 10,158,000

 Table 3.4-3

 CITY OF SAN DIEGO GREENHOUSE GAS EMISSIONS BY SECTOR

Source: City 2018

MT = metric tons; CO_2e = carbon dioxide equivalent

The approximately 34-acre Project site is home to an existing high school serving an estimated 2,644 students in grades 9 through 12. A GHG emissions inventory by sector for the existing use was compiled using CalEEMod as described in the Air Quality and Greenhouse Gas Emissions Technical Report. As shown in Table 3.4-4, *Existing San Diego High School Greenhouse Gas Emissions by Sector*, as with other inventories presented previously, transportation is the largest source of GHG emissions for the school.

 Table 3.4-4

 EXISTING SAN DIEGO HIGH SCHOOL GREENHOUSE GAS EMISSIONS BY SECTOR

Sector		2020 Emissions (MT CO₂e)
On-Road Transportation		3,642 (51.7%)
Electricity		2,545 (36.1%)
Natural Gas		471 (6.7%)
Solid Waste		226 (3.2%)
Water		163 (2.3%)
	TOTAL	7,047

Source: HELIX 2020a

MT = metric tons; CO_2e = carbon dioxide equivalent

3.4.2 Regulatory Setting

This section summarizes federal, state, and local regulations related to GHG emissions that are applicable to the Proposed Project.

3.4.2.1 Federal

Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. USEPA*, that CO_2 is an air pollutant, as defined under the CAA, and that the USEPA has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including CO_2 , CH_4 , N_2O , HFC, PFC, and SF_6) threaten the public health and welfare of the American people. This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA).

Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the NHTSA worked together on developing a national program of regulations to reduce GHG emissions and to improve fuel economy of light-duty vehicles. The USEPA established the first-ever national GHG emissions standards under the CAA, and the NHTSA established Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking that established standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025.

On August 2, 2018, the agencies released a notice of proposed rulemaking—the Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule). The purpose of the SAFE Vehicles Rule is "to correct the national automobile fuel economy and greenhouse gas emissions standards to give the American people greater access to safer, more affordable vehicles that are cleaner for the environment." The direct effect of the rule is to eliminate the standards that were put in place to gradually raise average fuel economy for passenger cars and light trucks under test conditions from 37 miles per gallon (mpg) in 2020 to 50 mpg in 2025. By contrast, the new SAFE Vehicles Rule freezes the average fuel economy level standards indefinitely at the 2020 levels. The new SAFE Vehicles Rule also results in the withdrawal of the waiver previously provided to California for that state's GHG and zero emissions vehicle (ZEV) programs under section 209 of the CAA.

3.4.2.2 State

California Code of Regulations, Title 24, Part 6

CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions.

The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The Project would be required to comply with the current building requirements (i.e., Title 24). The Energy Efficiency Standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards–the energy budgets–that vary by climate zone (of which there are 16 in California) and building type; thus, the Energy Efficiency Standards are

tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that provide a recipe or a checklist compliance approach.

California Green Building Standards Code

The CALGreen Building Standards Code (CCR Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings throughout California. The development of CALGreen is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impacts during and after construction.

CALGreen contains requirements for storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

Executive Order S-3-05

On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

Assembly Bill 32 – Global Warming Solutions Act of 2006

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that CARB develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed by AB 32 to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions.

Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG emission reduction targets with those of leading international governments, including the 28-nation European Union. California is on track to meet or exceed the target of reducing GHGs emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the goal established by EO S-3-05 of reducing emissions 80 percent under 1990 levels by 2050.

Senate Bill 32

Senate Bill (SB) 32 (Amendments to the California Global Warming Solutions Act of 2006) extends California's GHG emissions reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EO B-30-15 of 80 percent below 1990 emissions levels by 2050.

Assembly Bill 197

A condition of approval for SB 32 was the passage of AB 197. AB 197 requires that CARB consider the social costs of GHG emissions and prioritize direct reductions in GHG emissions at mobile sources and large stationary sources. AB 197 also gives the California legislature more oversight over CARB through the addition of two legislatively appointed members to the CARB Board and the establishment of a legislative committee to make recommendations about CARB programs to the legislature.

Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

AB 1493 (Pavley) requires that CARB develop and adopt regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." On September 24, 2009, CARB adopted amendments to the Pavley regulations that intend to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments bind California's enforcement of AB 1493 (starting in 2009), while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to merge its rules with the federal CAFE rules for passenger vehicles (CARB 2013). In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single packet of standards called Advanced Clean Cars (CARB 2013).

Assembly Bill 341

The state legislature enacted AB 341 (California Public Resource Code Section 42649.2), increasing the solid waste diversion target to 75 percent statewide. AB 341 requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The final regulation was approved by the Office of Administrative Law on May 7, 2012 and went into effect on July 1, 2012.

Executive Order S-01-07

This EO, signed by Governor Schwarzenegger on January 18, 2007, directs that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by the year 2020. It orders that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California and directs CARB to determine whether a LCFS can be adopted as a discrete early action measure pursuant to AB 32. CARB approved the LCFS as a discrete early action item with a regulation adopted and implemented in April 2010. Although challenged in 2011, the Ninth Circuit reversed the

District Court's opinion and rejected arguments that implementing LCFS violates the interstate commerce clause in September 2013. CARB is therefore continuing to implement the LCFS statewide.

Senate Bill 350

Approved by Governor Brown on October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, and geothermal. In addition, large utilities are required to develop and submit Integrated Resource Plans to detail how each entity will meet their customers resource needs, reduce GHG emissions, and increase the use of clean energy.

Senate Bill 375

SB 375 aligns regional transportation planning efforts, regional GHG emission reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPOs' Regional Transportation Plans (RTPs). Qualified projects consistent with an approved SCS or Alternative Planning Strategy categorized as "transit priority projects" would receive incentives to streamline CEQA processing.

Senate Bill 100

Approved by Governor Brown on September 10, 2018, SB 100 extends the renewable electricity procurement goals and requirements of SB 350. SB 100 requires that all retail sale of electricity to California end-use customers be procured from 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

3.4.2.3 California Air Resources Board: Climate Change Scoping Plan

On December 11, 2008, the CARB adopted the Climate Change Scoping Plan (Scoping Plan; CARB 2008) as directed by AB 32. The Scoping Plan proposes a set of actions designed to reduce overall GHG emissions in California to the levels required by AB 32. Measures applicable to development projects include those related to energy-efficiency building and appliance standards, the use of renewable sources for electricity generation, regional transportation targets, and green building strategy. Relative to transportation, the Scoping Plan includes nine measures or recommended actions related to reducing vehicle miles traveled (VMT) and vehicle GHG emissions through fuel and efficiency measures. These measures would be implemented statewide rather than on a project-by-project basis.

In response to EO B-30-15 and SB 32, all state agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the Scoping Plan to reflect the 2030 target (CARB 2014). The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue driving down emissions. In December 2017, CARB adopted the *2017 Climate Change Scoping Plan Update, the Strategy for Achieving California's 2030 Greenhouse Gas Target,* to reflect the 2030 target set by EO B-30-15 and codified by SB 32 (CARB 2017).

3.4.2.4 Local

San Diego Association of Governments: Climate Action Strategy

The SANDAG Climate Action Strategy serves as a guide to help policymakers address climate change as they make decisions to meet the needs of growing populations, as well as to maintain and enhance quality of life and promote economic stability (SANDAG 2010). The purpose of the strategy is to identify land use, transportation, and other related policy measures that could reduce GHG emissions from passenger cars and light-duty trucks as part of the development of the SCS for the 2050 RTP in compliance with SB 375. Additional policy measures are identified for buildings and energy use, protecting transportation and energy infrastructures from climate impacts, and assisting SANDAG and other local agencies in reducing GHG emissions from their operations.

San Diego Air Pollution Control District

The SDAPCD is responsible for air quality planning within the San Diego County Air Basin, including projects in the City. SDAPCD has not developed specific thresholds to evaluate GHG impacts but has developed GHG-related district regulations to implement federal rules and continues to participate in regional efforts aimed at addressing GHG emissions. For instance, SDAPCD administers Rules 1401 and 20.3, which address GHG emissions from stationary sources. SDAPCD has a memorandum of understanding with CARB to maintain coordination between the two agencies to address municipal solid waste landfills and related emissions.

City of San Diego Climate Action Plan

The City adopted a CAP in 2015. The CAP outlines the City's efforts to reduce GHG emissions consistent with statewide GHG reduction goals. The goals of the CAP include creating a renewable energy program, implementing a zero-waste plan, improving public health and air quality, conserving water, using existing resources efficiently, increasing clean energy production, improving quality of life, and saving taxpayer money. The CAP is a package of strategies to reduce GHG emissions by 15, 40, and 50 percent by 2020, 2025, and 2035, respectively, relative to 2010 baseline conditions.

3.4.3 Impact Significance Criteria

Based on the State CEQA Guidelines, Appendix G, the Proposed Project would result in a significant impact related to greenhouse gas emissions if it would:

- 1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- 2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The State CEQA Guidelines do not prescribe a particular threshold of significance or method for determining significance of GHG emissions in CEQA documents, but instead allow lead agencies to adopt thresholds and methods that are previously adopted or recommended by other public agencies or recommended by experts [State CEQA Guidelines Sections 15064.4(a) and 15064.7(c)].

The District has not yet formally adopted specific thresholds of significance with regard to GHG emissions, nor has the District adopted a qualified plan, policy, or regulation to reduce GHG emissions that qualifies for tiering in CEQA documents [per State CEQA Guidelines Section 15183.5(a)]. For this analysis, the most appropriate threshold is the 900-metric tons (MT) CO₂e annual threshold provided by CAPCOA in a report titled "CEQA and Climate Change" (CAPCOA 2008). The 900-MT CO₂e threshold was established to meet the year 2020 statewide emissions targets as mandated by AB 32 and was used by the County for projects before 2020. CAPCOA has not proposed revised thresholds to account for GHG reduction targets beyond 2020. Accordingly, a threshold reduced by 4.98 percent each year between 2020 and 2030 would meet the mandates of SB 32 for a 40 percent reduction in emissions by 2030. Beyond 2030, a 5.34 percent reduction each year between 2030 and 2050 would meet the target of an 80 percent reduction in emissions by 2050 proposed by EO S-3-05. The first full year of operations is anticipated to be in 2035; therefore, a conservative threshold of 410 MT CO₂e per year is used in this analysis based on the LRFMP portion of the Project, which represents a 54.41 percent reduction in emissions from 900 MT CO₂e by 2035. Project emissions below this level are considered less than cumulatively considerable, and Project emissions above this level require additional analysis. Moreover, projects that result in a net benefit by reducing GHG emissions are determined to have a less-thansignificant impact related to GHG emissions. In accordance with the State CEQA Guidelines and scientific consensus regarding the cumulative nature of GHGs,¹ the analysis herein includes a cumulative, rather than Project-level, evaluation of GHG impacts.

3.4.3.1 Methodology

GHG emissions for Project construction and operation were calculated using CalEEMod, Version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model was developed for CAPCOA in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The input data and subsequent construction and operation emission estimates for the Proposed Project are discussed below.

Construction

As described above, construction emissions for both WSM and LRFMP improvements were estimated using CalEEMod. The model uses OFFROAD2011 and EMFAC2014 emission factors from CARB's models for off-road equipment and on-road vehicles, respectively. The construction analyses for the two sets of improvements included modeling of the projected construction equipment that would be used during each construction activity and quantities of earth and debris to be moved. The model calculates emissions of the GHGs CO₂, CH4 and N₂O (as well as the total CO₂e).

Construction input data for CalEEMod include, but are not limited to: (1) the anticipated start and finish dates of construction activity; (2) inventories of construction equipment to be used; (3) areas to be excavated and graded; and (4) volumes of materials to be exported from and imported to the Project area. The analysis assessed total annual emissions from individual construction activities. Construction

¹ Climate change is a global problem, and GHGs are global pollutants, unlike criteria air pollutants (such as ozone precursors), which are primarily pollutants of regional and local concern. Given their long atmospheric lifetimes, GHGs tend to accumulate in the atmosphere. Therefore, GHG impacts are inherently cumulatively considerable.

activities for the WSM improvements include demolition, site preparation, grading, building construction, paving, and architectural coating. Construction activities for the LRFMP improvements include demolition, site preparation, grading, building construction, paving, and architectural coatings. Construction equipment estimates are based CalEEMod defaults, adjusted for anticipated Project-specific site improvement activities.

The construction schedule for the WSM improvements were conservatively estimated to begin in late 2020 and end in late 2023; however, construction is anticipated to begin in 2021. Construction involving demolition, site preparation, grading, building construction, paving, and architectural coating are estimated to occur when school is not in session in the summers of 2021, 2022, and 2023. As a result, construction emission estimates are based on CalEEMod defaults, adjusted to fit within the estimated summer season. For modeling purposes, it was conservatively assumed all WSM improvements would be completed within the first summer season, therefore, emissions associated with the WMS improvements were modeled to begin June 1, 2021 and completed by approximately August 30, 2021.

The construction schedule for the LRFMP improvements is uncertain; however, they would occur after the WSM improvements, between the years of 2024 and 2035. Therefore, the construction schedule for the LRFMP improvements was based on CalEEMod defaults, with the start date set to January 1, 2024. The CalEEMod default setting put the Project completion date as the end of 2025; however, construction of the LRFMP improvements may not occur concurrently, and may occur anytime between the years of 2024 and 2035.

Operation

Operational use of the Proposed Project would be similar to existing conditions as there would be no net change to student enrollment on campus. The only Project component that would differ from existing operational emissions would be the addition of the aquatic center during the LRFMP improvements. Therefore, the only operational impacts analyzed were the operational emissions associated with the aquatic center. Operational impacts were estimated using CalEEMod, as discussed above. Model output data sheets are included in Appendix B. Modeled operational sources of pollutant emissions include area, energy, mobile (transportation), solid waste, and water and wastewater. The sources and assumptions used in the modeling are described below.

- Area Sources Operational emissions from area sources include pump tank emissions from the pool maintenance equipment. CalEEMod default values were used for area sources.
- Energy Sources Operational emissions of criteria pollutants from energy sources include the use of natural gas for hot water and building heat. Additionally, the Project use of electricity would result in GHG emissions. CalEEMod default values were used for energy sources.
- Mobile Sources Operational emissions from mobile sources are associated with Project-related vehicle trip generation and trip length. Per the Project Trip Generation Memorandum, the total Project trip generation would be approximately 140 ADT associated with operation of the aquatic center (Kimley Horn 2020). The CalEEMod default trip distances were used.

- Solid Waste Operational emissions of GHGs from solid waste sources are associated with emissions from the decomposition of waste in landfills. CalEEMod default values were used for solid waste sources.
- Water and Wastewater Operation emissions of GHGs would result from the use of water and generation of wastewater. The aquatic center was assumed to be approximately 10,000 sf. The proposed aquatic center would have a pool that is 25 yard by 35 meters long,² with an estimated depth of eight feet, which would require a total of about 517,500 gallons of water to fill. CalEEMod defaults were utilized for the water and wastewater sources.

3.4.4 Impact Analysis

Issue 1: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact Discussion

WSM and LRFMP

Construction and operation of the Proposed Project would result in the emission of GHGs. A discussion of construction- and operation-related impacts is presented below.

Construction

Project construction GHG emissions were estimated using CalEEMod model as described in subsection 3.4.3.1. Project-specific input was based on general Project information and default model settings to estimate reasonably conservative conditions. Additional details of phasing, selection of construction equipment, and other input parameters, including CalEEMod data, are included in Appendix B.

Emissions of GHGs related to the construction of both the WSM and LRFMP improvements would be temporary. As shown in Table 3.4-5, *WSM Improvements Construction GHG Emissions*, the total estimated GHG emissions associated with construction of the WSM improvements would be 98.6 MT CO₂e. To be conservative in accounting for all Project sources of GHG emissions, the construction period GHG emissions were amortized (i.e., averaged) over 30 years and added to operational emissions. Averaged over 30 years, the proposed WSM improvements' construction activities would contribute approximately 3.3 MT CO₂e emissions per year.

² Pool lengths are measured in meters and yards to allow for different types of swimming competitions.

Construction Phase	Emissions (MT CO₂e)
Demolition	11.3
Site Prep	4.0
Grading	42.9
Building Construction	36.6
Paving	3.2
Architectural Coating	0.6
TOTAL ¹	98.6
Amortized Construction Emissions ²	3.3

Table 3.4-5 WSM IMPROVEMENTS CONSTRUCTION GHG EMISSIONS

Source: Appendix B

¹ Totals may not sum due to rounding.

² Construction emissions are amortized over 30 years.

WSM = Whole Site Modernization; MT = metric ton; CO_2e = carbon dioxide equivalent

As shown in Table 3.4-6, *LRFMP Improvements Construction GHG Emissions*, the total estimated GHG emissions associated with construction of the LRFMP improvements would be 456.7 MT CO₂e. Averaged over 30 years, the proposed LRFMP improvements construction activities would contribute approximately 15.2 MT CO₂e emissions per year.

Year	Emissions (MT CO2e)
Demolition	42.0
Site Prep	8.7
Grading	10.9
Building Construction	376.2
Paving	15.9
Architectural Coating	2.9
TOTAL ¹	456.7
Amortized Construction Emissions ²	15.2

 Table 3.4-6

 LRFMP IMPROVEMENTS CONSTRUCTION GHG EMISSIONS

Source: Appendix B

¹ Totals may not sum due to rounding.

² Construction emissions are amortized over 30 years.

LRFMP = Long-Range Facilities Master Plan; MT = metric ton; CO_2e = carbon dioxide equivalent

Operation

The Project's net increase in operational GHG emissions, consisting of the operational emissions generated by the proposed aquatic center and the amortized annual construction emissions, are shown in Table 3.4-7, *Operational GHG Emissions*. The CalEEMod output files are included in Appendix B.

Emission Sources	Emissions (MT CO₂e)
Area	<0.1
Energy	0.0
Mobile	77.9
Solid Waste	21.5
Water and Wastewater	3.7
Operational Subtotal	103.1
WSM Construction (Annualized over 30 years)	3.3
LRFMP Construction (Annualized over 30 years)	15.2
TOTAL OPERATIONAL EMISSIONS	121.6
Screening Threshold	410*
Exceed Threshold?	No

Table 3.4-7 OPERATIONAL GHG EMISSIONS

Source: Appendix B

Note: Totals may not sum due to rounding

MT = metric ton; CO₂e = carbon dioxide equivalent; WSM = Whole Site Modernization;

LRFMP = Long-Range Facilities Master Plan

* 410 MT CO₂e represents a 54.41 percent reduction in emissions from 900 MT CO₂e by 2035.

As shown in Table 3.4-7, the Project would result in an increase in annual GHG emissions of 121.6 MT CO₂e which would not exceed the adjusted annual screening threshold of 410 MT CO₂e per year. Therefore, the Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The impact would be less than significant.

Level of Significance Prior to Mitigation

Impacts associated with the generation of GHGs during construction and operation of the WSM and LRFMP improvements would be less than significant.

Mitigation Measures

As no significant impacts would occur, no mitigation measures would be required.

Level of Significance After Mitigation

Impacts associated with the generation of GHGs during construction and operation of the WSM and LRFMP improvements remain less than significant.

Issue 2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Discussion

WSM and LRFMP

Construction and Operation

There are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall State regulations are AB 32 and SB 32, the California Global Warming Solutions Act of 2006. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. SB 32 would require further reductions of 40 percent below 1990 levels by 2030. The 2017 Scoping Plan builds on the programs established from AB 32 Scoping Plan that was drafted to meet the 2020 reduction targets per AB 32. The 2017 Scoping Plan proposed meeting the 2030 goal by accelerating the focus on zero and near-zero emissions technologies for moving freight, continued investment in renewables, greater use of low-carbon fuels including electricity and hydrogen, stronger efforts to reduce emissions of short-lived climate pollutants (CH4 and fluorinated gases), further efforts to create walkable communities with expanded transit and other alternatives to travelling by car and ensuring natural lands become carbon sinks to provide additional emissions reductions and flexibility in meeting the target.

The Proposed Project would involve the modernization of an existing campus that would reduce GHG emissions and energy use by updating older school buildings and facilities with modern and efficient technology. The WSM and LRFMP improvements would incorporate green building principles, including an emphasis on energy efficiency, water conservation, and waste reduction. Although the measures included in the 2017 Scoping Plan are necessarily broad, the Project would be consistent with the goals and desired outcomes of the plan (i.e., increasing energy efficiency, water conservation, waste diversion, transportation sustainability). Specifically, the WSM improvements would involve the installation of PV panels, canopy shade outside of buildings, and new and replacement windows and HVAC. LRFMP improvements through 2035 would involve the replacement of older buildings with newer, more efficient buildings that are safer and require less energy to operate. No increases in Student enrollment or school capacity are anticipated as a result of the Project and while some increases in GHG emissions would occur with the proposed public use of the aquatic center, they would not exceed the MT CO₂e threshold (see Table 3.4-7).

Regarding the City's CAP, school uses are not specifically referenced or quantified, but per capita assumptions used by the CAP to develop GHG emissions goals presumably assume existing and future student enrollment. As discussed above, the Project involves updating aging facilities at an existing school campus to continue to serve current student enrollment levels with modernized educational facilities and buildings. The City's CAP includes citywide goals to modernize and reduce energy use at the municipal level. While these goals are intended to be implemented at the city level, the Proposed Project would either support or not impede the City's ability to achieve the goals outlined in their CAP. Specifically, the Project would promote the CAP goals to reduce building and per capita energy consumption by modernizing older school buildings; increase renewable electricity supply by installing PV panels on buildings; increase urban tree coverage and drought-tolerant landscaping by including appropriate landscape enhancements including trees and native or naturalized plant species; and diverting solid waste from landfills by recycling metal and mixed material and reusing concrete on-site as possible. Other City CAP goals, such as increasing walking and bicycling opportunities and promoting

mass transit would not be hindered by the Project. Due to the Project's location in downtown, existing transit, bicycle, and pedestrian facilities near the Project site would continue to be available for students and visitors.

Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the LCFS, and regulations requiring an increasing proportion of electricity to be generated from renewable sources are being implemented at the statewide level; as such, compliance at the Project level is not addressed. Therefore, the Proposed Project does not conflict with those plans and regulations. As previously discussed, the increase in GHG emissions would be less than the significance threshold applied to this analysis. Therefore, the Proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions and impacts would be less than significant.

Level of Significance Prior to Mitigation

Impacts associated with conflicts with plans, policies, and regulations governing GHGs during construction and operation of the WSM and LRFMP improvements would be less than significant.

Mitigation Measures

As no significant impacts would occur, no mitigation measures would be required.

Level of Significance After Mitigation

Impacts associated with conflicts with plans, policies, and regulations governing GHGs during construction and operation of the WSM and LRFMP improvements would remain less than significant.

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3.5 HAZARDS

This section describes the existing and regulatory setting for hazards and includes an evaluation of potential hazards impacts as they relate to the Project's proximity to an airport (i.e., the SDIA).

3.5.1 Existing Conditions

3.5.1.1 Airport Hazards

The SDHS campus is located approximately 1.4 miles southeast of the SDIA at elevations ranging between 110 and 180 feet amsl. SDIA includes a single runway (i.e., Runway 9-27), a control tower, two terminals, aircraft storage, car rentals, and administrative offices. Runway 9-27 is 9,401 feet long and 200 feet wide and is referred to as Runway 9 for flight departures and Runway 27 for flight arrivals. The end of SDIA Runway 27 is as close as approximately 7,665 feet and as far as 9,150 feet west of the Project site. Air travel above the campus typically involves planes that are approaching the airport for landing at Runway 27, heading in a westerly direction above the campus. Depending on weather conditions, flight take-off and landing patterns can be reversed and may also involve flight departures above the SDHS campus, also from Runway 9. The next closest airport to the Project site is a military airport at Naval Air Station North Island (NASNI), located about 3.4 miles west of the campus. NASNI is at an elevation of 26 feet amsl and has two intersecting runways. Runway 11-29 is 7,501 feet long and 200 feet wide, while Runway 18-36 is 8,001 feet long and 200 feet wide. NASNI also includes 13 helicopter pads in addition to airport support facilities including maintenance, fuel and equipment supply and storage, the control tower, and hangars. No other airports are in the vicinity of the SDHS campus.

3.5.2 Regulatory Setting

3.5.2.1 Federal

Federal Aviation Administration

The FAA promotes air safety and provides for navigable airspace, including at SDIA near the Project site. While the FAA has no authority to restrict or limit a proposed project, FAA Federal Regulation Title 14, Part 77 (Part 77) provides a framework for federal airspace regulation to assess airspace obstructions and potential hazards to flight. In addition to Part 77 surfaces, FAA Order 8260.3B establishes federal standards to determine if an obstruction would result in a hazard to air navigation, referred to as Terminal Instrument Procedures (TERPS) surfaces. Lastly, Threshold Siting Surfaces (TSS) are defined by the FAA in FAA Advisory Circular 150/5300-13A to include protected airspace to maintain safe approaches to runways. The following describes the Part 77 surfaces, TERPS surfaces, and TSS as they relate to the Project site.

Part 77 includes three subparts that the FAA uses to guide review of projects near an airport. Each of the applicable Part 77 subparts is described below:

• <u>Part 77, Subpart B</u> defines when a notice of construction or alteration for a proposed project must be submitted to the FAA for review. A project sponsor must notify the FAA of any proposal to build or alter a structure or object that is ether taller than 200 feet above the ground level or is taller than the height of an imaginary airspace surface (Part 77 surface) extending outward

and upward from the runway at a slope of 100:1 within 20,000 feet of a runway. The FAA maintains an online tool to assist in determining if notification is required by federal law.¹ Notification is accomplished by completing and submitting FAA Form 7460-1, "Notice of Proposed Construction or Alteration" for FAA review. Notification areas are also shown on Figure 3.5-1, FAA Height Notification Area.

- <u>Part 77, Subpart C</u> identifies standards to determine if a proposed project would involve obstructions to navigable airspace. Established obstruction standards for projects within a Part 77 airspace include buildings with a height of 499 feet above ground level (or 200 feet above ground level or airport elevation within three miles of the airport); a height that encroaches into the required obstacle clearance area separating designated flight altitudes from obstacles; a height that increases a minimum obstacle clearance under en-route criteria; or if the surface is exceeded for an imaginary surface defined around the airport.
- <u>Part 77, Subpart D</u> pertains to identifying if there is an effect of a project on navigable airspace. Issues considered as part of Part 77, Subpart D include impacts on aircraft operating under visual flight rules and instrument flight rules; impacts on existing and planned public-use airports; airport capacity; and minimum obstacle clearance altitudes.

As shown on Figure 3.5-2, *Runway 27 Airspace Surfaces*, Part 77 surfaces for SDIA Runway 27 include the following surfaces: a notification surface (shown in light blue and labeled "Part 77 Subpart B Notification Surface"); a horizontal surface (shown in dark blue as "Part 77 Horizontal Surface"); and a terrain penetration surface (shown in red hatching as "Part 77 Terrain Penetration"). As shown on Figure 3.5-2, areas between 7,665 and 9,150 feet from the edge of Runway 27 with a ground elevation of 110 to 180 feet amsl (including the Project site) are above the notification surface (which includes areas greater than 100 feet amsl). As such, proposals to construct or alter a building anywhere within the Project site would require FAA notification in accordance with Part 77, Subpart B. Also, the Part 77 horizontal surface above the Project site is around 170 feet amsl and the terrain penetration surface extends above 170 feet amsl to about 200 feet amsl. Consideration of the horizontal and terrain penetration surfaces is appropriate for development within areas of the Project site where the ground surface elevation exceeds 170 feet amsl (e.g., the northern half of the campus).

Part 77 surfaces can be penetrated without creating a hazard to air navigation. However, unlike Part 77 surfaces, penetrations of TERPS surfaces are considered air navigation hazards. TERPS surfaces, which are also shown on Figure 3.5-2, are identified as airspace protection areas concerned with maintaining a safe distance between aircraft travel routes and permanent objects on the ground. As shown on Figure 3.5-2, TERPS surfaces above the Project site begin around 390 feet amsl and extend above 500 feet amsl. Lastly, Figure 3.5-2 shows that the TSS defining critical airspace protection areas above the Project site (shown in green) is concerned with potential airspace conflicts at 475 feet amsl or greater. In conclusion, the Project site is entirely within the Part 77 notification surface, portions of the Project site are within the Part 77 horizontal surface and terrain penetration surface, and airspace above the Project site includes designations for TERPS and TSS airspaces. Airspace protection boundaries including the terrain penetrations and TSS airspace are also shown on an aerial view of the site and surrounding areas on Figure 3.5-3, *SDIA Airspace Protection Boundaries*.

¹ <u>https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm</u>.

3.5.2.2 Local

Airport Land Use Compatibility Plans

The SDIA ALUCP and the NASNI ALUCP both include portions of the Project site. The San Diego County Regional Airport Authority, which acts as the Airport Land Use Commission (ALUC) for the SDIA and NASNI, maintains the SDIA and NASNI ALUCPs, as amended in May 2014 and adopted in October 2020, respectively. The ALUCPs contain policies to regulate land use and development intended to minimize or avoid aircraft hazards to residents and employees within an area referred to as the Airport Influence Area (AIA). Development proposals within an AIA are reviewed by the ALUC to comply with compatibility factors that consider the topics of noise, safety, airspace protection, and overflight. Two geographic areas, Review Area 1 and 2, are identified in the SDIA AIA and contain compatibility factors for each review area. As shown on Figure 3.5-4, *SDIA Airport Influence Areas*, the Project site is located within SDIA AIA Review Area 1. Specifically, Review Area 1 is more restrictive than Review Area 2 and includes areas within the 60 dBA CNEL noise contour, the outer boundary of all safety zones, and airspace TSS. Review Area 2 includes airspace protection and overflight boundaries that extend beyond Review Area 1. The Project site is identified in the NASNI AIA; however, the NASNI ALUCP does not identify review areas. A summary of the SDIA and NASNI ALUCP compatibility factors and how they pertain to the Project site are provided below.

Noise

Airport compatibility assessment related to noise is intended to result in development that is compatible with aircraft noise. Specifically, the SDIA ALUCP limits new noise-sensitive development within the noise compatibility boundary, identifies sound attenuation goals for noise-sensitive development, and considers if avigation easements are necessary. Table 2-1 of the SDIA ALUCP identifies land use types, their compatibility for each noise contour range, and the resulting acceptable noise level for each use if conditionally allowed. Airport noise contours as they relate to the Project site are depicted on Figure 3.5-5, *SDIA Noise Contours*. As shown, the southern part of campus is within the forecasted 60 to 65 dBA CNEL noise exposure contours and areas in the northern part of campus are within the 65 to 70 dBA and 70 to 75 dBA CNEL noise exposure contours. Noise restrictions in the 60 to 65 dBA CNEL as they relate to school uses (K-12) include limiting indoor noise levels to 45 dBA CNEL. New school uses are not permitted in the noise contours.

Safety

A small portion of the campus is within Safety Zone 4 (Outer Approach/Departure Zone) and includes the northernmost part of the campus near I-5 at the ball fields (see Figure 3.5-6, *SDIA Safety Compatibility Zones*). The rest of the campus is not within an airport safety zone. Land use restrictions for Safety Zone 4 allow for infill development to the average intensity of comparable surrounding uses for projects that are in "Dense Urban²" areas. Non-residential development intensity within Safety Zone 4 within the Centre City-East Village neighborhood (as identified in the Downtown Community Plan) is limited to 240 people per acre. The NASNI ALUCP does not identify the Project site within a safety zone.

² Dense Urban is defined as "city core areas characterized by extensive mid- and high-rise buildings, often with 100 percent lot coverage and limited surface parking (SDIA ALUCP, page E-38).

Airspace Protection

Three types of surfaces are defined in the SDIA ALUCP for the purposes of airspace protection at SDIA, including Part 77 surfaces, TERPS surfaces, and TSS (see Figures 3.5-2 and 3.5-3). Together, these comprise the airspace protection considerations for development at the Project site. The SDIA ALUCP depicts that the notification surface approaching Runway 27 is below the ground surface for at least 10,000 feet extending east of SDIA (see Figure 3.5-2). Projects located on ground elevations above the Part 77 notification surface must notify the FAA during the planning stages of a project. These surfaces are further described above under the FAA regulatory setting in EIR subsection 3.5.2.1.

Overflight

Airspace overflight pertains to notification and disclosure requirements for prospective buyers of new residential development of the presence of aircraft overflight. The Project site is located within an airspace overflight area for the SDIA ALUCP and is not located within an airspace overflight area for the NASNI ALUCP.

3.5.3 Impact Significance Criteria

The following significance criteria are based on State CEQA Guidelines, Appendix G, and provide the basis for determining significance of impacts associated with hazards resulting from implementation of the Proposed Project. The Project would result in a significant environmental impact on air quality if it would result in any of the following:

- 1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- 2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- 3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- 4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or environment?
- 5. Be located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, and would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?
- 6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- 7. Expose people or structures, either directly or indirectly, to a significant loss, injury, or death involving wildland fires?

Except for Issue 5, the issues above were discussed in the Initial Study prepared for the Project (Appendix A) and were determined to not have a significant environmental impact as a result of the Project. A summary of why Issues 1 through 4 and Issues 6 and 7 did not warrant additional evaluation is provided in EIR Section 4.3, *Effects Found Not to be Significant*. As a result, the analysis below is limited to Issue 5.

3.5.4 Impact Analysis

Issue 5: Would the Project be located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, and would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?

Impact Discussion

WSM and LRFMP

Construction

Airport land use plans are concerned with new development and increases in the congregation of additional people within proximity to an airport and do not regulate construction activities separately. As such, construction activities associated with the WSM and LRFMP improvements would not conflict with an airport land use plan and significant impacts would not occur.

Operation

The Proposed Project is located within two miles of a public airport where an airport land use plan (i.e., the SDIA ALUCP) has been adopted. Compatibility of Proposed Project operations as it relates to the SDIA is evaluated based on consistency with the applicable SDIA and NASNI ALUCP noise, safety, airspace protection (including FAA review considerations), and overflight considerations.

Noise

As noted above and shown on Figure 3.5-5, the southern half of the campus is within the forecasted 60 to 65 dBA CNEL noise exposure contours and areas in the northern part of campus are within the 65 to 70 dBA and 70 to 75 dBA CNEL noise exposure contours of the SDIA ALUCP. School uses are conditionally allowed within the 60 to 65 dBA CNEL contour provided that interior noise levels of 45 dBA CNEL are demonstrated. New school uses are not allowed in the 65 to 75 dBA CNEL noise exposure contours; however, SDIA ALUCP land use restrictions are generally not applicable to existing land uses unless there are SDIA ALUCP inconsistencies at a project site. As noted earlier, the NASNI ALUCP does not identify noise exposure contours at the Project site.

The Proposed Project would involve the modernization and improvement of an existing school campus and would not result in campus expansion. No increase in student enrollment or capacity is anticipated as a result of the Project. The Proposed Project would involve upgrades to existing building interiors/exteriors and campus facilities, as well as new, replaced, and demolished structures throughout the campus. New development would include a proposed auxiliary gymnasium, performing arts building, parking structure, aquatic center, field house, and the replacement of two school buildings during the LRFMP improvements. Campus-wide improvements associated with WSM improvements would include new building identification graphics, new security cameras, façade improvements, HVAC installations, and new pavement. Structural changes associated with WSM improvements would occur as a result of a building 100 addition and two food kiosks. Proposed buildings would not exceed 35 feet in height. Improvements in the northern part of the campus, including the performing arts building, parking structure, and auxiliary gymnasium, would replace or enhance existing school development and would not be considered new school uses. These improvements would also be required to meet the Title 24 interior noise standards of 45 dBA CNEL. The Proposed Project is not expected to conflict with the SDIA ALUCP noise policies and significant impacts would not occur related to noise exposure.

Safety

As noted earlier, a small part of the outfield at the ballfields in the northern part of the campus is within Safety Zone 4, and the SDIA ALUCP limits activity in this area to 240 people per acre. As this part of the campus includes an athletic field and does not contain bleachers or spectator seating, athletes would periodically occupy this space. It is not expected that this area would be used for congregating and would not approach or exceed activity exceeding 240 people per acre. Further, there are no safety zones identified in the NASNI ALCUP that overlap the Project site. As a result, the campus is an existing compatible land use for safety. Further, no Project improvements are identified for areas of the campus within Safety Zone 4 and as such, impacts related to safety would not occur.

Airspace Protection

Because airspace protection considerations in the SDIA and NASNI ALUCPs refer to compliance with FAA regulations (e.g., FAA Part 77, FAA Order 8260.3B, and FAA Advisory Circular 150/5300-13A), consistency with SDIA and NASNI ALUCP compliance also demonstrates consistency with FAA review requirements. As stated earlier, the Project site is entirely within the Part 77 notification surface, portions of the Project site are within the Part 77 horizontal surface and terrain penetration surface, and airspace above the Project site includes TERPS and TSS airspaces.

The District would be required to notify the FAA in compliance with Part 77 as the site is located above the Part 77 Subpart B Notification Surface (see Figure 3.5-2). The District would complete and file Form 7460-1 with the FAA to comply with notification requirements. As part of the notification, the FAA would consider Part 77 horizontal surface and terrain penetration surfaces near the site, as well as the TERPS and TSS airspaces. Because the Project site does not exceed 180 feet amsl and the TERPS surfaces above the Project site begin more than 375 feet amsl above the site, penetrations into TERPS and TSS airspaces are not anticipated with the development of buildings up to 35 feet tall. As shown in Figure 3.5-3, the northern part of the campus is within the Part 77 terrain penetration surfaces and the TSS where some of the LRFMP improvements are identified, such as the auxiliary gymnasium, parking structure, and performing arts building. As the ground level in the northern portions of the campus is near the 180-foot amsl elevation, the height of structures up to 35 feet may extend into a Part 77 terrain penetration. However, the Project would include buildings of similar size, scale, and height to existing buildings and would not extend into TERPS or TSS surfaces. As a result, it is anticipated that either a DNH would be received without any obstruction, or an DNH with Marking and Lighting Requirements would be received with conditions to include building marking and lighting. If a DNH with Marking and Lighting Requirements is received from the FAA, the District would agree to an avigation easement with the airport operator. While the FAA would be notified of the Project, the proposed development and buildings would be of similar height to existing buildings, would not exceed 35 feet in height, and are not anticipated to result in obstructions to navigable airspace. As a result, the FAA is anticipated to issue a

DNH for the Project and safety hazards impacts related to airspace protection areas associated with SDIA and NASNI would remain less than significant.

Overflight Notification

Because the Project involves redevelopment of an existing school and no residential uses are proposed, no further evaluation as to overflight notification is required.

Level of Significance Prior to Mitigation

Impacts associated with safety hazards and excessive noise associated with construction and operation of the WSM and LRFMP due to the Project's location within an airport land use plan would be less than significant.

Mitigation Measures

As no significant impacts would occur, no mitigation measures would be required.

Level of Significance After Mitigation

Impacts associated with safety hazards or excessive noise during construction and operation of the WSM and LRFMP improvements would remain less than significant.

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HELIX Environmental Planning

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Source: Aerial (SanGIS 2017)

FAA Height Notification Area

Figure 3.5-1

Distance From Runway End (mi.) .25 .50 1.75 1.25 1.5 .75 550 525 TERPS LNAV (GPS) OC\$ 500 475 450 425 TERPS Localizer Only OCS 400 375 350 Glide Path Angle (3.14°) 325 Elevation 300 275 (ft 250 TSS (20:1) – 6th Avenue MSL) 225 State Route 163 200 175 Part 77 Horizontal Surface 150 Part 77 Approach Surface (34:1) – Interstate-125 Runway 27 End 100 Part 77 Subpart B Notification Surface (100:1) 75 50 25 0 -----610 ft. -25 -2000 -1500 -1000 -500 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 8000 9500 10000 0 500 1000 6500 7000 7500 8500 9000 - Runway 27 Displaced Threshold Distance From Runway End (ft.)

75|S|SDU|SDU-02.18_SDH5_EIR|Map|EIR|Fig3.5-2_Runway27.indd__SDU-02.18_08/24/20-R

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----- Part 77 Approach and Horizontal Surfaces

------ Threshold Siting Surface (TSS)

—— TERPS Localizer Only (LOC) Surface

—— TERPS Lateral Navigation (LNAV) Surface

Part 77 100:1 Subpart B Notification Surface

---- Glide Path Angle

Ground Profile Along Extended Runway Centerline



Notes:

- 1. Vertical scale exaggerated 10 times.
- 2. Profile depicted along extended runway centerline.
- LNAV and LOC Surfaces contain a (34:1) visual portion of the final approach segment which is treated as an obstacle identification surface.
- 4. OCS: Obstacle Clearance Surface
- 5. TERPS: Terminal Instrument Procedures

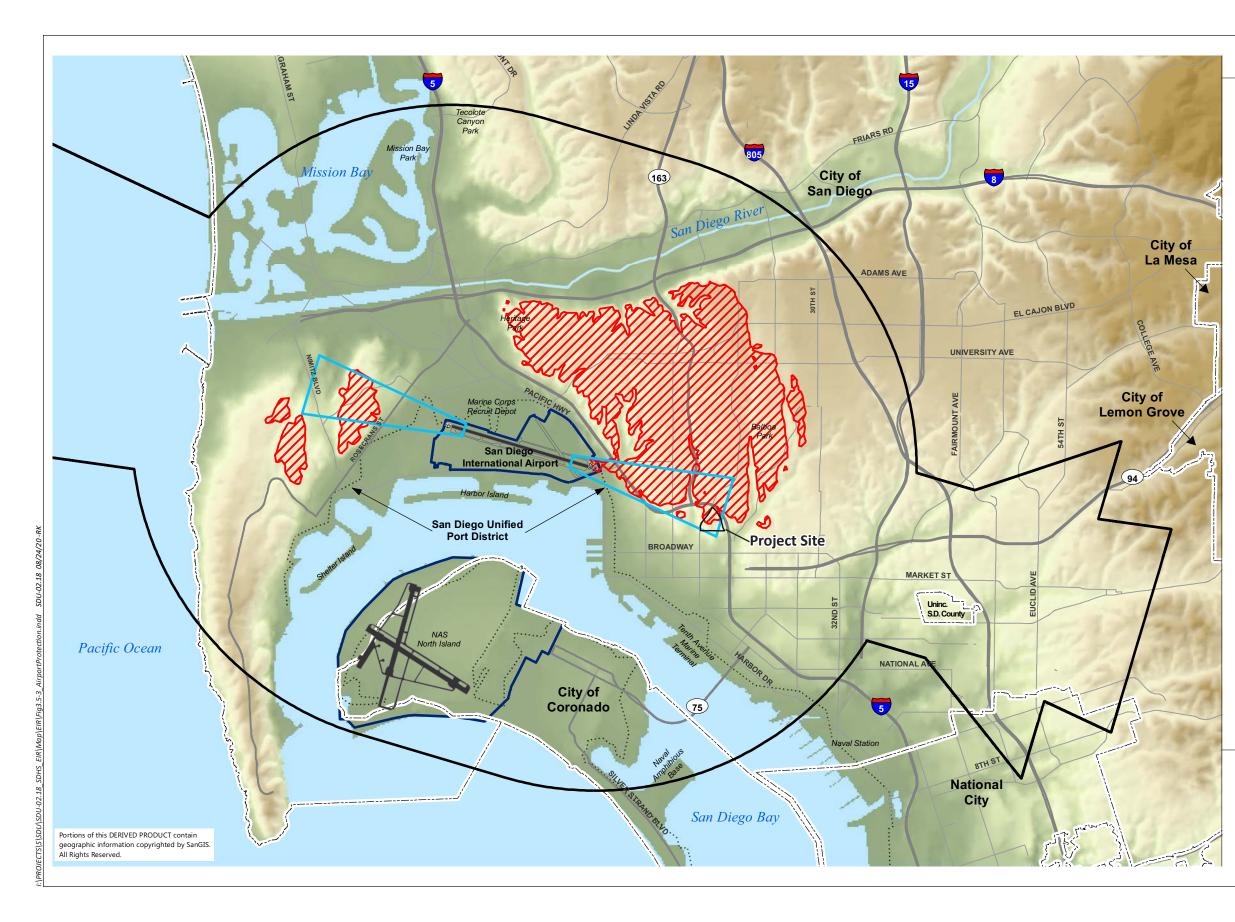
Sources: Ricondo & Associates, Inc., July 2011, based on Federal Aviation Administration (FAA), Order 8260.3B, United States Standards for Terminal Instrument Procedures, June 5, 2009; FAA Federal Aviation Regulations, Part 77, Safe, Efficient Use, and Preservation of Navigable Airspace, June 2011; San Diego Association of Governments (SANDAG) 30 meter raster elevation data in Digital Elevation Model, November 2010 (Part 77 surfaces and terrain penetrations; TERPS surfaces; threshold siting surface; airport approach overlay zone; and glide path angle).

Prepared by: Ricondo & Associates, Inc., March 2012.

Source: Ricondo & Associates 2012

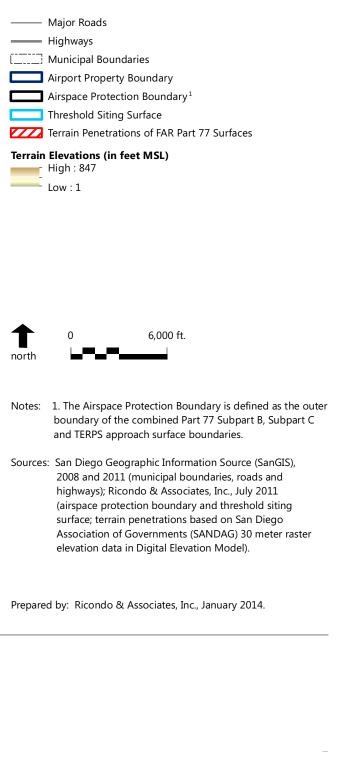
Runway 27 Airspace Surfaces

Figure 3.5-2





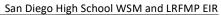
LEGEND



Source: Ricondo & Associates 2014

SDIA Airspace Protection Boundaries

Figure 3.5-3

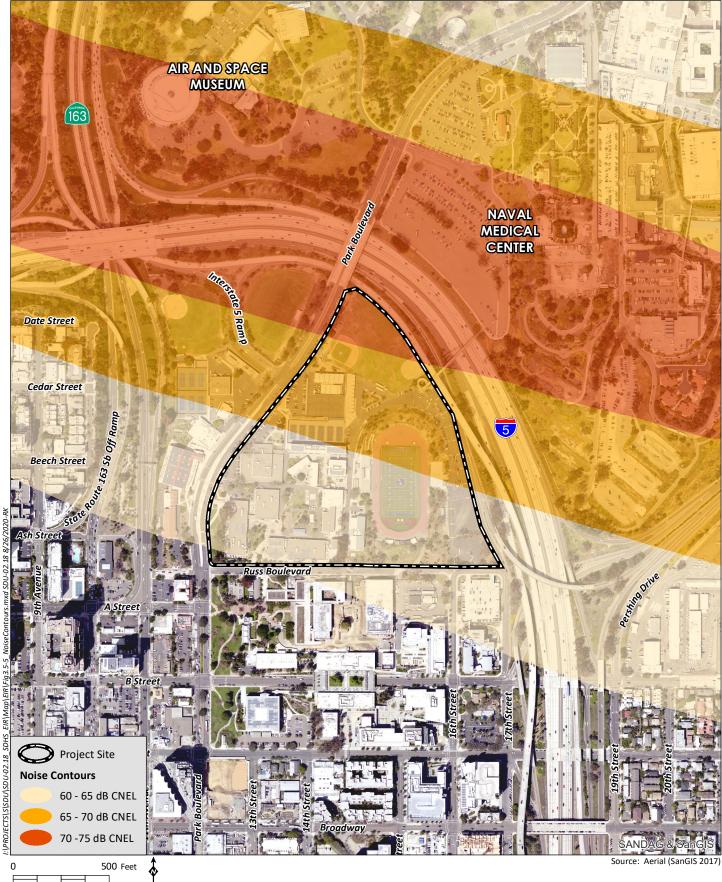




SDIA Airport Influence Areas

Figure 3.5-4



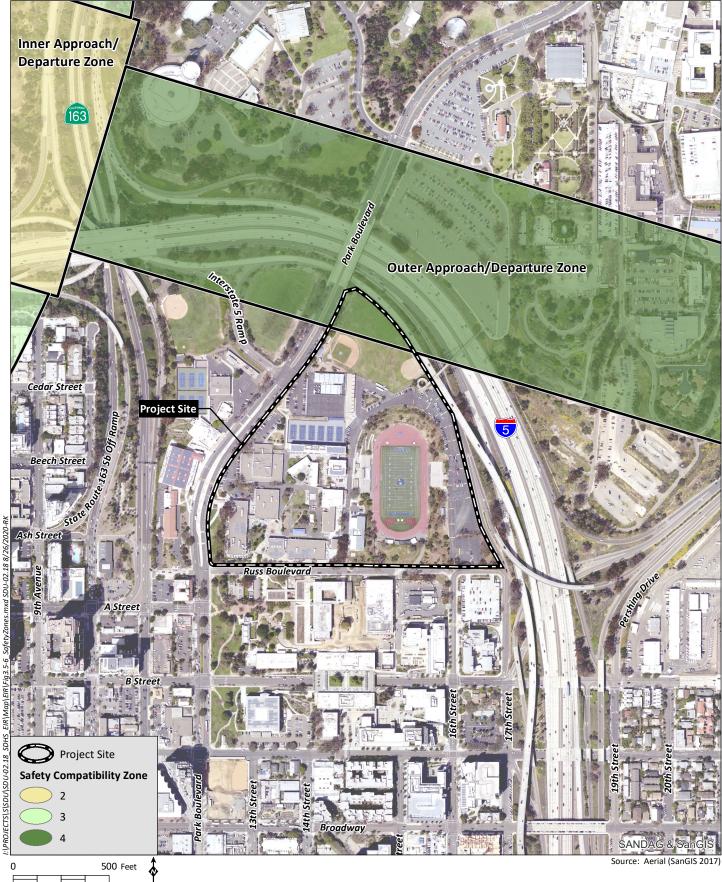




SDIA Noise Contours

Figure 3.5-5

San Diego High School WSM and LRFMP EIR





SDIA Safety Compatibility Zones

Figure 3.5-6

3.6 NOISE AND VIBRATION

This section describes the existing and regulatory setting for noise and presents the results of an assessment of potential noise and vibration impacts associated with construction and operation of the Proposed Project. This section is based on the analysis presented in the Noise Analysis Letter Report prepared for the Project (HELIX 2020c), included as Appendix E.

3.6.1 Existing Conditions

3.6.1.1 Noise Terminology

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound, which interferes with normal activities, causes physical harm, or has adverse health effects.

All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A-weighting (dBA) to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol L_{EQ} , with a specified duration. The CNEL is a 24-hour average, with an added 5 dBA weighting during the evening hours of 7:00 p.m. to 10:00 p.m., and an added 10 dBA weighting for sound levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. These metrics are used to express noise levels for both measurement and comparison to municipal regulations, as well as for land use guidelines and the enforcement of noise ordinances.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver contribute to the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound.

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. A logarithmic scale is used to describe sound pressure level (SPL) in terms of dBA units. The threshold of hearing for the human ear is about 0 dBA.

Because decibels are logarithmic units, SPL cannot be added or subtracted through simple addition. Under the decibel scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level would be 3 dBA higher than one source under the same conditions.

3.6.1.2 Sensitive Land Uses

The study area for noise impacts is defined as the sensitive land uses in the vicinity of the Proposed Project site that would be potentially impacted by elevated noise and vibration levels generated during

Proposed Project construction or operation. Noise sensitive land uses (NSLUs) are land uses that may be subject to stress and/or interference from excessive noise and generally include residences, hospitals, schools, hotels, resorts, libraries, sensitive wildlife habitat, or similar facilities where quiet is an important attribute of the environment. The nearest NSLU to the Project site is San Diego City College located to the south of the Project site across Russ Boulevard. Additionally, the site itself is a school and is therefore considered an NSLU. On-site noise and vibration-sensitive uses include classrooms and exterior areas that would frequently be used for extended periods of time such as outdoor play and eating areas.

3.6.1.3 Existing Noise Environment

The Project site is in an urban area surrounded by academic and commercial land uses. Existing noise sources in the vicinity of the Project site include aircraft operations associated with SDIA (located approximately 1.4 miles northwest of the site) and vehicular traffic along Park Boulevard and I-5. An ambient noise measurement survey was conducted on January 20, 2020 at the Project site and included five 15-minute measurements (refer to Figure 3.6-1, *Noise Measurement Locations*). Noise measurement locations and results are shown in Table 3.6-1, *Ambient Noise Levels*.

Measurement	Location	Time	Noise Level (dBA L _{EQ})
M1	Basketball courts	10:46 a.m. – 11:01 a.m.	64.6
M2	West side of Balboa Stadium	alboa Stadium 10:22 a.m. – 10:39 a.m.	
M3	East side of Balboa Stadium	dium 9:53 a.m. – 10:08 a.m.	
M4	South of Building 1100	11:16 a.m. – 11:31 a.m.	59.6
M5	Intersection of Park Boulevard and	11:40 a.m. – 11:55 a.m.	65.0
	Russ Boulevard		

Table 3.6-1 AMBIENT NOISE LEVELS

3.6.2 Regulatory Setting

3.6.2.1 State

California Building Code, Title 24

The State of California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, California Building Code. These noise standards are applied to new construction for the purpose of providing suitable interior noise environments. The regulations specify that acoustical studies must be prepared when development is proposed near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. The acceptable interior noise limit for new construction in habitable rooms is 45 dBA CNEL. As shown on Figure 3.5-5 in EIR Section 3.5, *Hazards*, the campus is within forecasted 60 to 75 dBA CNEL noise exposure contours due to its proximity to the SDIA.

California Department of Transportation

The California Department of Transportation (Caltrans) provides widely referenced vibration guidelines in its publication, Transportation and Construction Vibration Guidance Manual (Caltrans 2013). Although these guidelines do not represent strict standards that apply to the Proposed Project, they are useful in establishing appropriate thresholds of impact, particularly because the City and the District do not provide quantitative standards for groundborne vibration levels. The manual defines potential vibration impact in terms of annoyance potential and sets the distinctly perceptible vibration annoyance potential criteria as 0.04 inch per second (in/sec) peak particle velocity (PPV). Groundborne vibration annoyance criteria are typically only assessed at building locations rather than exterior areas such as yards, parks, or playgrounds because people are typically much less sensitive to groundborne vibration when they are using exterior areas than when they are inside buildings.

3.6.2.2 Local

While California Government Code Section 53094 includes provisions for school districts to exempt specific school facilities from local zoning regulations, applicable elements of the City's Land Use-Noise Compatibility Guidelines from the 2008 General Plan related to noise are identified for impact evaluation and are reflected in the impact analysis in Section 3.6.4. Specifically, the City's Land Use-Noise Compatibility Guidelines identify school uses within a 60-65 dBA CNEL contour to achieve interior noise levels of 45 dBA CNEL.

City of San Diego Municipal Code

The City's Municipal Code Chapter 5, Article 9.5, Division 4, §59.5.0404 (Construction Noise) lists the following noise regulations:

- (a) It shall be unlawful for any person, between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise unless a permit has been applied for and granted beforehand by the Noise Abatement and Control Administrator. In granting such permit, the Administrator shall consider whether the construction noise in the vicinity of the proposed work site would be less objectionable at night than during the daytime because of different population densities or different neighboring activities; whether obstruction and interference with traffic particularly on streets of major importance, would be less objectionable at night than during the daytime; whether the type of work to be performed emits noises at such a low level as to not cause significant disturbances in the vicinity of the work site; the character and nature of the neighborhood of the proposed work site; whether great economic hardship would occur if the work were spread over a longer time; whether proposed night work is in the general public interest; and he shall prescribe such conditions, working times, types of construction equipment to be used, and permissible noise levels as he deems to be required in the public interest.
- (b) Except as provided in subsection (c) hereof, it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines

of any property zoned residential, an average sound level greater than 75 dBA during the 12-hour period from 7:00 a.m. to 7:00 p.m.

(c) The provisions of subsection (b) of this section shall not apply to construction equipment used in connection with emergency work, provided the Administrator is notified within 48 hours after commencement of work.

Operational noise within the City is regulated by the City's Municipal Code Section 59.5.0401, which establishes the allowable noise limits at the property boundaries for different land use zones. The relevant parts are cited below:

- (a) It shall be unlawful for any person to cause noise by any means to the extent that the one-hour average sound level exceeds the applicable limit given in the following table, at any location in the City of San Diego on or beyond the boundaries of the property on which the noise is produced. The noise subject to these limits is that part of the total noise at the specified location that is due solely to the action of said person.
- (b) The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts. Permissible construction noise level limits shall be governed by Section 59.5.0404 of this article.

The noise limits for the various land use zones are summarized in Table 3.6-2, *City of San Diego Property Line Noise Limits*. The applicable requirement is a function of the time-of-day and land use zone.

Receiving Land Use	7 a.m. to 7 p.m. (dBA L _{EQ})	7 p.m. to 10 p.m. (dBA L _{EQ})	10 p.m. to 7 a.m. (dBA L _{EQ})
Single-family Residential	50	45	40
Multi-family Residential	55	50	45
All Other Residential	60	55	50
Commercial	65	60	60
Industrial or Agricultural	75	75	75

 Table 3.6-2

 CITY OF SAN DIEGO PROPERTY LINE NOISE LIMITS

dBA = A-weighted sound level, the sound pressure level in decibels as measured using the A weighting filter network, which de-emphasizes the very low- and very high-frequency components of the sound in a manner similar to the frequency response of the human ear;

L_{EQ} = equivalent sound level, the average of the sound energy occurring over the measurement period.

The Project site and San Diego City College, the nearest NSLU to the Project site, are zoned Centre City Planned District - Public/Civic (CCPD-PC) and Centre City Planned District – Open Space (CCPD-OS). These are institutional/educational land uses, with no direct land use equivalent in Table 3.6-2. This analysis conservatively uses the property line noise limits for multi-family residential land uses.

Airport Land Use Compatibility Plan

The San Diego County Regional Airport Authority, which acts as the ALUC for the SDIA, maintains the San Diego ALUCP, as amended in May 2014. The ALUCP contains policies to regulate land use and development, including noise compatibility considerations. Consideration of airport compatibility

related to noise is intended to result in development that is compatible with aircraft noise. Specifically, the ALUCP limits new noise-sensitive development within the noise compatibility boundary, identifies sound attenuation goals for noise-sensitive development, and considers if avigation easements are necessary. Table 2-1 of the SDIA ALUCP identifies land use types, their compatibility for each noise contour range, and the resulting acceptable noise level for each use if conditionally allowed. As shown on Figure 3.5-5 in EIR Section 5.5, *Hazards*, the southern part of campus is within the forecasted 60 to 65 dBA CNEL noise exposure contours and areas in the northern part of campus are within the 65 to 70 dBA and 70 to 75 dBA CNEL noise exposure contours. Noise restrictions in the 60 to 65 dBA CNEL contours as they relate to school uses (K-12) include limiting indoor noise levels to 45 dBA CNEL. New school uses are not permitted in the noise contour ranges above 65 dBA CNEL.

3.6.3 Impact Significance Criteria

The following criteria provide the basis for determining the significance of noise impacts resulting from implementation of the Proposed Project. The criteria are based on the State CEQA Guidelines, Appendix G and include additional detail from the City's municipal code. Specifically, the Proposed Project would result in a significant impact with respect to noise if it would result in any of the following:

1. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

For the purposes of this analysis, a significant impact may occur if:

- Project construction activity generates a 12-hour L_{EQ} in excess of 75 dBA L_{EQ} at noise-sensitive land uses between 7:00 a.m. and 7:00 p.m.; or
- Project operations generate noise levels at noise-sensitive land uses in excess of the noise limits provided by Section 59.5.0401 of the City of San Diego municipal code; or
- Project-generated traffic causes a noticeable increase in noise levels that would result in a noise level greater than 65 dBA CNEL at any residence, or 70 dBA CNEL at any church (a noticeable increase in traffic noise is considered to be 3 dBA or more).
- 2. Generation of excessive groundborne vibration or groundborne noise levels?

This impact will be assessed using the criteria established by Caltrans.

3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, would the Project expose people residing or working in the Project area to excessive noise levels?

3.6.4 Impact Analysis

Potential noise and vibration impacts associated with Project construction activities were evaluated using a construction equipment schedule provided by the District, and noise and vibration source levels and modeling methodologies provided by Caltrans (Caltrans 2013) and the Federal Highway Administration's (FHWA's) Roadway Construction Noise Model. Traffic noise was analyzed using data from SANDAG's Transportation Forecast Information Center. *Issue 1: Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

For the purposes of this analysis, a significant impact may occur if:

- Project construction activity generates a 12-hour L_{EQ} in excess of 75 dBA L_{EQ} at noise-sensitive land uses between 7 a.m. and 7 p.m.; or
- Project operations generate noise levels at noise-sensitive land uses in excess of the noise limits provided by Section 59.5.0401 of the City of San Diego municipal code; or
- Project-generated traffic causes a noticeable increase in noise levels that would result in a noise level greater than 65 dBA CNEL at any residence, or 70 dBA CNEL at any church (a noticeable increase in traffic noise is considered to be 3 dBA or more).

Impact Discussion

WSM and LRFMP

The Project would result in the generation of temporary and permanent increases in ambient noise levels in the vicinity of the high school campus. Operational noise levels would be similar to existing conditions, with the exception of the aquatic center.

Construction

Construction would be limited to the hours of 7:00 a.m. to 7:00 p.m. to comply with the City's noise ordinance and would be coordinated by the District to occur at times when school is not in session, as feasible.

Construction activities for the Proposed Project would require a variety of equipment that could temporarily increase noise levels at properties near the work areas. Noise levels generated during construction would vary depending on the types of construction equipment used during construction activity, site geometry (i.e., shielding from intervening structures), and the distance between the noise source and receiver. During construction of the WSM improvements, the construction activities that would generate the highest noise levels would be the demolition of the existing pavement in the student quad area and the construction of the foundation for the addition of 700 sf onto the existing Building 100. A concrete saw, backhoe, and dump truck would likely be the loudest pieces of equipment used during the demolition of the student quad area. The loudest pieces of equipment anticipated to be used while laying the foundation for the 700 sf addition onto building 100 would be a concrete mixer truck and a concrete pump truck. During construction of the LRFMP improvements, the loudest activities would be during building demolition and building construction. The loudest pieces of equipment anticipated to be utilized during building demolition are a breaker, excavator, and dump truck. Noise generated at the closest on-site and off-site NSLUs during the loudest anticipated construction activities are shown in Table 3.6-3, *Anticipated Noise Levels During Construction*.

Activity	Equipment	Distance to NSLU (feet)	Noise Level at NSLU (dBA LEQ)	Exceed Construction Noise Limit?
WSM Improvements	-	•	•	
Student Quad Area Demolition	Concrete Saw	50	82.6	Yes
	Backhoe/Dump Truck		76.1	Yes
	Concrete Saw	300	67.0	No
	Backhoe/Dump Truck		60.5	No
Building 100 Addition Foundation	Concrete Mixer Truck	30	79.3	Yes
	Concrete Pump Truck		78.8	Yes
	Concrete Mixer Truck	400	56.8	No
	Concrete Pump Truck		56.3	No
LRFMP Improvements				
Building Demolition	Breaker	50	80.0	Yes
	Excavator		76.7	Yes
	Dump Truck		72.5	No
	Breaker	150	70.5	No
	Excavator		67.2	No
	Dump Truck		62.9	No
Building Construction	Excavator	50	76.7	Yes
	Compactor		76.2	Yes
	Concrete Mixer Truck		74.8	No
	Concrete Pump Truck		74.4	No
	Excavator	150	67.2	No
	Compactor]	66.7	No
	Concrete Mixer Truck		65.3	No
	Concrete Pump Truck		64.9	No

Table 3.6-3 ANTICIPATED NOISE LEVELS DURING CONSTRUCTION

 1 Based on the construction noise limit of 75 dBA L_{EQ} (12 hour)

As shown in Table 3.6-3, some construction activities are anticipated to exceed the 75 dBA L_{EQ} (12 hour) limit established by the City's Municipal Code. All construction-related noise exceedances would occur at on-site NSLUs and would not occur at off-site areas. Activities where on-site NSLUs would be impacted by construction noise if construction occurs during the school year are described below:

- Demolition of the concrete in the student quad area during WSM improvements would occur at an average distance of 50 feet from the surrounding academic buildings, which are considered on-site NSLUs. At 50 feet, operation of a concrete saw and the simultaneous use of a backhoe and dump truck would generate noise levels exceeding the 75 dBA L_{EQ} threshold (Impact NOI-1).
- Laying the foundation for the 700 square foot addition onto building 100 during WSM improvements would occur at an average distance of 30 feet from the nearest on-site NSLUs. At 30 feet, a concrete mixer truck and a concrete pump truck would generate noise levels exceeding the 75 dBA L_{EQ} threshold (Impact NOI-1).
- 3. Building demolition during LRFMP improvements that would occur closest to an on-site NSLU would be the demolition of building 600, which is immediately south of building 500. The demolition of building 600 would occur at an average distance of 50 feet from the nearest

on-site NSLU. At 50 feet, a breaker and an excavator would generate noise levels exceeding the 75 dBA L_{EQ} threshold. It is conservatively anticipated that all building demolition (e.g., demolition of buildings 400, 600, and 700) may generate noise levels exceeding the 75 dBA L_{EQ} threshold at on-site NSLUs (Impact NOI-2).

4. Building construction during LRFMP improvements that would occur closest to an on-site NSLU would be the construction of the parking structure, which is immediately north of building 900. The construction of the parking structure would occur at an average distance of 50 feet from the nearest on-site NSLU. At 50 feet, an excavator and a compactor would generate noise levels exceeding the 75 dBA L_{EQ} threshold. It is conservatively anticipated that construction of all proposed buildings (e.g., construction of building 400, building 700, the field house, aquatic center, parking structure, auxiliary gymnasium, and performing arts building) may generate noise levels exceeding the 75 dBA L_{EQ} threshold at on-site NSLUs (Impact NOI-2).

Operation

Long-term operational noise sources associated with the implementation of the Proposed Project include on-site activities and noise generated by Project traffic on local streets.

On-site Operation Noise

Operational use of the Proposed Project would be similar to existing conditions as there would be no change to student enrollment or student capacity at the campus. The only Project component that is expected to differ from existing operational noise sources would be the addition of the aquatic center during the LRFMP improvements. All other operational noise would be similar to existing conditions and would not result in a significant increase in noise to nearby NSLUs.

The proposed aquatic center would include a public address system to be used for announcements. The public address system would not be used to play music, so it would not create a continuous noise source at the site. However, the sporadic use of the public address system to make announcements may exceed the property line noise limits established by the City's Municipal Code. As previously discussed, this analysis conservatively uses the property line noise limits for multi-family residential land uses for the Project site and San Diego City College, which are the closest NSLUs. Specific designs for the aquatic center and its public address system are not available at this time and outdoor use of a future public address system has the potential to cause significant off-site noise impacts at San Diego City College (Impact NOI-3).

Traffic Noise

As previously discussed, operation of the Proposed Project would be similar to existing conditions as there would be no change to student enrollment or capacity on campus. The only Project component that would contribute to existing traffic conditions would be the addition of the aquatic center during the LRFMP improvements. With implementation of the Project, the aquatic center would be open to the public during weekends and school breaks.

There would be an increase of about 140 daily trips associated with the Proposed Project, which would be minimal in relation to the average daily traffic along Park Boulevard of approximately 14,500 vehicles (SANDAG 2019). Doubling of a noise source would lead to a 3 dBA increase in noise, which would be considered a significant impact. Because Project traffic would not double the existing traffic volumes of

Park Boulevard, the increase in noise would not exceed 3 dBA, and would not be perceptible. As such, impacts related to noise generated by operational traffic would be less than significant.

Level of Significance Prior to Mitigation

Impact NOI-1: The Proposed Project has the potential to result in noise exceeding the 75 dBA L_{EQ} threshold at on-site NSLUs during student quad area demolition and laying the foundation for the building 100 addition during construction of the WSM improvements.

Impact NOI-2: The Proposed Project has the potential to result in noise exceeding the 75 dBA L_{EQ} threshold at on-site NSLUs during building demolition and construction of proposed buildings during the LRFMP improvements.

Impact NOI-3: Operation of the public address system at the proposed aquatic center has the potential to exceed the applicable noise standards at the nearest off-site NSLU.

Once constructed, impacts related to noise generation associated with the operation of the WSM improvements would be less than significant.

Mitigation Measures

- MM NOI-1 Construction Noise Control Measures. Construction noise control measures shall be implemented to comply with the City's Municipal Code construction noise limits of 75 dBA L_{EQ} (12 hour) during construction of the WSM improvements. Construction of the WSM improvements shall also comply with the permitted construction hours listed within the City's Municipal Code. The District shall be responsible for requiring that contractors adhere to the following noise abatement measures:
 - No demolition or debris removal shall occur during active classes within 325 feet of a classroom.
 - No excavations or major subsurface work shall occur during active classes within 200 feet of a classroom.
 - No cement deliveries or pumping shall occur during active classes within 225 feet of a classroom.
 - No materials deliveries or materials truck unloading shall occur during active classes within 225 feet of a classroom.
 - No construction vehicles or equipment shall occur in the student quad area of the campus during active classes.
 - All lift and portable equipment for exterior or interior work above foundation (during active classes) is limited to the exterior area outside the student quad area.
 - All lift and portable equipment used for exterior and interior work above the foundation (during active classes) must be shielded from direct line-of-sight

view of classrooms within 150 feet including second floor classrooms by Sound Transmission Class (STC) 21 (or higher) noise blankets or other similar or greater STC level noise control methods.

• All building exterior construction work (above foundation) must be shielded from direct line of sight of active classrooms within 150 feet with noise control blankets STC 21 (interior work with closed windows in place in building shell are excluded from this condition).

If desired by the District and/or their contractor, these barriers may be left in place beyond the minimum durations specified above, but such an extension is not required. The minimum height of the barriers shall be 8 feet above ground level. The barriers shall provide a minimum STC 21 or higher, a minimum noise reduction coefficient (NRC) of 0.80, and be firmly secured to the framework. If blankets are used, the soundabsorptive side of the blankets shall be oriented toward the construction equipment and the blankets shall be overlapped by at least 4 inches at seams and taped and/or closed with hook-and-loop fasteners (i.e., Velcro[®]) or other methods so that no gaps exist. If blankets are used, the largest blankets available should be used to minimize the number of seams, and they shall be draped to the ground to eliminate any gaps at the base of the barrier.

In addition, the following noise control measures shall be implemented to reduce noise at nearby noise-sensitive land uses:

- All construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and other applicable shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification.
- All mobile or fixed construction equipment used on the Proposed Project that is regulated for noise output by a local, state, or federal agency shall comply with such regulation while in the course of Proposed Project activities.
- All construction equipment shall be properly maintained to prevent the generation of excessive noise levels.
- All construction equipment shall be operated only when necessary and shall be switched off when not in use.
- Construction employees shall be trained in the proper operation and use of the equipment. (Careless or improper operation or inappropriate use of equipment can increase noise levels. Poor loading, unloading, excavation, and hauling techniques are examples of how a lack of adequate guidance and training may lead to increased noise levels.)
- Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.

- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- MM NOI-2 Construction Noise Control Measures. Construction noise control measures shall be implemented to comply with the City's Municipal Code construction noise limits of 75 dBA L_{EQ} (12 hour) during construction of the LRFMP improvements. Construction of the LRFMP improvements shall also comply with the permitted construction hours listed within the City's Municipal Code. The District shall be responsible for requiring that contractors adhere to the following noise abatement measures:
 - No demolition or debris removal shall occur during active classes within 325 feet of a classroom.
 - No excavations or major subsurface work shall occur during active classes within 200 feet of a classroom.
 - No cement deliveries or pumping shall occur during active classes within 225 feet of a classroom.
 - No materials deliveries or materials truck unloading shall occur during active classes within 225 feet of a classroom.
 - No construction vehicles or equipment shall occur in the student quad area of the campus during active classes.
 - All lift and portable equipment for exterior or interior work above foundation (during active classes) is limited to the exterior area outside the student quad area.
 - All lift and portable equipment used for exterior and interior work above the foundation (during active classes) must be shielded from direct line-of-sight view of classrooms within 150 feet including second floor classrooms by STC 21 (or higher) noise blankets or other similar or greater STC level noise control methods.
 - All building exterior construction work (above foundation) must be shielded from direct line of sight of active classrooms within 150 feet with noise control blankets STC 21 (interior work with closed windows in place in building shell are excluded from this condition).

If desired by the District and/or their contractor, these barriers may be left in place beyond the minimum durations specified above, but such an extension is not required. The minimum height of the barriers shall be 8 feet above ground level. The barriers shall provide a minimum STC 21 or higher, a minimum noise reduction coefficient (NRC) of 0.80, and be firmly secured to the framework. If blankets are used, the sound-absorptive side of the blankets shall be oriented toward the construction equipment and the blankets shall be overlapped by at least 4 inches at seams and taped and/or closed with hook-and-loop fasteners (i.e., Velcro[®]) or other methods so that no gaps exist. If blankets are used, the largest blankets available should be used to minimize the number of seams, and they shall be draped to the ground to eliminate any gaps at the base of the barrier.

In addition, the following noise control measures shall be implemented to reduce noise at nearby noise-sensitive land uses:

- All construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and other applicable shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification.
- All mobile or fixed construction equipment used on the Proposed Project that is regulated for noise output by a local, state, or federal agency shall comply with such regulation while in the course of Proposed Project activities.
- All construction equipment shall be properly maintained to prevent the generation of excessive noise levels.
- All construction equipment shall be operated only when necessary and shall be switched off when not in use.
- Construction employees shall be trained in the proper operation and use of the equipment. (Careless or improper operation or inappropriate use of equipment can increase noise levels. Poor loading, unloading, excavation, and hauling techniques are examples of how a lack of adequate guidance and training may lead to increased noise levels.)
- Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- MM NOI-3 Aquatic Center Public Address System Design. During the architectural and engineering design phases for the proposed aquatic center, and prior to aquatic center operation, an acoustical consultant shall be retained by the District to evaluate the design of the aquatic center's public address system and provide recommendations, as necessary, to ensure that the associated one-hour average noise level would not exceed 55 dBA L_{EQ} at the property line with San Diego City College during the daytime hours of 7:00 a.m. to 7:00 p.m. If the aquatic center's public address system would operate during the evening hours of 7:00 p.m. to 10:00 p.m., the applicable one-hour noise limits shall be

reduced to 50 dBA L_{EQ} ; if the aquatic center's public address system would operate during the nighttime hours of 10:00 p.m. to 7:00 a.m., the applicable noise limits shall be further reduced to 45 dBA L_{EQ} . Design considerations may include, but are not limited to, the selection of a quieter public address system, changes in unit locations/ orientations, and acoustical louvers or screens. The recommendations of the acoustical consultant shall be incorporated into the final design for the aquatic center.

Level of Significance After Mitigation

Implementation of MM NOI-1 and MM NOI-2 would reduce potentially significant impacts related to noise generation during construction of the WSM and LRFMP improvements to less than significant. Impacts associated with noise generation during operation of the WSM improvements would be less than significant.

Implementation of MM NOI-3 would reduce potentially significant impacts related to noise generation during operation of the aquatic center. However, as detailed site planning and the public address system design are not available, impacts are concluded to remain significant and unavoidable.

Issue 2: Would the Project generate excessive groundborne vibration or groundborne noise levels?

Impact Discussion

WSM and LRFMP

Construction

Heavy construction equipment has the potential to produce groundborne vibration levels that are perceptible to people in the surrounding area. Vibration levels from construction equipment attenuate as they radiate from the source. The equation to determine vibration levels at a specific distance states that

$$PPV_{equip} = PPV_{ref} * (25/D)^{n}(in/sec)$$

where PPV_{ref} is PPV at 25 feet, D is distance from equipment to the receptor in feet, and n=1.1 (the value related to the attenuation rate through the ground). The value of 1.1 is determined based on the soil conditions at the Proposed Project site and was chosen to represent hard soil in order to provide a conservative estimate of vibration levels.

The primary source of vibration during Project construction would be a vibratory roller (primarily used to achieve soil compaction for new pavement and building foundations during both the WSM and LRFMP phases of the Project). Due to its mobile nature of operations, the use of a vibratory roller during construction would occur at an average distance, over the course of a workday, of 50 feet from the nearest on-site NSLU during soil compaction activities for new pavement for the student quad area and new building foundation. A vibratory roller generates approximately 0.21 in/sec PPV at a distance of 25 feet. Using the equation included above, it is determined that a vibratory roller would generate a PPV of 0.10 in/sec at a distance of 50 feet. This would exceed the distinctly perceptible vibration annoyance potential criteria of 0.04 in/sec PPV as provided in Caltrans' Transportation and Construction Vibration Guidance Manual (Caltrans 2013) for continuous/ frequent intermittent sources. Therefore, a significant

impact could occur to on-site NSLUs during use of a vibratory roller during WSM improvements (Impact NOI-4) and LRFMP improvements (Impact NOI-5).

Pavement compaction would occur closest to an off-site NSLU during construction of building 400, which would occur at an average distance of 150 feet from San Diego City College. As previously stated, a vibratory roller creates approximately 0.21 in/sec PPV at a distance of 25 feet. At a distance of 150 feet, a vibratory roller would create a PPV of 0.03 in/sec. This would be below the distinctly perceptible vibration annoyance potential criteria of 0.04 in/sec PPV as provided in the Caltrans' Transportation and Construction Vibration Guidance Manual (Caltrans 2013) for continuous/frequent intermittent sources. Though vibration levels may be perceptible to people at nearby land uses, the levels would be low and would occur for short periods of time. As such, vibration impacts to off-site NSLUs during pavement compaction would be less than significant.

Operation

Once the WSM and LRFMP improvements are constructed, operations at the Project site would involve school operations and would not involve vibration-inducing activities. Operational impacts associated with the Project would not occur.

Level of Significance Prior to Mitigation

Impact NOI-4: The Proposed Project has the potential to result in excessive groundborne vibration to onsite NSLUs during Project construction of WSM improvements.

Impact NOI-5: The Proposed Project has the potential to result in excessive groundborne vibration to onsite NSLUs during Project construction of LRFMP improvements.

Operational impacts related to excessive groundborne vibration would not occur once the WSM and LRFMP improvements are constructed.

Mitigation Measures

- **MM NOI-4** Implement Vibration Avoidance Measure. Prior to the commencement of construction activities for the WSM improvements, the District shall require that no soil compaction occurs within 110 feet of a classroom during active classes and shall require that this mitigation measure be included on the contractor's construction plans. The District Project Manager shall coordinate with the construction contractor to either plan for soil compaction when school is not in session or when a distance of at least 110 feet from active classrooms can be maintained.
- **MM NOI-5** Implement Vibration Avoidance Measure. Prior to the commencement of construction activities for the LRFMP improvements, the District shall require that no soil compaction occurs within 110 feet of a classroom during active classes and shall require that this mitigation measure be included on the contractor's construction plans. The District Project Manager shall coordinate with the construction contractor to either plan for soil compaction when school is not in session or when a distance of at least 110 feet from active classrooms can be maintained.

Level of Significance After Mitigation

Implementation of MM NOI-4 and MM NOI-5 would reduce potentially significant impacts related to excessive groundborne vibration during the construction of the WSM and LRFMP improvements to less than significant.

Operational impacts related to excessive groundborne vibration would not occur once the WSM and LRFMP improvements are constructed.

Issue 3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, would the Project expose people residing or working in the Project area to excessive noise levels?

Impact Discussion

WSM and LRFMP

Construction

The applicable restrictions apply to Project operations and no discussion of potential conflicts associated with construction is warranted.

Operation

The Proposed Project is located within two miles of a public airport where an airport land use plan (i.e., the SDIA ALUCP) has been adopted as is within noise contours related to airport noise ranging between 60 and 75 dBA CNEL. The applicable restrictions apply to Project operations and no discussion of potential conflicts associated with construction is warranted. As stated in EIR Section 3.5, the Proposed Project would involve improvements to an existing school campus and would not result in campus expansion or increases in student enrollment or capacity. As shown in Table 1-1, new and replacement buildings associated with the Project would be reviewed and approved by the Office of the DSA, which includes review for compliance with Title 24 of the CBC. As Title 24 requires that buildings achieve interior noise limits of 45 dBA CNEL, the Proposed Project would not conflict with the ALUCP noise policies. As student enrollment and capacity would not increase at the campus, there would be no additional exposure of school faculty or students to excessive noise related to aircraft operations. While the proposed aquatic center would be a new use that would be available to the public, the future site of the aquatic center is within the 60 to 65 dBA CNEL noise contour, which is an acceptable exterior noise level for new school uses. The Office of the DSA would also review and approve the final design of the aquatic center which includes conformance to Title 24 requirements. Therefore, significant impacts would not occur related to noise exposure as a result of the Project.

The Project site is not located in the vicinity of a private airstrip. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels where the Project is within the vicinity of a private airstrip. No impacts related to private airstrips would occur.

Level of Significance Prior to Mitigation

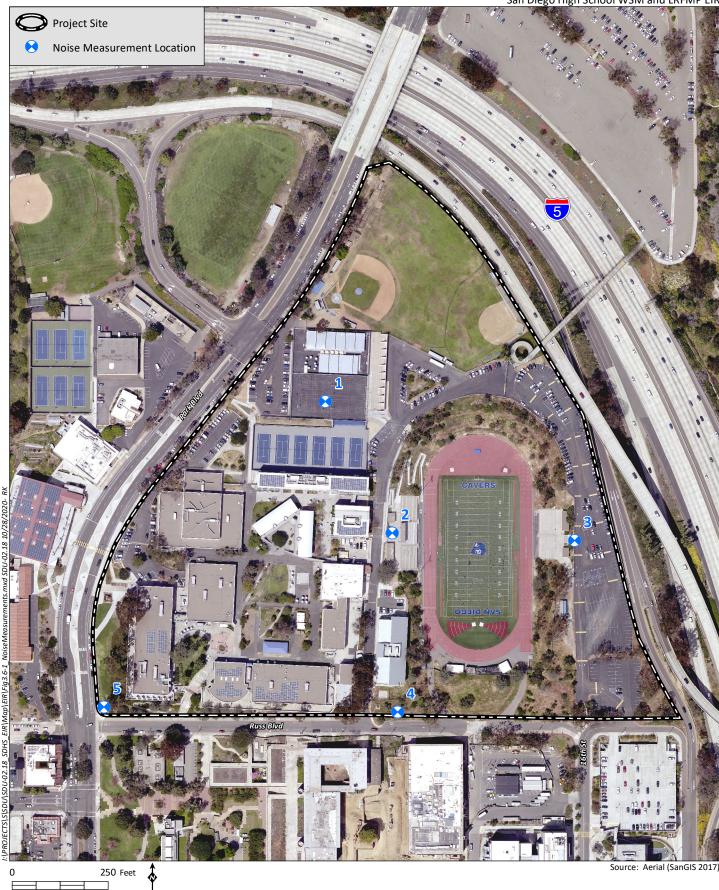
Impacts associated with the exposure of excessive noise levels to people residing or working near the Project associated with construction and operation of the WSM or LRFMP improvements would not occur.

Mitigation Measures

As no significant impacts would occur, no mitigation measures would be required.

Level of Significance After Mitigation

Impacts associated with the exposure of excessive noise levels to people residing or working near the Project during construction and operation of the WSM and LRFMP improvements would not occur.



HELIX Environmental Planning

Source: Aerial (SanGIS 2017)

Noise Measurement Locations

Figure 3.6-1

3.7 TRANSPORTATION AND TRAFFIC

This section includes a review of existing traffic conditions, a summary of applicable policies and regulations related to traffic, and an analysis of traffic impacts resulting during construction and operation of the Proposed Project. The information in this section is based on technical information prepared by Kimley-Horn in December 2020, which is provided as Appendix F.

3.7.1 Existing Conditions

School Access, Circulation, and Parking

The SDHS campus is located in the Downtown Community Planning area of the City and is bound by the I-5 freeway to the north and east, Russ Boulevard to the south, and Park Boulevard to the west. Regional access to the site from the north is provided via I-5 and SR 163, from the south via I-5, and from the east via SR 94. The combined SR 163 off-ramp and I-5 on-ramp intersects with Park Boulevard at the northwestern part of the campus and provides site access at Russ Boulevard. An I-5 off-ramp and the southern terminus of SR 163 turn into Tenth Avenue west of the campus and provides access via A Street. SR 94 and I-5 northbound both provide access to the site via B Street.

Russ Boulevard is a local street with a 25 mile per hour (mph) posted speed limit that operates as a two-way street between Park Boulevard and the high school driveway, and as a one-way eastbound street between the high school driveway and 16th Street. Russ Boulevard provides parallel parking and sidewalk on the south side of the roadway, while sidewalk is only provided on the north side between Park Boulevard and the high school driveway near 16th Street.

Park Boulevard provides north-south connectivity between downtown and the mid-city communities through Balboa Park. Park Boulevard is classified as a four-lane major arterial north of Russ Boulevard and a four-lane collector south of Russ Boulevard. Park Boulevard has a raised median through the study area and a posted speed limit of 25 mph. Sidewalk exists on both sides of the roadway adjacent to the campus, Class II buffered bike lanes are provided between the I-5 southbound ramps and Russ Boulevard, and Class III bike route sharrows are provided elsewhere. The 2016 Downtown San Diego Mobility Plan (Downtown Mobility Plan) recommends a future Class IV bikeway between C Street and I-5.

A Street and B Street form a one-way east-west couplet in the downtown grid system, A Street in the eastbound direction and B Street in the westbound direction, each with three travel lanes. A Street is classified as a major arterial. B Street is classified as a major arterial east of Park Boulevard, and a collector west of Park Boulevard. Sidewalk and parking exist on both sides of A Street and B Street within the study area, and both have a posted speed limit of 25 mph. A Street provides Class III bike route sharrows in the right-most travel lane from the west up to 10th Avenue. The Downtown Mobility Plan recommends a Class III bike route on B Street.

16th Street is a north-south two-lane local street with a 25 mph posted speed limit north of B Street. It provides access to the high school parking lot. Sidewalk exists on both sides of the roadway.

In addition to the roadways that provide regional and local access to the site, a pedestrian foot bridge spans I-5 providing access from Balboa Park to the site for pedestrians and bicyclists. A Metropolitan Transit System (MTS) bus stop is located along Park Boulevard adjacent to the campus near building 200

and includes service from the Route 7 bus. Campus parking is available within several small parking lots on campus, including along Park Boulevard at the western edge of campus, in the northern part of the campus near the baseball and softball fields and the pedestrian foot bridge, and in the eastern part of campus near I-5. There are approximately 400 parking spaces within the Project site to serve the high school campus, of which 300 spaces are in parking areas around Balboa Stadium and the remaining 100 spaces are along the western part of the campus near Park Boulevard. Student drop-off areas are located along Russ Boulevard along the southern campus boundary.

Roadway Safety

Information regarding roadway safety conditions surrounding the Project site is maintained by the California Highway Patrol's Statewide Integrated Traffic Records System. A total of 35 traffic collisions have been documented near the Project site between 6:00 a.m. and 10:00 p.m. during weekdays between January 1, 2015 and December 31, 2019. Collisions primarily involved broadside collisions between two vehicles (10 occurrences) pedestrian/vehicle collisions (8 occurrences) and rear-end collisions between two vehicles (7 occurrences). Roadways with higher collision rates near the campus include along Park Boulevard and B Street (14 collisions include the intersection of A Street and 11th Avenue (6 collisions) and Park Boulevard and B Street (5 collisions). Of the 8 pedestrian collisions with automobiles, 4 of them involved pedestrians not using a crosswalk, and 3 of those were across Park Boulevard. None of the 35 collisions near the Project site resulted in pedestrian or vehicular traffic fatalities or serious injuries.

3.7.2 Regulatory Setting

3.7.2.1 State

Senate Bill 743

SB 743 was approved by the California legislature in September 2013 requiring changes to traffic methodology pursuant to CEQA. Specifically, SB 743 resulted in the California legislature directing the Governor's Office of Planning and Research (OPR) to develop alternative metrics to replace the traditional traffic metric of "level of service" (LOS) when evaluating traffic impacts. The OPR published a "Technical Advisory on Evaluating Transportation Impacts in CEQA" in December 2018 to include recommendations to replace the traditional LOS metric with a "vehicle miles traveled" (VMT) metric for future traffic impact evaluations. OPR then adopted the VMT metric as the primary measure for transportation impacts and directed local agencies to update their transportation procedures by July 1, 2020 to replace LOS with VMT.

State CEQA Guidelines Section 15064.3

Section 15064.3 of the State CEQA Guidelines was added as part of a comprehensive update to the guidelines that was adopted by the California Resources Agency in December 2018. Section 15064.3 describes specific considerations for evaluating a project's transportation impacts and identifies VMT as the most appropriate metric for determining transportation impacts. Except for roadway capacity projects, Section 15064.3 stipulates that a project's effect on automobile delay does not constitute a significant environmental impact under CEQA.

California Department of Transportation

Caltrans has jurisdiction over the state highway system and is divided into 12 districts. The Project is in District 11, which includes San Diego and Imperial counties. In August 2013, Caltrans adopted an Intersection Control Evaluation (ICE) and Design Guidance Memorandum that provides interim engineering, guidance, and process updates, and establishes the ICE Technical Assistance Program to evaluate decisions related to the addition, expansion, or modification of access to and from state highways. In July 2014, Caltrans released a Maintenance Manual that focuses on the preservation, upkeep, and restoration of roadway structures to the condition to which they were constructed. Section 1.20 of the Maintenance Manual describes Freeway Maintenance Agreements and that they define the responsibility that must be accepted by each agency upon the completion of a project affecting a state highway. While Caltrans maintains full jurisdiction over maintenance and control of the state highway system, Freeway Maintenance Agreements are used to transfer maintenance of all infrastructure that is not on the state highway system, such as other streets and roads serving the highway, approaches to ramps, overcrossings, and undercrossings that serve adjoining property and local traffic. Caltrans can retain title to and be responsible for maintenance; however, if the local authority desires, Caltrans can transfer title for areas of uncontrolled access that are likely to be maintained by the local authority.

In July 2020, Caltrans released Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance, which provides guidance for a simplified safety analysis for all land use projects and land use plans within or near a State facility. The guidance does not establish thresholds of significance for determining safety impacts under CEQA but suggests that judgment should be used when reviewing data for the safety analysis.

3.7.2.2 Local

City of San Diego Transportation Study Manual

The City's Transportation Study Manual (TSM) provides guidance on preparing transportation impact analyses for projects within the City pursuant to SB 743. The City's TSM establishes VMT as the performance metric for measuring transportation impacts under CEQA and relies on the results of a Local Mobility Analysis (LMA) to determine if issues related to site access, circulation, and multi-modal transportation network may occur as a result of a project. The VMT and LMA criteria are summarized below.

Vehicle Miles Traveled Screening Criteria

The City's draft TSM includes VMT screening criteria, significance thresholds, analysis methodologies, and suggested mitigation measures to address traffic impacts. Initial screening criteria consider the project's location, daily trips generated, and the type of project. Specifically, a VMT analysis must be completed for projects under the City's jurisdiction unless any of the following are applicable:

- 1. <u>VMT Efficient Location</u> The project is in a VMT Efficient Location, as depicted in the SANDAG Screening Map.
- 2. <u>Small Project</u> The project would generate less than 300 daily unadjusted driveway trips.

- 3. <u>Locally Serving Retail</u> The project would include 100,000 sf of gross floor area or less and serves a population of roughly 25,000 people or less based on a market area study.
- Locally Serving Public Facilities The project would serve the surrounding community (e.g., transit centers, public schools, libraries, post offices, park-and-ride lots, police and fire facilities, government offices, or passive public facilities like utility buildings, water sanitation or waste management projects).
- <u>Affordable Housing Project</u> The project would provide access to transit and would meet one of the following: (a) affordable housing equal or less than 50 percent of the area median income; (b) senior housing; (c) transitional foster youth housing; (d) disabled veterans; or (e) homeless persons.
- 6. <u>Mixed Use Project</u> The individual land uses of the project would each meet another screening criteria above.
- 7. <u>Redevelopment Project</u> The project would result in a net reduction/decrease in total project VMT compared to existing conditions.

3.7.3 Impact Significance Criteria

The following significance criteria are based on State CEQA Guidelines, Appendix G, and provide the basis for determining significance of impacts associated with transportation and traffic from implementation of the Proposed Project. The Project would result in a significant environmental impact related to transportation and traffic if it would result in any of the following:

- 1. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- 2. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- 3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- 4. Result in inadequate emergency access?

Methodology

OPR does not provide guidance regarding standards or requirements for schools (traditional, charter, or private) under SB 743. However, as detailed in EIR Section 3.7.2, the City's TSM provides guidance on VMT analysis to evaluate traffic impacts using a VMT metric. Because there is no OPR guidance or adopted District thresholds for evaluating VMT as it relates to school projects and because the City has released draft guidance on evaluating VMT for proposed projects, the District is relying on the City's TSM to evaluate VMT impacts associated with the Proposed Project.

Trip Generation

As described in EIR Chapter 2, *Environmental Setting and Project Description*, the Proposed Project would not result in an increase in student enrollment or campus capacity as a result of the WSM or

LRFMP improvements. The WSM improvements would be limited to maintenance and upgrades to existing campus facilities, including a building addition of about 700 sf to building 100; however, operations would not increase. The LRFMP improvements would involve building demolition and new building construction; however, most of the LRFMP improvements would maintain existing campus operations. Specifically, classroom buildings 400 (which includes a performing arts center), 600, and 700 would be demolished and replaced by a new classroom building with lower level parking and a food service and custodial building. Other LRFMP improvements would involve constructing an auxiliary gymnasium to support the existing gymnasium at building 200, a field house at Balboa Stadium to support the school's existing athletic programs, a performing arts building, a parking structure with tennis courts above, and an aquatic center that would be a shared facility between the school and the public. Of these Project improvements the aquatic center would result in some operational increases at the Project site. None of the other Project improvements are anticipated to result in additional operations at SDHS and would not result in the generation of vehicle trips.

Trip generation for the aquatic center was determined by considering traffic volumes and patterns for existing aquatic centers in similar locations. Based on the anticipated use schedule of the aquatic center, the highest single-day use would occur on weekdays during summer break for 12 hours per day (7:00 a.m. to 7:00 p.m.); however, typical peak hour traffic volumes associated with the school are substantially lower while school is not in session. As such, the most appropriate evaluation of traffic impacts associated with public use of the aquatic center is anticipated to be during the school year. During the school year, the public would have access to the aquatic center on weekdays between 7:00 a.m. to 9:30 a.m. After 9:30 a.m., the pool would be closed to the public for high school classes, sports, and swim meets. High school classes are not anticipated to generate trips, while swim meets are assumed to occur outside of the weekday peak periods. Therefore, trip generation for the site focuses on the a.m. peak hour period.

Morning peak hour trips were estimated based on the following assumptions:

- Number of lap lanes is 14
- Swim classes would utilize 4 lanes, the remaining 10 lanes would be open to the public as a lap pool
- Swim classes would accommodate 8 attendees
- Lap pool lanes would operate at 100 percent capacity during the 2.5 hours
- Attendees of the lap pool lanes would swim for 0.5 hour
- Two trips per attendee are estimated for arrival and departure from the site

As shown in Table 3.7-1, Aquatic Center Trip Generation (7:00 – 9:30 a.m.), public use of the aquatic center would generate 140 trips on weekday mornings. The aquatic center would be used by the public during these 2.5 hours of the morning only. For the remainder of the day, the aquatic center would be used by the high school and is not expected to generate additional trips. Therefore, the 140 morning peak period trips are also considered to be the ADT generated by the Project during a typical weekday.

Activity	Total	Driveway Trips	
Activity	Trips	In	Out
Swim Class	16	8	8
Lap Pool	124	62	62
Total	140	70	70

Table 3.7-1 AQUATIC CENTER TRIP GENERATION (7:00 a.m.– 9:30 a.m.)

Source: Appendix F

Note: Total trips generated by the aquatic center is equal to the ADT generated by the Project during a typical weekday. The aquatic center would not generate additional trips for the remainder of the day.

3.7.4 Impact Analysis

Issue 1: Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Impact Discussion

WSM and LRFMP

Transportation facilities in the Project area, including bus stops, roadways, bicycle lanes, and sidewalks, are located near the Project site. Russ Boulevard, Park Boulevard, and 16th Street accommodate both sidewalks and bike lanes as described above in section 3.7.1. A bus stop is located near the Project site along Park Boulevard near building 200. The Proposed Project involves WSM improvements including the realignment of the parking lot entrance at 16th Street. LRFMP improvements would involve construction of a new campus entrance/exit along Park Boulevard.

Construction

Impacts on the circulation system, including transit, roadway, bicycle, and pedestrian facilities could occur during construction of the WSM and LRFMP improvements as construction vehicles would use the roadways that surround the Project site, including Park Boulevard, 16th Street, Russ Boulevard, B Street, and 11th Avenue, to deliver materials and haul construction debris. The generation of construction vehicular traffic is not anticipated to be substantial enough to require or result in road closures. During materials and construction equipment deliveries, roadway users in downtown San Diego and surrounding areas near the Project site could experience temporary and infrequent delays; however, temporary and intermittent delays are not anticipated to significantly affect overall traffic circulation in the area. Staging for the Proposed Project would occur on site and is not expected to impede circulation in the area, including non-motorized modes of travel or public transportation.

Construction during the WSM improvements associated with repaving in the parking lot at the eastern and northern part of the campus would result in a temporary closure of the pedestrian foot bridge (which also accommodates bicyclists) that spans I-5. Once the parking lot improvements are completed, pedestrian foot bridge access would be restored and would remain as under existing conditions. Temporary traffic control during construction would be required on construction document specifications, including placing temporary signage and advanced detour notifications, providing for safe pedestrian and bicycle passage or detour, and protecting existing site improvements to remain (including curbs and pavement). Construction activities would primarily occur within the school property and contractors would be required to comply with traffic control requirements. Off-site improvements within Park Boulevard at the combined SR 163 off-ramp and I-5 on-ramp during the LRFMP improvements may involve roadway, sidewalk, and bike lane closures; however, these closures would be temporary and detours would be available within the area to maintain circulation around the campus. Temporary street closures at Park Boulevard related to the intersection improvements at the combined SR 163 off-ramp and I-5 on-ramp during the LRFMP improvements would be coordinated with the City and Caltrans during construction and would require City approval of a traffic control plan and/or public right-of-way permits as required for construction work in the public right-of-way, and Caltrans' issuance of encroachment permits for those improvements. As a result, Project construction is not anticipated to conflict with the circulation system or result in a significant environmental impact.

Operation

Once construction is completed, SDHS enrollment and capacity would not change and school operations would continue as under existing conditions with the exception of the aquatic center. Other improvements, such as the performing arts center and classroom buildings, would either replace or modernize (and not expand) existing uses or would not generate additional trips during morning or afternoon weekday peak hours (i.e., 7:00 a.m. to 9:30 a.m. and 4:00 p.m. to 6:00 p.m.) compared to existing campus operations. The aquatic center would be a new use at the Project site and would be shared between the school and public and would accommodate up to 439 persons. Use of the aquatic center between the high school and the public is shown on Table 2-3. During the school year, users of the aquatic center would involve students at SDHS already enrolled and attending the school and would not generate additional trips. Swim meets are also expected to occur outside of the peak hour periods. Public use of the aquatic center would involve lap swimming and swim classes in the mornings during the week and Saturdays and in the early afternoon on Sundays for most of the year (41 weeks). During summer break, public use would be expanded to all day (e.g., 7:00 a.m. to 7:00 p.m.) during the week, 7:00 a.m. to 4:00 p.m. on Saturdays, and 12:00 to 4:00 p.m. on Sundays. Traffic volumes during the summer are much lower than during the school year, and therefore trips generated for the site would not overlap with peak hours. As a result, the traffic impact analysis associated with the Project is limited to non-summer public use of the aquatic center during the a.m. peak hour only. Surrounding roadways and intersections near the Project site would not be permanently affected once the proposed WSM improvements are constructed as there would be no additional operational trips associated with WSM improvements. While the LRFMP improvements would result in some traffic increases associated with the proposed aquatic center, these increases would not be substantial and would not conflict with the surrounding circulation system. Further, existing pedestrian and bicycle access into the site via the pedestrian foot bridge that spans I-5 into the campus would operate as it does under existing conditions once construction is completed and no operational impacts to the pedestrian foot bridge are anticipated. During the temporary closure of the pedestrian foot bridge, pedestrians and bicycles would be detoured to Park Boulevard to access the site. The proposed campus entrance at Park Boulevard near the combined SR 163 off-ramp and I-5 on-ramp would create a fourth leg to an existing intersection and a new driveway into the campus; however, coordination with both the City and Caltrans would be required for the design, permitting, and maintenance of the intersection, which would consider Caltrans and City programs, policies, and plans addressing the circulation system. There is an existing sidewalk along the campus perimeter along Park Boulevard that would be partially removed to accommodate a driveway into the campus; however, pedestrian and bicycle movement through this intersection would be accommodated once the intersection is improved. As a result, permanent operational impacts resulting from a conflict with a transportation policy or program would be less than significant.

Level of Significance Prior to Mitigation

Impacts related to conflicts with a program, plan, ordinance, or policy addressing the circulation system during construction and operation of the WSM and LRFMP improvements would be less than significant.

Mitigation Measures

As no significant impacts would occur, no mitigation measures would be required.

Level of Significance After Mitigation

Impacts associated with conflicts with the circulation system during construction and operation of the WSM and LRFMP improvements would remain less than significant.

Issue 2: Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Impact Discussion

WSM and LRFMP

Construction

As stated above for Issue 1, construction vehicles during the WSM and LRFMP phases of the Project would use the roadways that surround the Project site to deliver materials and haul construction debris, including Park Boulevard, 16th Street, Russ Boulevard, B Street, and 11th Avenue. It is anticipated that construction workers would primarily be drawn from existing residents of the City and surrounding area. As such, construction worker VMT would not be newly generated, but rather would be redistributed throughout the transportation network based on workers' travel to different work sites each day. Accordingly, construction worker VMT is merely a redistribution of VMT that would otherwise be generated at other construction sites throughout the San Diego region. This redistribution would be nominal and temporary.

Additionally, the goals of SB 743, as stated in the legislative text, include reducing GHG emissions and traffic-related air pollution, promoting the development of multimodal transportation systems, and providing clean, efficient access to destinations. The legislative text of SB 743 further states that it is the intent of the Legislature to balance the need for LOS standards for traffic with the need to build infill housing and mixed-use commercial developments within walking distance of mass transit facilities, downtowns, and town centers. Therefore, based on the legislative intent of SB 743, which focuses on long-term VMT reductions through smart growth and planning, the redistribution of VMT from construction traffic is not expected to substantially increase VMT in the region such that it could contribute to long-term adverse environmental effects from increases in GHG and criteria pollutant emissions or hinder the promotion of multimodal transportation systems or implementation of clean, efficient access to destinations; and the Project's temporary effects on VMT and the transportation system are not deemed to be significant. Consequently, VMT impacts would be less than significant during construction activities associated with the Proposed Project.

Operation

The Project does not involve school expansion or increases in student enrollment or capacity; however, due to the development of the aquatic center and its use by the public, a maximum of 140 trips is anticipated during the school year in the mornings between 7:00 a.m. to 9:30 a.m. The City's TSM outlines screening criteria for land use projects to determine if a project could substantially increase VMT and result in a significant impact. As described in Section 3.7.2.2, projects that are "Locally Serving Public Facilities," including public schools and aquatic centers, are presumed to result in less than significant VMT impacts. Also, projects that generate less than 300 unadjusted driveway trips are "Small Projects" that would likewise not result in significant VMT impacts. As a result, impacts related to operational VMT increases are presumed to be less than significant and a detailed VMT analysis is not warranted for the Proposed Project.

Level of Significance Prior to Mitigation

Impacts related to conflicts or inconsistencies with CEQA Guidelines Section 15064.3, subdivision (b) during construction and operation of the WSM and LRFMP improvements would be less than significant.

Mitigation Measures

As no significant impacts would occur, no mitigation measures would be required.

Level of Significance After Mitigation

Impacts associated with conflicts or inconsistencies with CEQA Guidelines Section 15064.3 subdivision (b) during construction and operation of the WSM and LRFMP improvements would remain less than significant.

Issue 3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Discussion

WSM and LRFMP

Construction

Construction activities for all Project improvements would occur within the SDHS campus, except for the creation of a new campus entrance/exit from Park Boulevard at the combined SR 163 off-ramp and I-5 on-ramp during the LRFMP improvements. During the planning phases for the new site access point from Park Boulevard, the City would need to become a sponsor of this improvement to allow Caltrans to coordinate with the City. Caltrans, through their ICE Technical Assistance Program, would likely require the preparation of a Project Report and/or a New Roadway Connection Report to be reviewed by the Federal Highway Administration. The Project Report and/or New Roadway Connection Report would consider intersection design options and include an assessment if the SR 163 or I-5 ramps would need to be widened to accommodate the connection to SDHS. Once the design is completed, environmental review pursuant to the requirements of the National Environmental Policy Act (NEPA) are anticipated and would be led by Caltrans.

Construction of these improvements would require work within City streets that are not within the Project site. Permits from the City (i.e., public right-of-way and/or traffic control permits) and Caltrans (i.e., encroachment permits) would be required prior to conducting off-site work and would include requirements to maintain non-hazardous roadway conditions. Impacts associated with increasing hazards during construction would be less than significant.

Operation

Once constructed, operation of the Proposed Project would continue similar to existing conditions as no increases in student enrollment or capacity would occur and no changes to student pick-up and drop-off locations would occur. Improvements at the parking lot at Russ Boulevard near 16th Street would modify that intersection to be aligned with the parking lot entrance, resulting in an improvement in geometric design features. Regarding the proposed entrance from Park Boulevard into the campus near the combined SR 163 off-ramp and I-5 on-ramp, the design would be reviewed and considered by Caltrans. Specifically, improvements to Park Boulevard at the combined SR 163 off-ramp and I-5 on-ramp would be evaluated as part of Caltrans' ICE Technical Assistance Program. If constructed, it is also expected that Caltrans will require the District and City to enter into a Freeway Maintenance Agreement to maintain the intersection in perpetuity. As a result of the Caltrans process for reviewing improvements adjacent to the state highway system to help ensure their safety, operational impacts associated with traffic hazards would be less than significant.

Level of Significance Prior to Mitigation

Impacts associated with substantially increasing hazards during construction and operation of the WSM and LRFMP improvements would be less than significant.

Mitigation Measures

As no significant impacts would occur, no mitigation measures would be required.

Level of Significance After Mitigation

Impacts associated with substantially increasing hazards during construction and operation of the WSM and LRFMP improvements would remain less than significant.

Issue 4: Would the Project result in inadequate emergency access?

Impact Discussion

WSM and LRFMP

Construction

During construction, roadway users, including emergency vehicles, may experience temporary delays on roadways surrounding the school site as a result of deliveries and the off-hauling of construction materials. Also, temporary lane closures along Park Boulevard would occur and would be subject to City approval of a traffic control plan and traffic control permit to maintain roadway safety and accessibility for emergency vehicles. However, such delays would be infrequent, brief, and temporary. Emergency

access would be provided for all times. All construction staging would occur within the boundaries of the Project site and impacts would be less than significant.

Operation

The Proposed Project includes aligning the parking lot with 16th Street during the WSM improvements and aligning the combination SR 163 off-ramp and I-5 on-ramp with the campus along Park Boulevard. Both improvements would enhance site access for all users, including for emergency vehicles. Internal campus circulation would generally remain as it does under existing conditions, and the existing fire lane through the center of campus between buildings 700 and 1100 would remain as it does under existing conditions. Because existing emergency access would remain and enhancements related to site access would occur with the Project, impacts on emergency access would not be significant.

Level of Significance Prior to Mitigation

Impacts associated with inadequate emergency access during construction and operation of the WSM and LRFMP improvements would be less than significant.

Mitigation Measures

As no significant impacts would occur, no mitigation measures would be required.

Level of Significance After Mitigation

Impacts associated with inadequate emergency access during construction and operation of the WSM and LRFMP improvements would remain less than significant.

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3.8 TRIBAL CULTURAL RESOURCES

This section describes the existing conditions and applicable laws and regulations for tribal cultural resources, followed by an analysis of the Proposed Project's potential to result in a substantial adverse change in the significance of a tribal cultural resource. California State AB 52 amended CEQA to add another category of cultural resource: tribal cultural resources. Tribal cultural resources are defined as "sites, features, places, and objects with cultural value to descendant communities or cultural landscapes and sacred places including, but not limited to, Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines." These resources must be listed in the Native American Heritage Commission (NAHC) Sacred Lands File, included in or eligible for inclusion in the California Register of Historical Resources (CRHR), included in a local register of historical resources, or be determined to be significant by the CEQA lead agency.

3.8.1 Existing Conditions

Pursuant to PRC Section 21080.3.1 (AB 52), California Native American tribes traditionally and culturally affiliated with a project area can request notification of projects in their traditional cultural territory. Since enactment of AB 52, the Jamul Indian Village contacted the District and requested to be a consulting tribe on all District projects; it is now a consulting tribe under AB 52. The District and the Jamul Indian Village meet periodically to review upcoming District projects and discuss tribal concerns. On August 7, 2019, an invitation to consult on the District's *CIP Program EIR and CEQA Guidelines,* which included all District facilities, including SDHS, was extended to the Jamul Indian Village. No response was received; a follow-up letter was sent to the Jamul Indian Village (Jamul) on January 24, 2020, and a follow-up meeting occurred on February 20, 2020. Prior to the preparation of this EIR, the District provided the NOP to the Jamul Indian Village. An administrative review draft of this EIR section was provided via email to Jamul on November 13, 2020, with a follow-up email sent on November 13, 2020. No response from the Jamul Indian Village was received.

A Sacred Lands File Search was requested from the NAHC on April 28, 2020. The NAHC indicated in a response dated May 7, 2020 that no known sacred lands or Native American cultural resources are within the Project site, but that the absence of specific site information in the Sacred Lands File does not indicate the absence of cultural resources in any project area. Contact program letters were sent on May 29, 2020 to Native American representatives and interested parties identified by the NAHC. One response was received from the San Pasqual Band of Mission Indians on June 12, 2020 that the Project site includes territory that the tribe considers its Traditional Use Area. They requested to be kept informed of the Project and may recommend monitoring depending on the results of the cultural resources pedestrian field survey and records search results.

A record search of the California Historical Resources Information System (CHRIS) at the South Coastal Information Center (SCIC) was conducted on December 4, 2019. The SCIC identified 45 previously recorded cultural resources within a quarter-mile of the Project site, but none have been recorded within the boundaries of the SDHS campus. All previously recorded cultural resources are from the historic period, including: 33 historic built-environment resources; 10 historic archaeological sites or isolates consisting of at or below ground features such as cisterns, foundations, privies, and wells accompanied by trash scatters or deposits, and isolated refuse items; a historic object (a portion of the San Diego flume system); and a historic district (Cabrillo Freeway National Register Historic District). No prehistoric resources have been recorded within the record search limits. A pedestrian survey of the Project site was conducted on January 20, 2020 by HELIX archaeologist Julie Roy and Kumeyaay Native American monitor Shuuluk Linton (Red Tail Environmental). The pedestrian field survey involved observing areas that exhibited bare ground throughout the campus and looking for historic period or prehistoric cultural material or features. No archaeological or tribal cultural resources were identified during the pedestrian field survey, and the potential for archaeological resources to be present within the Project site was determined to be low due to the past disturbances associated with the development of the school.

3.8.2 Regulatory Setting

3.8.2.1 State

Assembly Bill 52

AB 52 revised PRC Section 21074 to include Tribal Cultural Resources as a CEQA resource to be evaluated for potential impacts. As a general concept, a Tribal Cultural Resource is similar to the federally-defined term Traditional Cultural Properties; however, it incorporates consideration of local and state significance and required mitigation under CEQA. According to Patricia L. Parker and Thomas F. King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is derived from the role the property plays in a community's historically rooted beliefs, customs, and practices.

A Tribal Cultural Resource may be considered significant if it is:

- (i) included in a local or state register of historical resources;
- (ii) determined by the lead agency to be significant pursuant to criteria set forth in PRC Section 5024.1;
- (iii) a geographically defined cultural landscape that meets one or more of these criteria;
- (iv) a historical resource described in PRC Section 21084.1 or a unique archaeological resource described in PRC Section 21083.2; or
- (v) a non-unique archaeological resource if it conforms with the above criteria.

Under AB 52, formal consultation with tribes is required prior to determining the level of environmental impact if a tribe has requested to be informed by the lead agency of proposed projects and if the tribe, upon receiving notice of the project, accepts the opportunity to consult within 30 days of receipt of the notice. AB 52 also requires that consultation, if initiated, consider project alternatives and mitigation measures for significant effects, if specifically requested by the tribe during consultation. AB 52 states that consultation is considered concluded when either party agrees to measures to mitigate or avoid a significant effect on a Tribal Cultural Resource, or when either the tribe or the agency concludes that mutual agreement cannot be reached after making a reasonable, good-faith effort. Under AB 52, any mitigation measures recommended by the agency or agreed upon with the tribe may be included in the final environmental document and in the adopted mitigation monitoring program if they were determined to avoid or lessen a significant impact on a tribal cultural resource. If the recommended measures are not included in the final environmental document, or if there are no agreed upon

mitigation measures at the conclusion of the 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, then the lead agency must consider the feasible mitigation methods described in PRC Section 21084.3 to avoid or minimize the significant adverse impact. Examples of mitigation measures described in PRC Section 21084.3 include:

- 1. Avoidance and preservation of the resources in place.
- 2. Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource.
- 3. 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.
- 4. Protecting the resource.

Any information submitted by a tribe during the consultation process is considered confidential and is not subject to public review or disclosure. It will be published in a confidential appendix to the environmental document unless the tribe consents to disclosure of all or some of the information to the public.

Health and Safety Code 7050.5/Public Resources Code 5097.9

Health and Safety Code 7050.5 addresses the protection of human remains discovered in any location other than a dedicated cemetery and makes it a misdemeanor for any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law, except as provided in PRC Section 5097.99. It further states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions concerning investigation of the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in PRC Section 5097.98. If the coroner determines that the remains are not subject to his or her authority and recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact the NAHC by telephone within 24 hours. Whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, they shall immediately notify those people believed to be the most likely descendants of the deceased Native American. The descendants may inspect the site where the remains were discovered and make recommendations on the removal or reburial of the remains.

California Government Code Section 6254 (r) and 6254.10

California Government Code Sections 6254(r) and Section 6254.10 of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage

Commission." Section 6254.10 exempts from disclosure requests for, "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

3.8.3 Impact Significance Criteria

Based on the State CEQA Guidelines, Appendix G, the Proposed Project would result in a significant impact to tribal cultural resources if the Proposed Project would result in the following.

- A substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - a) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC section 5020.1(k), or
 - 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

3.8.3.1 Methodology

The impact analysis in this section focuses on determining potential impacts to Tribal Cultural Resources; impacts to other cultural resources are discussed in EIR Section 3.2, *Cultural Resources*. Tribal Cultural Resources were identified during AB 52 consultation, in addition to the results of the Sacred Lands File search, records search, and pedestrian field survey.

3.8.4 Impact Analysis

Issue 1: Would the Proposed Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC section 5020.1(k); or
- 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 Section 5024.1?

Impact Discussion

WSM and LRFMP

Construction

No tribal cultural resources were identified by Sacred Lands File search results provided by the NAHC, records search, or pedestrian field survey. The NAHC indicated in a response dated May 7, 2020 that no known sacred lands or Native American cultural resources are within the Project site. The records search of the CHRIS resulted in the identification of 45 previously recorded cultural resources within a quartermile radius of the Project site; but 33 of them consist of historic built-environment resources. The pedestrian field survey did not result in the identification of any tribal cultural resources, and as described in Section 3.2.1.2, *Identification of Cultural Resources within the Project Site*, the Project site is underlain by fill and San Diego Formation materials and has been developed, with little to no native ground surface remaining.

On November 7, 2020, the District sent an email to the Jamul Indian Village providing an administrative review draft of this EIR section and a copy of the Cultural Resources Technical Report prepared for the Project (HELIX 2020b), including a copy of the records search and Sacred Lands File search results. A follow-up email was sent on November 13, 2020; however, no response from Jamul Indian Village was received. At the February 20, 2020 meeting between the District and Jamul Indian Village to consult on the District's *CIP Program EIR and CEQA Guidelines*, which included SDHS, no concerns regarding the SDHS campus were brough up by the Tribe at that time.

As a result of the above identification efforts, no tribal cultural resources are known to be present within the Project site. However, as noted by the NAHC, the absence of specific site information does not indicate the absence of resources at the Project site and the Proposed Project has the potential to inadvertently impact unknown tribal cultural resources (Impact TCR-1).

Operation

Once the WSM and LRFMP improvements are constructed, operations at the Project site would involve school operations and would not involve ground-disturbing activities. Operational impacts associated with the Project would not occur.

Level of Significance Prior to Mitigation

Impact TCR-1: The Proposed Project has the potential to result in inadvertent impacts to unknown tribal cultural resources during the construction of the WSM improvements involving ground-disturbing activities.

Impact TCR-2: The Proposed Project has the potential to result in inadvertent impacts to unknown tribal cultural resources during the construction of the LRFMP improvements involving ground-disturbing activities.

Operational impacts on a tribal cultural resource would not occur once the WSM and LRFMP improvements are constructed.

Mitigation Measures

To reduce potential impacts to unknown tribal cultural resources during the implementation of the WSM and LRFMP improvements the following mitigation measures shall be implemented.

- **MM TCR-1a** Prior to the implementation of the WSM improvements, the District shall review Project engineering/grading plans with Jamul Indian Village to determine if the Project location is identified an as area of tribal cultural resources concern. If the Project location is not identified an as area of tribal cultural resources concern, no further action is required. If monitoring is determined to be required, the District shall implement mitigation measure TCR-1b.
- **MM TCR-1b** If it is determined that monitoring is necessary for a WSM improvement component, monitoring shall be conducted by a Kumeyaay Native American monitor during initial ground-disturbing activities. The role of the Kumeyaay Native American monitor shall be to represent tribal concerns and communicate with the tribal council. Specifically, the following measures shall be implemented:

The Native American consultant/monitor shall be present at the pre-construction meeting to establish procedures for discovery notification and monitoring protocols.

A Native American monitor shall be present to monitor initial ground disturbing activities related to the improvement activities. If archaeological material/features or tribal cultural resources are encountered, the Native American monitor shall have the authority to temporarily halt or redirect work to permit the identification, evaluation, and treatment of the resource, as appropriate.

In the event that prehistoric archaeological artifacts or features are encountered during the Native American consultant/monitor's absence, work shall stop until the Native American monitor can observe and comment on the nature of the find.

If a significant prehistoric archaeological resource or tribal cultural resource is encountered, the District, in consultation with the District's qualified archaeological Principal Investigator and Native American consultant/monitor, shall determine the appropriate avoidance or treatment measures to be implemented.

Interpretation of a find shall be requested from the Native American consultant/monitors involved with the discovery, evaluation, or data recovery of unanticipated finds for inclusion in a final Cultural Resources Monitoring Report.

The Native American monitor, in consultation with the District's qualified archaeologist, shall have the discretion to increase the level of monitoring, such as when native soils are encountered, or decrease the level of monitoring under certain field conditions that illustrate past grading and other disturbances have removed soils with a reasonable potential for containing tribal cultural resources or archaeological deposits. Attendance by Native American monitors during construction is at the discretion of the tribe, and the absence of a Native American monitor, should the tribes choose to forgo monitoring for some reason, shall not delay work.

- **MM TCR-2a** Prior to the implementation of the LRFMP improvements, the District shall review Project engineering/grading plans with Jamul Indian Village to determine if the Project location is identified an as area of tribal cultural resources concern. If the Project location is not identified an as area of tribal cultural resources concern, no further action is required. If monitoring is determined to be required, the District shall implement mitigation measure TCR-2b.
- **MM TCR-2b** If it is determined that monitoring is necessary for a LRFMP improvement component, monitoring shall be conducted by a Kumeyaay Native American monitor during initial ground-disturbing activities. The role of the Kumeyaay Native American monitor shall be to represent tribal concerns and communicate with the tribal council. Specifically, the following measures shall be implemented:

The Native American consultant/monitor shall be present at the pre-construction meeting to establish procedures for discovery notification and monitoring protocols.

A Native American monitor shall be present to monitor initial ground disturbing activities related to the improvement activities. If archaeological material/features or tribal cultural resources are encountered, the Native American monitor shall have the authority to temporarily halt or redirect work to permit the identification, evaluation, and treatment of the resource, as appropriate.

In the event that prehistoric archaeological artifacts or features are encountered during the Native American consultant/monitor's absence, work shall stop until the Native American monitor can observe and comment on the nature of the find.

If a significant prehistoric archaeological resource or tribal cultural resource is encountered, the District, in consultation with the District's qualified archaeological Principal Investigator and Native American consultant/monitor, shall determine the appropriate avoidance or treatment measures to be implemented.

Interpretation of a find shall be requested from the Native American consultant/monitors involved with the discovery, evaluation, or data recovery of unanticipated finds for inclusion in a final Cultural Resources Monitoring Report.

The Native American monitor, in consultation with the District's qualified archaeologist, shall have the discretion to increase the level of monitoring, such as when native soils are encountered, or decrease the level of monitoring under certain field conditions that illustrate past grading and other disturbances have removed soils with a reasonable potential for containing tribal cultural resources or archaeological deposits. Attendance by Native American monitors during construction is at the discretion of the tribe, and the absence of a Native American monitor, should the tribes choose to forgo monitoring for some reason, shall not delay work.

Level of Significance After Mitigation

Implementation of mitigation measures TCR-1a, TCR-1b, TCR-2a, and TRC-2b would reduce potentially significant related to potential damage or loss of tribal cultural resources during construction of the WSM and LRFMP improvements to less than significant.

Impacts associated with tribal cultural resources during operation of the WSM and LRFMP improvements would not occur.

4.0 ADDITIONAL CONSIDERATIONS

This chapter includes additional information that is not contained elsewhere in this EIR but is required to be included per the State CEQA Guidelines. Specifically, discussions of the following are included in the sections below: (1) significant irreversible changes to the environment that would result from implementation of the Proposed Project (State CEQA Guidelines Section 15126.2[c]); (2) growth-inducing impacts of the Proposed Project, which pertain to ways in which the Proposed Project could promote either direct or indirect growth (State CEQA Guidelines Section 15126.6[d]); and (3) environmental effects of the Proposed Project that were found not to be significant during the initial environmental review processes (State CEQA Guidelines Section 15128).¹

4.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

State CEQA Guidelines Section 15126(c) requires that an EIR identify significant and irreversible environmental changes resulting from implementation of the Proposed Project. Irreversible commitments of resources are also evaluated to ensure that their use is justified. Irreversible environmental changes typically fall into three categories: primary impacts, such as the use of nonrenewable resources; secondary impacts, such as road or highway improvements that provide access to previously inaccessible areas; and environmental accidents associated with the Project. Section 15126.2(c) of the State CEQA Guidelines states that irretrievable commitments of resources should be evaluated to assure that current consumption of such resources is justified.

The Proposed Project includes campus upgrades at the existing SDHS, including building improvements, building demolition, and new building construction that are part of the WSM and LRFMP improvements. Campus-wide updates as part of the WSM improvements would involve interior and exterior improvements and reconfigurations of school buildings, the addition of building identification graphics, a public address system for emergency use, surveillance cameras and security fencing, and interior and exterior lighting improvements. The LRFMP improvements would primarily involve the demolition of three school buildings (buildings 400, 600, and 700) and the construction of seven school buildings (the performing arts building, field house, and aquatic center). Other LRFMP improvements would involve constructing a new campus entrance/exit via Park Boulevard at the I-5 on-ramp/SR 163 off-ramp and at the eastern end of Russ Boulevard, and site enhancements consisting of landscape and hardscape improvements west of building 100 near the corner of Russ Boulevard and Park Boulevard.

The Proposed Project components, including interior and exterior modifications to several school buildings and athletic facilities as part of the WSM improvements, as well as building demolition and replacement or construction of existing or new campus buildings would not be reversible. As detailed in Section 3.2, *Cultural Resources*, neither the SDHS campus nor any of its individual buildings meet the criterion as historically significant for the NRHP or CRHR; however, buildings 600 and 700 are eligible for listing in the CSDHRR and their removal would constitute significant and unavoidable impacts under the Proposed Project. As discussed in Section 3.2, implementation of MM CUL-2a involves providing a record of buildings 600 and 700, resulting in the protection of historical resources during Project construction activities. Additionally, implementation of MM CUL-2b involves providing a record of, and

¹ The requirements of State CEQA Guidelines Section 15126.2(a), (b), and (e) are met in Chapter 3, *Environmental Analysis*, under each resource discussion, and the requirements of State CEQA Guidelines 15126.2(f) are met in Chapter 6, *Alternatives*.

highlighting, the history and significance of SDHS. Implementation of MM CUL-2a and CUL-2b would eliminate the loss of historical information and would reduce impacts to historical resources. However, the impacts to historical resources resulting from the removal of buildings 600 and 700 would remain significant and unavoidable. Therefore, while the proposed WSM improvements and most of the LRFMP improvements would be irreversible and would not result in significant environmental impacts, demolition of buildings 600 and 700 during the LRFMP improvements are irreversible changes and would represent a significant environmental impact under CEQA.

As the Project site is currently developed with school uses, implementation of the Project would not result in significant irreversible impacts to agricultural and forestry resources, biological resources, or mineral resources, as described below in EIR section 4.3. In addition, no water bodies are located on or adjacent to the site that would be impacted by the Project. While operation of the aquatic center public address system has the potential to cause significant off-site noise impacts at San Diego City College, these impacts are temporary and reversible as they could cease by not operating the public address system or by enhancing the design to meet the property line noise limits established in the City's Municipal Code. As discussed in MM NOI-3, design options that may be considered to reduce noise impacts resulting from the public address system include, but are not limited to, the selection of a quieter public address system, changes in unit locations/orientations, and acoustical louvers or screens. The recommendations of the acoustical consultant would be incorporated into the final design for the aquatic center.

As discussed below in subsection 4.3.5, *Energy*, implementation of the Proposed Project would require a permanent commitment of non-renewable natural resources primarily from the direct consumption on fossil fuels, natural gas, electricity, construction materials (i.e., concrete, asphalt, sand and gravel, petrochemicals, steel, and lumber and forest products), potable water, and labor during construction of the WSM and LRFMP improvements. Operation of the WSM improvements would result in a reduction of the consumption of energy and non-renewable resources as they would involve the repair and replacement of inefficient aging facilities that would be replaced with modern technology and infrastructure. Operation of the LRFMP improvements would involve some permanent commitment of fossil fuels, electricity, natural gas, and potable water due to the introduction of new buildings on the campus (i.e., the field house and aquatic center). However, some of the LRFMP improvements would replace existing buildings with more efficient buildings, thereby reducing the use of energy and nonrenewable resources. Also, as student enrollment and school capacity would not be affected by the Project, there would be no additional use of non-renewable natural resources related with an increased student and faculty population. Use of non-renewable resources on any level would have an incremental effect on the regional consumption of these commodities, and therefore result in longterm, irretrievable losses of non-renewable resources, such as fuel and energy.

Paleontological resources that could be present beneath the site would be recovered with the implementation of a paleontological mitigation plan for the Proposed Project. As described in EIR Section 3.3, *Geology and Soils*, impacts to paleontological resources would be reduced to a less than significant level with the incorporation of mitigation measures GEO-3 and GEO-4 and potential impacts would not result in an irreversible change to the resource.

The Project would not involve road or highway improvements that would provide access to previously inaccessible areas. While a new campus connection is proposed from Park Boulevard at the I-5 on-ramp/SR 163 off-ramp, the entire campus is accessible and developed under existing conditions and the Project would not create access to new areas of the campus that would result in a significant

environmental impact. Also, no major environmental accidents or hazards are anticipated to occur as a result of Project implementation (see EIR subsection 4.3.7, below).

4.2 GROWTH-INDUCING IMPACTS

State CEQA Guidelines Section 15126.2(d) requires that an EIR discuss the ways in which a proposed project could directly or indirectly foster economic growth, population growth, or additional housing, and how that growth would affect the surrounding environment. Direct growth inducement would result if a project, for example, involved the construction of new housing. Indirect growth might occur if a project were to establish substantial new permanent employment opportunities that would stimulate the need for additional housing, utilities, and public services. Similarly, a project would indirectly induce growth if it would remove an obstacle to additional development, such as removing a constraint on a required public service or utility. A project that involves an expansion of water supply capabilities in an area where limited water supply has historically restrained growth would be considered growth-inducing.

This section discusses the characteristics and consequences of the Project that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

4.2.1 Economic Growth

One criterion by which growth inducement can be measured involves economic growth. Economic growth considerations include a demand for temporary and permanent employees, fostered through the creation of new jobs.

In the short term, Project construction would introduce temporary employment opportunities. During the WSM and LRFMP Project construction periods, demand for various construction trade skills and labor would increase. It is anticipated that this short-term demand would be met by the local labor force and would not result in economic growth inducing effects requiring the importation of labor.

In the long term, once the Proposed Project is in operation, teachers and administrative staff would not be expected to increase; however, a relatively small number of staff for the proposed aquatic center would be hired for long-term employment during both school and public use. The long-term addition of up to 10 employees at the aquatic center would be met by the local labor force and would not result in growth inducing effects related to long-term economic growth.

4.2.2 Housing Growth

The Proposed Project does not call for the construction of housing nor would it increase the City's population in a manner that would necessitate the construction of additional housing. The approximately 10 new permanent jobs may allow current residents to upgrade their existing housing; however, the Project would not result in the direct or indirect construction of new or additional housing due to the increase in permanent jobs.

4.2.3 Population Growth

As stated above, a project would indirectly induce growth if it would remove a constraint on a required public service or utility. A project would also indirectly induce growth if it would establish a precedent-setting action (e.g., an innovation, a change in zoning, a general plan amendment approval).

The Proposed Project would not extend infrastructure such as roadways, water, gas, or electricity into previously undeveloped areas. Existing roadways, water, and wastewater services already serve the Proposed Project site and surrounding area. As such, the Proposed Project would not remove obstacles to growth.

4.2.4 Summary of Growth-Inducing Impacts

While the Project is expected to incrementally increase personnel to operate the proposed aquatic center, the increase would provide new jobs in the San Diego area that are not anticipated to generate a modest demand for move-up housing. The Proposed Project would not directly or indirectly induce population growth or result in the construction of new housing in the region. Overall, the Proposed Project would have a minimal effect on regional growth.

4.3 EFFECTS FOUND NOT TO BE SIGNIFICANT

Early in the environmental scoping process and during the preparation of this EIR, it was determined that one or more effects related to aesthetics, agricultural and forestry resources, biological resources, energy, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, utilities and service systems, and wildfire would not be significant. In accordance with State CEQA Guidelines Section 15128, a brief explanation indicating the reasons that the effects on these resources would not be significant is provided under each subheading below.

4.3.1 Aesthetics

4.3.1.1 Scenic Vistas

A scenic vista is generally defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Scenic vistas are commonly identified in local planning documents but can also include public viewpoints not identified within an adopted regulatory document but that are locally known points where scenic views are enjoyed by the public. Within the Project's vicinity in downtown San Diego, view corridors are identified on Figure 5-1 of the City's Downtown Community Plan towards the San Diego Bay along most east/west oriented streets west of Kettner Street. All of the view corridors are located west or south of the Project site, and the Proposed Project does not occur along or west of any of the view corridors identified in the Downtown Community Plan. Areas north and west of the Project site within Balboa Park, on the opposite side of I-5, include grass and picnic areas with southern and western views towards the Project site. While not designated as scenic vistas, these areas do provide views of downtown and San Diego Bay; however, the elevation of the Project site is much lower than areas to the north within Balboa Park and the addition of new structures within the campus, as well as temporary construction activities, are not anticipated to result in significant impacts on scenic vistas.

4.3.1.2 Scenic Resources

There are two designated or eligible state scenic highways near the Project site, including SR 163, a designated state scenic highway, and I-5, an eligible state scenic highway. Both SR 163 and I-5 occur at a lower elevation than the Project site and neither provide motorists with prolonged views onto the Project site. The Project would not result in damage to scenic resources within the viewshed of either highway. The proposed WSM and LRFMP components, including taller buildings, would not be expected to be visible or highly noticeable from a designated or eligible state scenic highway and no impacts would occur.

4.3.1.3 Visual Character and Quality

The Project is located on an existing high school campus in an urban area in downtown San Diego. The Project involves upgrades to an existing high school campus, the most noticeable of which would include construction of a performing arts center, auxiliary gymnasium, field house, aquatic center, and parking structure and the demolition of several buildings on campus. The Project also includes replacement of the student quad areas, improvements to parking and roadway access, construction of blacktop basketball courts, and campus-wide improvements including reconfigurations of school buildings, the addition of building identification graphics, a public address system for emergency use, surveillance cameras, and interior and exterior lighting improvements. While the Project would not substantially alter the existing visual character of the campus, visual changes associated with the introduction of construction equipment and workers during Project implementation and new and replacement buildings would be noticeable from surrounding areas once the Project is completed. These changes would not modify the existing visual character of the school site as the improvements would continue to support education/school activities, similar to existing conditions. Further, as the campus is generally built-out and is surrounded by dense urban development, the replacement and addition of school buildings are not anticipated to be highly noticeable and would not substantially degrade the existing quality of the school.

Regarding applicable zoning and regulations governing scenic quality in urbanized downtown San Diego, while California Government Code Section 53094 includes provisions for school districts to exempt specific school facilities from local zoning and regulations, applicable policies from the City's Downtown Community Plan related to scenic quality were reviewed. Specifically, Chapter 5 of the Downtown Community Plan, Urban Design, addresses scenic quality related to the downtown street grid and views as well as bulk, skyline, and sun access. Applicable goals and policies of the Downtown Community Plan related to the downtown street grid and views include the following: Policy 5.1-P-3, which protects public views of the water and the re-establishment of water views; and Policy 5.3-P-1, which requires development related to building heights to be consistent with the FAA and ALUCP. The Downtown Community Plan also establishes view corridors along select downtown street and also includes additional provisions for sun access for development near parks. Due to the Project's location in northeastern downtown, intervening topography and tall buildings preclude views of the water from the Project site. New development at the Project site would be similar to existing development in terms of location, height, and scale and no changes to views of the water would occur with the Project. As discussed in EIR Section 3.5, Hazards, the FAA would be notified of the Project; however, because the Project is not expected to result in an obstruction to navigable airspace a DNH for the Project is anticipated and no inconsistencies with this policy would result. Lastly, the Project site is not located along any identified view corridors (see Downtown Community Plan Figure 5-1) nor does the Community Plan identify a building height or sun access restriction at the Project site. As a result, the

Proposed Project would not conflict with applicable zoning and regulations governing scenic quality in downtown. Impacts to the existing visual character and quality of SDHS, including conflicts with applicable zoning and regulations governing scenic quality in an urbanized area as a result of the Project would be less than significant.

4.3.1.4 Light or Glare

Project construction activities would only occur during the permitted daytime hours of 7 a.m. to 7 p.m. to comply with the City's Noise Ordinance and would not introduce new sources of substantial nighttime lighting or glare. During operation, the Project would include new sources of lighting and glare, including safety and security lighting in the outdoor student quad area and throughout campus along pedestrian paths through parking areas for the purposes of safety and security. No new lighting is proposed for the athletic facilities and fields; however, new exterior lighting elements would be down-shielded to prevent off-site light spillover and would be consistent with City regulations (Municipal Code sections 142.0740). Impacts on daytime and/or nighttime views in the area associated with light or glare would be less than significant.

4.3.2 Agricultural and Forestry Resources

The school campus is in a densely urbanized area of downtown San Diego where there are no farmlands or forest resources. According to the San Diego County Important Farmland mapper, maintained by the California Department of Conservation, the Project site is classified as "Urban and Built-Up Land," which does not contain agricultural uses or areas designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (CDC 2018). Furthermore, there are no Williamson Act contracts or forest lands in the Project area (CDC 2013). As a result, no impact on agricultural or forestry resources would occur.

4.3.3 Air Quality

4.3.3.1 Air Quality Plan Conflicts

The District is in the SDAB, which is commensurate with San Diego County. The SDAPCD is required, pursuant to the federal and state CAAs, to reduce emissions of criteria pollutants for which the SDAB is in nonattainment. The SDAB is currently classified as a moderate nonattainment area for the federal 8-hour O_3 standard and attainment for all other federal pollutants. In addition, the SDAB is classified as a nonattainment area for state O_3 , PM_{2.5}, and PM₁₀ standards (SDAPCD 2018).

All areas designated as nonattainment are required to prepare plans that show how the areas would meet the state and federal air quality standards by their attainment dates. The San Diego RAQS is the region's applicable air quality plan for improving air quality in the region and attaining federal and state air quality standards. The RAQS relies on information from CARB and SANDAG, including projected growth in the county, which is based, in part, on information from local general plans. Generally, projects that propose development that is consistent with the land use designations and growth anticipated by the local general plan and SANDAG are consistent with the RAQS.

Construction of the Project elements would be required to comply with SDAPCD Rules and Regulations, including Rules 50, 51, and 55, which forbid visible emissions, forbid nuisance activities, and require fugitive dust control measures, respectively. Construction and operation activities that would be reasonably foreseeable with implementation of the Proposed Project could result in a temporary

increase in emissions, including motor vehicle trips, energy consumption, and other sources, compared to existing conditions. However, the Proposed Project is not anticipated to result in emissions that would exceed existing general plan and SANDAG projections because no increase in student enrollment is proposed. While the Proposed Project includes the future development of an aquatic center, its use would not require amendments or deviations from existing land use and zoning designations. The addition of this facility would not result in an inconsistency with the RAQS nor would its development obstruct implementation of the RAQS. Operational air quality emissions related to the aquatic center are addressed in EIR Section 3.1. As a result, the Proposed Project would be consistent with the local general plan and SANDAG's growth projections and no impacts are anticipated.

4.3.3.2 Other Emissions/Odors

According to the Air Quality and Land Use Handbook (CalEPA/CARB 2005), land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding facilities. The Project is not within close proximity to these land uses that generate odors. Additionally, the renovation and development of school facilities on the existing campus would not create objectionable odors. Thus, the Project would not generate or expose sensitive receptors to objectionable odors and impacts would not occur.

4.3.4 Biological Resources

4.3.4.1 Sensitive Plant and Animal Species

The Project site is completely developed as an operating school, and all areas on the campus are either paved or graded. However, the Project site contains ornamental vegetation that provides potentially suitable nesting habitat for migratory birds and raptors protected under the federal MBTA and Sections 3503 and 3503.5 of the California Fish and Game Code, which prohibit the take or destruction of migratory birds and raptors, their nests, and/or eggs. Project construction activities would involve noises in proximity to trees and vegetation that could affect nesting birds during the breeding season (January 15 to August 31) and may involve ornamental vegetation and tree removal. No protected tree species would be removed. During construction, the District would comply with federal and state environmental regulations, including but not limited to the MBTA. For construction activities occurring during the breeding season, the District would implement CM-1, identified in Table 2-4, and would retain a qualified biologist to conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed areas of disturbance, including temporary construction noise impacts. Per CM-1, a pre-construction survey will be conducted within seven calendar days prior to the start of construction activities (including removal of vegetation). If nesting birds are detected the qualified biologist will establish appropriate avoidance construction buffers from the nest and visit the site weekly until it is determined that the fledglings are no longer dependent on the nest. Construction would be delayed, or an appropriate buffer established until the end of the breeding season, or until the fledglings are no longer dependent on the nest. Implementation of this standard operating procedure established by the District would reduce potential impacts to less than significant.

4.3.4.2 Riparian Habitat and Sensitive Natural Communities, State and Federally Protected Wetlands, and Wildlife Corridors

The Project site is completely developed as an operating school, and all areas on the campus are either paved or graded. As such, there is no sensitive or riparian habitat, state or federally protected wetlands, or a wildlife corridor on or adjacent to the Project site. Construction would occur within the existing campus, as well as within paved portions of Park Boulevard adjacent to the campus. The proposed improvements associated with the Project would not limit the range or movement of plants or animals or interfere with natural processes (fire or flooding) that contribute to the health of a habitat. As a result, the Project would not affect riparian or sensitive natural communities, wetlands, or a wildlife corridor, either directly or indirectly, and no impacts would occur.

4.3.4.3 Local Policies, Ordinances, and Conservation Plans

The Project site is completely developed as an operating school and is in an urban area. In the County, local habitat, species, and biological resources are protected under the Multiple Species Conservation Program (MSCP), which is implemented in the City through the City's MSCP Subarea Plan (City 1997). SDHS is not within or adjacent to the City's Multi-Habitat Planning Area (MHPA). As such, the City's MHPA Land Use Adjacency Guidelines would not be applicable to the Proposed Project and construction and operation of the Proposed Project would not result in direct or indirect impacts on the MHPA. Due to the developed nature of the school, no habitat, species, or resources protected under the MSCP are present within the Project site and no impacts are anticipated.

4.3.5 Energy

The Proposed Project does not involve an expansion of the existing campus or an increase in enrollment related to the WSM and LRFMP improvements. In general, the WSM improvements would improve the efficiency of energy use on the campus through the installation of new and more efficient HVAC systems and replacement building windows that would provide better insulation. During construction of the Project, temporary electric power for as-necessary lighting and electricity-powered tools would be provided by San Diego Gas and Electric (SDG&E). The electricity use for construction activities would be temporary and minimal and would have a negligible contribution to the Project's overall energy consumption. Natural gas may be consumed as a result of Project construction; however, its use also would be temporary and negligible. Fuels used for construction would primarily consist of diesel and gasoline. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction and would include the transportation of construction materials and construction worker commutes. Heavy-duty construction equipment associated with construction activities, as well as haul trucks involved in the removal of construction and demolition materials, would consume petroleum-based fuel. Construction workers would travel to and from the Project site throughout the duration of construction, presumably in gasoline-powered vehicles. While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. However, the petroleum consumed during Project construction would be typical of similar construction projects and would not require the use of new petroleum resources beyond what are typically consumed in California. During Project operations associated with LRFMP improvements, while some increases in energy would occur associated with operation of the proposed aquatic center, the WSM and LRFMP improvements would involve the installation of PV panels, upgraded windows, and increases in building energy efficiency by updating and replacing older buildings that are safer and require less energy to operate. Based on these

considerations, construction and operation of the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources nor would a state or local renewable energy plan be obstructed or conflicted.

4.3.6 Geology and Soils

4.3.6.1 Stability, Liquefaction, and Landslides

According to the City's Seismic Safety Study, the Project site is not located in an area where liquefaction is likely to occur during a seismic event or in an area where landslides are likely to occur (City 2008). Additionally, the Geotechnical Evaluation prepared for SDHS in 2019 by Ninyo & Moore (and included as Appendix D1 to this EIR) concluded that liquefaction is not a design consideration for the campus because the subsurface geologic material beneath the campus comprises the San Diego Formation, which is a dense formation. Regarding landslides, the Geotechnical Evaluation states that there is no indication of landsliding at the campus based on a literature review and site visit. Therefore, impacts related to liquefaction and landslides would be less than significant.

4.3.6.2 Erosion and Topsoil

The Project would not result in substantial soil erosion or loss of topsoil as it is in a previously disturbed area of the existing campus. Potential short-term erosion impacts from construction activities would be addressed through BMPs in accordance with the California Stormwater Best Management Practices Handbook to control erosion and protect the quality of surface water runoff during Project construction. The Proposed Project would also adhere to the BMPs listed in the SWPPP prepared for the Project prior to construction. As mentioned in the Geotechnical Evaluation, some topsoil was observed on the Project site and it is recommended that topsoil within the limits of the building pads be removed and replaced with compacted engineered fill to improve building foundations. Impacts are expected to be less than significant.

4.3.6.3 Expansive Soil

According to the Geotechnical Evaluation (Appendix D1), the Project site is not located on expansive soil as defined in Table 18-1-B of the Uniform Building Code. Sampling was conducted at two locations, which were concluded to have an expansion potential of low to medium. Therefore, impacts would be less than significant.

4.3.6.4 Septic and Alternative Wastewater Disposal Systems

The existing campus is served by an existing sewer system and would not involve the construction or operation of septic or alternative wastewater disposal systems that would be incompatible with the soils beneath the campus. Impacts related to septic and alternative wastewater disposal systems would not occur.

4.3.7 Hazards and Hazardous Materials

4.3.7.1 Routine Transport, Use, and Disposal

The Proposed Project involves redevelopment of an existing school within a site that currently supports school operations. Construction of the Proposed Project would require the use of typical materials

associated with construction activities such as diesel fuels, hydraulic liquids, oils, solvents, and paints. These hazardous materials would be used in accordance with all applicable state and federal regulations. Operational activities would also be typical of the existing school and would include the use of cleaning and maintenance materials, include the use of chlorine for the aquatic center. All routine transport, use, or disposal of hazardous materials used at the school site would continue to be conducted in accordance with all state and federal regulations regarding hazardous materials. Impacts would be less than significant.

4.3.7.2 Upset and Accident Conditions

The Project would involve the continuation of educational operations at SDHS with campus upgrades and new and replaced buildings (including a new performing arts center, an auxiliary gymnasium, parking structure, and aquatic center). These uses would continue to provide a modern learning environment for high school education and these uses would not substantially alter the operations at the campus that would result in a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions. Impacts would be less than significant.

4.3.7.3 Hazardous Emissions Near Schools

Construction that would be reasonably foreseeable with implementation of the Proposed Project would involve the use of typical materials associated with construction activities, including diesel fuel, gasoline, oil, hydraulic fluid, engine exhaust, solvent for welding, PVC, and paint. During operation of the aquatic center during the LRFMP improvements, chlorine would be used to maintain the pool. Hazardous materials would be transported, used, and stored in accordance with state and federal regulations regarding hazardous materials and the emission or handling of acutely hazardous materials, substances, or waste is not anticipated to occur or result in significant environmental impacts.

4.3.7.4 Hazardous Materials Sites

The Project is not located on a site included on a list of hazardous material sites pursuant to Government Code Section 65962.5 and does not appear in the State Water Resource Control Board's (SWRCB) GeoTracker database (June 2020) or the Department of Toxic Substances Control (DTSC) EnviroStor database (June 2020). No impact would occur.

4.3.7.5 Emergency Response

Emergency management services for the high school are provided by the San Diego Fire-Rescue Department via Park Boulevard. Construction activities that would be reasonably foreseeable with implementation of the Proposed Project would have the potential to temporarily restrict access for emergency vehicles traveling to the school. However, construction would be required to comply with the County of San Diego's Emergency Operations Plan, and it has not been determined if construction would result in the full closure of roadways or other means of emergency access; however, improvements within Park Boulevard at the intersection of the combined SR 163 off-ramp and I-5 on-ramp would result in construction activities within Park Boulevard during construction only, which could impair emergency response. Prior to constructing site access improvements within Park Boulevard, SDUSD would coordinate with Caltrans and the City to obtain encroachment permits and public right-of-way and traffic control permits, respectively, and these permits would address safety and traffic control during construction, including accommodating emergency response. As a result, temporary construction measures to maintain adequate emergency response would be incorporated upon permit issuance with Caltrans and the City. Improvements related to the realignment of the parking lot entrance from Russ Boulevard near 16th Street and the new entrances into the campus during the WSM improvements may involve temporary roadway, sidewalk, and bike lane impairments; however, Russ Boulevard is not a major emergency response route and dead ends at I-5 near the southeastern corner of the campus. Improvements along Russ Boulevard are not anticipated to result in impacts to emergency response.

New operations associated with the Project would remain similar as they do under existing conditions as there would be no increase in student enrollment or capacity. While new public uses associated with the aquatic center would occur, the generation of an additional 140 ADT during weekday mornings is not anticipated to impair or interfere with implementation of adopted emergency response plans or evacuation plans and impacts would be less than significant.

4.3.7.6 Exposure of People or Structures to Wildfires

State law requires all local governments to identify any Very High Fire Hazard Severity Zone within their jurisdiction (California Government Code Sections 51175–51189). Inclusion within these zones is based on vegetation density, slope severity, and other relevant factors that contribute to fire severity. According to the Very High Fire Hazard Severity Zone maps prepared by the City in collaboration with the California Department of Forestry and Fire Protection, the Project is not located in an area identified as a wildland fire hazard area (City 2009). Additionally, the Project is in an urban area not associated with wildland fires. Impacts would be less than significant.

4.3.8 Hydrology and Water Quality

4.3.8.1 Water Quality Standards

The Project site is in the Pueblo San Diego Hydrologic Unit within the San Diego Mesa Hydrologic Area (908.20) and also within the San Diego Bay Watershed Management Area. Drainage and runoff within the Pueblo San Diego Hydrologic Unit primarily empties into San Diego Bay. As the Project site is near San Diego Bay and does not include streams or watercourses nearby, downstream receiving waters are limited to San Diego Bay, which is an impaired waterbody under Section 303(d) of the Clean Water Act. Pollutants contributing to impairment include copper, coliform bacteria, and toxic substances.

The Proposed Project involves internal improvements at the SDHS campus in an urbanized area of the City. During construction, excavation activities and exposed soil have the potential to temporarily increase the amount of sediment runoff that would enter the existing storm drain system during a rain event. As the Project includes over one acre of land disturbance, the District would comply with the standards and regulations established by the SWRCB National Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Construction Permit). The General Construction Permit was adopted by SWRCB as Water Quality Order 2012-0006-DWQ and became effective on July 17, 2012.

Compliance with a SWPPP would require the implementation of BMPs throughout the construction period. Stormwater BMPs would limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. The SWPPP requires a description of the Project site, identification of sources of sediment and other pollutants that may affect the quality of stormwater discharges, a list of BMPs to provide sediment and erosion control, waste handling measures, and non-stormwater management. The specific BMPs that would be implemented with the Proposed Project

would be identified during the development of the SWPPP, which would be completed prior to construction. Typical construction BMPs include soil cover of inactive areas, the use of gravel bags, and fiber rolls, among others. Compliance with the General Construction Permit and SWPPP would ensure that the Project would not degrade local water quality or exceed waste discharge requirements. During Project operations, the amount of stormwater runoff from the site would not be substantially altered in terms of impervious area and general site drainage characteristics would remain similar to existing conditions and would not involve new sources of pollutants.

4.3.8.2 Groundwater Supply and Recharge

The Project site is within an established urban community serviced by the City's Public Utilities Department, and the Project would not involve the use of groundwater during construction or operation. Additionally, as noted in the Geotechnical Evaluation prepared for the Project site (see EIR Appendix D1), groundwater was not encountered during any of the 10 small diameter borings or the 11 hand auger borings that ranged in depth between 1.5 to 41.4 feet below ground surface. Most of the Project improvements would occur in areas that are currently paved and do not support groundwater recharge. While the proposed field house and aquatic center would occur on bare ground areas, the Project would not substantially increase impervious surfaces. Therefore, the Proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge, and impacts would be less than significant.

4.3.8.3 Drainage and Runoff

The Project site is developed as an operating high school campus in a built-out, urbanized part of downtown San Diego and is currently served by stormwater infrastructure (i.e., storm drains) throughout the downtown area. No streams or river courses exist within the Project site or the immediate vicinity that could be affected by the Proposed Project, either through direct modification or from stormwater runoff from the Project site. The improvements would occur primarily within existing developed and paved areas except for the proposed field house and aquatic center that are planned to be constructed south of Balboa Stadium on open ground. These two structures would result in the addition of about 27,500 sf of impervious surfaces; however, during construction, BMPs would be implemented in compliance with the SWPPP and the General Construction Permit issued for the Project, which would require that erosion and siltation be addressed in order to avoid off-site water quality impacts. As a result, the implementation of BMPs during construction and the continuation of the existing storm drainage system on the campus and in surrounding areas of downtown would adequately provide stormwater conveyance during Project construction. During operation, much of the Project site would continue to utilize existing storm drain infrastructure throughout the campus and adjacent areas. Underground storm drain infrastructure would be replaced as part of improvements associated with the outdoor student quad areas and drainage characteristics would be similar to existing once the Project is constructed and operational. Project impacts associated with alterations in drainage resulting in erosion, siltation, flooding, or exceeding the capacity of stormwater drainage systems would be less than significant.

4.3.8.4 Flood Hazard, Tsunami, or Seiche

The Project site is not within or near areas mapped as 100- and 500-year flood zones as it is not located downstream of or adjacent to major water bodies, including lakes or rivers, that could contribute to impacts associated with inundation by flood hazards, tsunamis, or seiches. The closest water body to the

Project site is San Diego Bay, which is approximately 1.3 miles southwest of the school. The San Diego Bay would not pose a flooding hazard to the Project site due to the substantial distance. Additionally, the likelihood of the Project site being inundated by a tsunami is extremely low due to its elevation above 110 feet amsl and its location outside of the tsunami inundation area as identified by the California Emergency Management Agency (see EIR Appendix D1). Therefore, the Proposed Project would not result in risk of release of pollutants due to Project inundation in flood hazard, tsunami, or seiche zones and no significant environmental impacts are anticipated.

4.3.9 Land Use and Planning

4.3.9.1 Divide Community

Implementation of the Proposed Project would not physically divide an established community, including the community of downtown San Diego. The campus improvements would be constructed on an existing campus, within an existing city block in urbanized downtown San Diego. No new streets and no street closures would result upon Project implementation and physical circulation through the area would remain similar to existing conditions. While some of Park Boulevard may be temporarily closed or reconfigured when a new entrance is constructed onto the Project site from Park Boulevard just south of I-5, impacts would only last during construction and travel along Park Boulevard would continue similar to existing conditions once the improvement is completed. As a result, impacts are anticipated to be less than significant.

4.3.9.2 Plan, Policy, or Regulation Conflict

The Project would not involve changes to the existing land use designation or zoning at the site, which is currently classified as "Public/Civic" and "Existing Park/Open" in the City's General Plan. Further, the Project site has served as a school site since 1882 and its use would continue with no change in enrollment or capacity at SDHS. The redevelopment of the SDHS campus and the execution of a lease agreement between the City and the District would not conflict with planning documents that were adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would not occur.

4.3.10 Mineral Resources

The Project site is developed and not known to contain mineral resources that would be of value to the region or state. According to the Conservation Element of the City's General Plan, the Project site is mapped as urban land where no mineral deposits are present. Therefore, no mineral resources that would be of value to the region or the residents of the state would be lost as a result of the Project.

4.3.11 Population and Housing

4.3.11.1 Population Growth

The Project site consists of an existing school property in a built-out urbanized area of downtown San Diego and would not induce population or housing in the area. Under the Project, an existing school would be improved to continue to provide educational opportunities for high schoolers. The aquatic center would be used by the high school as well as members of the public during certain times of the year; however, there would be no construction of homes, businesses, roadway extensions, or other public infrastructure that would induce population growth in the area. Temporary jobs would be created during construction and operations associated with the aquatic center would result in 10 new permanent jobs. However, the additional jobs are expected to be filled by residents who currently live in the San Diego region. The jobs created would not result in the relocation of populations and as such, the Project would not induce substantial population growth, either directly or indirectly, or result in the extension of public roads or other infrastructure. As a result, no impacts would occur.

4.3.11.2 Housing

The Project site is completely developed and does not currently include housing, and no housing is included as part of the Proposed Project. No housing units would be removed or displaced, and the Project would not result in the displacement of housing or residents that would necessitate the construction of replacement housing elsewhere. No impacts would occur.

4.3.12 Public Services

The Proposed Project would result in campus improvements at an existing school site and would not result in substantial adverse physical impacts on public services. Implementation of the Proposed Project would improve the existing SDHS; however, because the site has been used as a school campus since the 1880s, additional public services would not be required. In addition, the Proposed Project would serve the existing high school students within the downtown area and would not induce population growth, either directly or indirectly. Therefore, impacts related to public services would be less than significant.

4.3.13 Recreation

4.3.13.1 Increased Use of Existing Facilities

An increase in the use of existing parks and recreational facilities typically results from an increase in the number of housing units or residents in an area. The Project would not result in an increased number of housing units or residents within the Project area because it would promote the improvement of an existing high school campus. Further, school enrollment and capacity would not increase as a result of the Project. The Project involves upgrading and expanding facilities at an existing high school to continue serving current enrollment and public uses consistent with the Civic Center Act, which permits public rental and use of school facilities. As such, the Project would not result in an increase in the use of other existing recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated.

4.3.13.2 Construction or Expansion of Facilities

The Project involves upgrades to existing facilities on the campus and construction of a performing arts center, auxiliary gym, tennis courts on top of a parking structure, and an aquatic center. Proposed improvements would be constructed on the existing high school campus, which is a developed site in an urban environment, and would primarily serve existing and future school populations. No other recreational facilities would be constructed or expanded and the potential for the construction or operation of the recreational amenities associated with the Project to result in physical environmental impacts is addressed by mitigation measures provided in other sections of this EIR. Therefore, the construction of the proposed recreational amenities at SDHS would not result in additional environmental impacts beyond those disclosed elsewhere in this EIR. The Project is not anticipated to have an additional impact on the environment as it relates to the construction or expansion of recreational facilities.

4.3.14 Utilities and Service Systems

4.3.14.1 New Construction, Relocation, or Expansion

The Project would not result in an increase in student enrollment or capacity at SDHS; however, the addition of a 10,000-sf aquatic center that would be accessible to the public, the auxiliary gymnasium, and the field house would result in some increase in utilities demand for water, wastewater, storm water drainage, electric power, natural gas, and telecommunications facilities. However, these increases in demand are not expected to result or require the relocation or construction of new public utility systems, and no associated significant environmental effects are anticipated. The proposed performing arts center during the LRFMP improvements would replace an existing performing arts center and would similarly not result in the relocation or construction of new public utility systems. Some underground utilities related to storm drain and sewer lines in the eastern parking lot and beneath the student quad area would be replaced. Utilities undergrounding activities would occur within the Project site and potentially significant impacts related to their construction and operation are included in the evaluations throughout this EIR. No additional off-site or other environmental impacts would occur related to the new construction, relocation, or expansion of utilities or service systems and impacts would be less than significant.

4.3.14.2 Water Supplies

Construction of the Project would require the use of water for activities such as dust suppression and the mixing of concrete; however, water usage during construction would be minimal and temporary. Implementation of the Project would not increase student capacity and the WSM and LRFMP improvements involving upgrades and building replacements at the existing campus would not result in substantial increases in water use; however, the operation of the aquatic center would introduce a public use to the campus and its related water use would be an increase in water demand. Specifically, additional water use would be required to fill the pool and accommodate showers and indoor plumbing. The City's 2015 Urban Water Management Plan (UWMP) demonstrates that there will be sufficient water supplies in the region to meet existing and planned demand through 2040. Water demand for 2020 in the region is estimated at 200,984 acre-feet and is expected to increase to 273,748 acre-feet by 2035 (when the LRFMP improvements will be completed). Single-dry year projections for the region's supply are forecasted to meet the demand with 213,161 acre-feet in 2020 and 290,654 acre-feet in 2035. As the demand for water in the region is projected to be less than the forecasted water supply throughout the region, impacts related to an increase in water demand that results in the need to construct new facilities to increase water supply to serve the proposed aquatic center are not anticipated. Overall, the demand for water would be minimal from a regional perspective to operate the proposed aquatic center and the increase would not be substantially greater than what currently exists at the site. Impacts would be less than significant.

4.3.14.3 Wastewater Treatment Capacity

Implementation of the Project would not result in increases in student capacity or enrollment and typical daily school activities with the Project would not increase wastewater generation; however, the addition of the aquatic center would result in some increase in wastewater generation at the Project site. According to the CalEEMod calculations included in EIR Appendix B, the aquatic center would generate approximately 473,145 gallons of wastewater per year. A yearly increase of 473,145 gallons, or

approximately 1,300 gallons per day (gpd) would represent a 10 percent increase above existing wastewater generation at the campus.²

Wastewater treatment service is provided to the Project by the Metropolitan Sewerage System (Metro System), which is owned and operated by the City Public Utilities Department's Wastewater Branch. Three treatment plants treat wastewater generated in the Metro System, including the North City Water Reclamation Plant (NCWRP), South Bay Water Reclamation Plant, and the Point Loma Wastewater Treatment Plant (PLWTP). The PLWTP currently treats the wastewater generated at the Project site and has a treatment capacity of 240 million gallons per day (mgd) and as of 2017, the latest available data, was operating at 144 mgd, which leaves an available capacity of approximately 96 mgd (City 2017). The contribution of the Proposed Project to this available capacity represents less than 0.0001 percent of the average daily capacity at the PLWTP. The increase in wastewater generation associated with the aquatic center is not expected to exceed the wastewater treatment capacity or require the expansion or construction of wastewater treatment facilities. As a result, impacts would be less than significant.

4.3.14.4 Solid Waste

Construction of the Proposed Project would result in the demolition of three school buildings and the student quad area. All non-recyclable solid waste generated during construction would be taken to local landfills, which include the Miramar, Sycamore, and Otay landfills. The Miramar Landfill is located just north of SR 52, between I-805 and SR 163. According to the Solid Waste Information System (SWIS) database maintained by the California Department of Resources Recycling and Recovery (CalRecycle), the Miramar Landfill has a remaining capacity of approximately 11,080,871 cy of solid waste as of January 30, 2020. Based on the remaining capacity and disposal rates, the Miramar Landfill is expected to close January 1, 2031. The SWIS database indicates that the Sycamore Landfill has a remaining capacity of 113,972,637 cy as of December 30, 2016 and is expected to close December 31, 2042. The Otay Landfill has a remaining capacity of 21,194,008 cy as of May 31, 2016 and is expected to close February 28, 2028 (CalRecycle 2020). However, the amount of waste managed at these landfills is expected to decrease while the amount of composting and recycling will increase over time as the City strives to achieve the target 75 percent diversion rate identified in the City's Zero Waste Plan as well as in AB 341 and AB 1826.

Demolition of the student quad area during the WSM improvements would generate an estimated 1,536 tons of solid waste by assuming 150 pounds of waste per cubic foot with an average thickness of 6 inches. Some of the concrete demolished at the student quad area may be pulverized and reincorporated into the subsurface material before building the new student quad area. During the LRFMP improvements, building demolition activities would involve the demolition of about 47,000 sf, which would generate a total of approximately 3,713 tons of solid waste. Additional solid waste materials during construction could include cardboard and other paper products, metals, plastics, and other building materials, some of which can be recycled.

Construction debris associated with the WSM and LRFMP components of the Project is anticipated to be sent to the Miramar Landfill until its closure in 2031. Construction debris generated from the LRFMP improvements after January 1, 2031 would be sent to the Sycamore Landfill as the Otay Landfill is not anticipated to be operational after February 2028. The District requires that contractors salvage or

² Calculations assumed 5 gallons of wastewater produced per student per day for 2,644 students enrolled at SDHS in 2019 (i.e., 13,220 gallons per day).

recycle 75 percent by weight of total non-hazardous solid waste, including demolition waste (e.g., asphalt paving, concrete, roofing, windows, carpets, cabinets, plumbing fixtures, sprinkler valves, lighting fixtures, etc.) and construction waste (e.g., lumber, wood sheet material, roofing, insulation, etc.). Specifically, the future contractors in charge of implementation of the WSM and LRFMP improvements would be required to submit a Site Debris Management Plan and Waste Management Plan within 10 days prior to construction to the District using District Forms CSDMP-1 and CSDDR-1, respectively. Records and receipts documenting donations, sales, recycling and processing, and landfill and incinerator disposal associated with debris hauled from the site will be requested to be submitted to the District to evaluate diversion rates and successful implementation of the Waste Management Plan. Based on the District requirements to divert 75 percent of construction debris and waste and the remaining capacity for solid waste at regional landfills, Project-related construction debris is not anticipated to result in a significant impact on solid waste facilities.

Once construction is completed, the Proposed Project would not increase student capacity at the school and solid waste generation by students is not anticipated to increase; however, the addition of the aquatic center would result in additional solid waste generated during Project operation. Aquatic and recreational facilities are assumed to produce 5.7 tons per 1,000 sf per year. As such, the 10,000-sf aquatic center is estimated to produce up to 43 tons of solid waste per year, which is not expected to substantially affect landfill operations or result in significant impacts. Other campus improvements would support the existing student population and no substantial increases in solid waste generation are anticipated.

4.3.15 Wildfire

4.3.15.1 Emergency Response/Evacuation Plan

The Proposed Project is in a highly urbanized area of downtown San Diego and is not located in or near a state responsibility area or lands classified as Very High Fire Hazard Severity Zones. While off-site improvements associated with the LRFMP improvements would include work within Park Boulevard at the combined SR 163 off-ramp and I-5 on-ramp, temporary disruptions to vehicle flow along Park Boulevard would be coordinated with Caltrans and the City during future review of construction work areas. Off-site construction activities within Park Boulevard would require Caltrans issuance of an encroachment permit and City review and approval of a traffic control plan and issuance of public right-of-way and traffic control permits for those improvements. Further, temporary construction within Park Boulevard would not impair emergency response or emergency evacuation as the Project site and surrounding areas are not within Very High Fire Hazard Severity Zones. Operations associated with the Project would not impair or interfere with implementation of adopted emergency response plans or evacuation plans as operations would be limited to within the Project site. As such, implementation of the Project would not impair or physically interfere with an emergency response in or near state responsibility areas or lands classified as Very High Fire Hazard Severity Zones, and impacts would not occur.

4.3.15.2 Exposure to Risks

The Proposed Project is in a highly urbanized area of downtown San Diego and would not be directly affected by wildfires or the uncontrolled spread of a wildfire. As a result, wildfire impacts, including those associated with exposing people or structures to significant risks, would not occur with the Proposed Project.

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5.0 CUMULATIVE IMPACTS

Cumulative impacts, as distinguished from Project-level impacts analyzed in EIR Chapter 3, *Environmental Analysis*, are impacts on the physical environment that result from the incremental effects of the Proposed Project when added to other past, present, and reasonably foreseeable future projects. The intent of this cumulative impacts discussion, as required by State CEQA Guidelines Section 15130, is to account for impacts that may not be significant when considering the Project on its own, but that may be part of a larger regional trend or that may combine with similar impacts of other projects and be significant when considered together.

5.1 Methodology and Scope of Analysis

According to State CEQA Guidelines Section 15130(b), the discussion of cumulative effects "... need not provide as great detail as is provided for the effects attributable to the Project alone. The discussion should be guided by the standards of practicality and reasonableness." The evaluation of cumulative impacts is to be based on either:

- The List Method, which includes a list of past, present, and reasonably foreseeable future projects producing related or cumulative impacts, including if necessary, those outside the control of the CEQA lead agency.
- The Plan Method, which uses the projections contained in an adopted general plan or related planning document, or in a prior environmental document that has been adopted or certified, which describes or evaluates regional or area-wide conditions contributing to the cumulative impacts.

The cumulative impact analysis conducted for the Proposed Project employs both the List and Plan Methods. As explained in State CEQA Guidelines Section 15130(b), when utilizing the List Method, factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project, and its type. As most of the Proposed Project's potential impacts are related to construction, the List Method of cumulative projects includes areas within proximity to the Project site (i.e., one-quarter mile). For the Plan Method, planning documents are relied upon that identify long-term improvements or future development potential and include the Project site, such as the City's General Plan and Downtown Community Plan and the SDIA and NASNI airport development and planning documents.

A list of projects approved or in the planning process but not yet approved within the surrounding community were identified by a review of the City's Development Services Department website (City 2020c). A total of 29 projects were identified within one quarter-mile from the Project site; however, many of these projects consisted of easement vacations or completed maintenance activities at existing wireless facilities and are not considered to be cumulative projects for the purposes of this analysis. Of the researched cumulative projects, two projects are included as part of the List Method of individual cumulative projects (see Table 5-1, *List of Cumulative Projects*). Listed projects in Table 5-1 include approved and pending future development in the area that could contribute to impacts associated with the Proposed Project, such as the SDIA Development Plan. Cumulative projects also include approved and adopted planning documents that include the Project site, such as the approved NASNI ALUCP and the adopted San Diego General Plan and the Downtown Community Plan.

ID	Location	Description	Distance from Project	Status		
	Individual Projects (List Method)					
1	777 1/3 Beech Street	Map waiver to create 115 residential condominiums on a single lot	0.25 mile	Approved October 2019		
2	3225 North Harbor Drive	SDIA Development Plan including terminal replacement and updates; improvements to North Harbor Drive; taxiway and overnight aircraft parking updates; five-story parking structure; administrative office and commercial development	1.40 miles	Status pending as of October 2020 (Final EIR certified January 2020)		
Planning Projects (Plan Method)						
3	Naval Air Station North Island	An ALUCP to promote land use compatibility for areas surrounding the NASNI airfield	3.4 miles	Approved October 2020		
4	San Diego General Plan and Downtown Community Plan	A long-range planning document guiding growth and development in downtown San Diego	Included	Adopted April 2006		

Table 5-1 LIST OF CUMULATIVE PROJECTS

Source: City 2020c

A cumulative impacts analysis also establishes a geographic scope in which cumulative conditions will be considered, known as the cumulative study area. The cumulative study area established for the Proposed Project depends on the environmental topic under evaluation and can include areas within a specific distance from the Project site or it can include a larger geographic area, such as an air basin or planning area. The cumulative study area is defined and described further below in this chapter for each environmental topic evaluated in EIR sections 3.1 through 3.8 because of their potential to result in significant impacts on the environment. Next, impacts from past, present, and reasonably foreseeable future projects are assessed to determine if a cumulative impact is present without the Project. Lastly, the Project's incremental contribution is considered, and a determination is made if the contribution is considerable. Environmental issues and topics dismissed in Chapter 4, *Additional Considerations*, are not carried forward into the cumulative analysis because it was determined during preparation of the NOP that they would result in no impacts or less than significant impacts on the environment and they are expected not to result in a considerable contribution to a significant cumulative impact.

5.2 Cumulative Impact Analysis

5.2.1 Air Quality

Potential cumulative air quality impacts would result when cumulative projects' emissions would combine to degrade air quality conditions below attainment levels for the SDAB, delay attainment of air quality standards, or impact sensitive receptors. As discussed in EIR subsection 3.1.3, no Project impacts would occur related to obstructing the implementation of an air quality plan or resulting in odors affecting a substantial number of people; therefore, these topics are not evaluated in this section.

The cumulative study area for the analysis of cumulative air quality impacts for the Project is the entire SDAB as air emissions can travel substantial distances and are not confined by jurisdictional boundaries. Air quality conditions are typically influenced by large-scale climatic and topographical features and air pollution is largely a cumulative impact. However, toxic air contaminants (TAC) and carbon monoxide (CO) are generated from off-road diesel equipment and vehicle exhaust and the cumulative study area for these air pollutants is more localized to the Project site.

The SDAB is currently in a federal and/or state nonattainment area for PM₁₀, PM_{2.5}, and ozone. The nonattainment status of regional pollutants is a result of past and present projects within the SDAB and is cumulative rather than the result of a single source or individual project. Cumulative projects throughout the SDAB, including the four projects listed in Table 5-1, would generate construction and operational air emissions that would continue contributing to regional air quality impacts. As a result, the effects of past, present, and reasonably foreseeable future projects have resulted in a cumulatively significant air quality impact within the SDAB.

As discussed under Issue 2 in EIR Section 3.1, *Air Quality*, the Proposed Project would have a less than significant direct impact on air quality during construction and operation (see EIR Tables 3.1-4 through 3.1-6). Due to the large size of the SDAB, other construction activities would occur within the SDAB at the same time as construction of the Proposed Project; however, potential cumulative air quality impacts resulting from combined construction projects would be addressed by the standard SDAPCD measures that apply to all construction projects in the SDAB. Project-related operational emissions are also expected to be less than significant and below SDAPCD thresholds. These thresholds were established for the purpose of addressing cumulative air quality impacts. Therefore, while the Proposed Project would generate emissions during construction and operation, the Proposed Project's incremental contribution to air quality emissions would not be cumulatively considerable.

As discussed under Issue 3 of EIR Section 3.1, the Proposed Project would not result in additional student enrollment or increased campus capacity; however, a component of the LRFMP improvements would involve construction and operation of an aquatic center that would be available for public use. Construction and operation of the aquatic center would result in TAC and CO emissions, respectively; however, neither would result in exceedances of the CO standard or substantial generation of TACs resulting in health effects on sensitive receptors near or at the Project site. TACs are concerned with emissions from construction equipment and CO emissions are concerned with vehicle exhaust at congested intersections, both of which decrease with distance and are more site-specific than cumulative. As there are no known cumulative projects within 0.25-mile of the Project site, the Proposed Project's incremental contribution to the exposure of sensitive receptors to substantial pollutant concentrations near the Project site would not be cumulatively considerable.

Level of Significance Prior to Mitigation

The Proposed Project's contribution to cumulative air quality impacts associated with construction and operation of the WSM and LRFMP improvements would not be cumulatively considerable.

Mitigation Measures

Cumulatively considerable contributions to air quality impacts would not occur and mitigation measures would not be required during construction or operation of the WSM and LRFMP improvements.

Level of Significance After Mitigation

The Proposed Project's contribution to cumulative air quality impacts associated with construction and operation of the WSM and LRFMP improvements would not be cumulatively considerable.

5.2.2 Cultural Resources

Potential cumulative cultural resource impacts would result when cumulative projects' impacts would result in adverse effects to significant historical resources, including historic archaeology and historic structures; prehistoric resources, including prehistoric archaeology; and human remains.

The cumulative study area for cultural resources impacts is difficult to define given the extent of cultural resources throughout the San Diego region. Prehistoric archaeological resources could be located within soils. Historic resources could be located within fill soils and may also include buildings, structures, or features that are of historic age (i.e., 45 years and older) or that are eligible for listing in an historic register (e.g., NRHP, CRHR, and CSDHRR).

Past projects within the geographic scope for cultural resources have resulted in the urbanization of downtown that is present today, which has incrementally impacted prehistoric and historic resources. As discussed in EIR Section 3.2, Cultural Resources, a records search was conducted that identified several historic resources and no prehistoric archaeological resources within one-quarter mile of the Project site. Specifically, the records search revealed the following resources: 33 historic builtenvironment resources (historic addresses); 10 historic archaeological sites or isolates consisting of ator below-ground features such as cisterns, foundations, privies, and wells accompanied by trash scatters or deposits, and isolated refuse items; a historic object (a portion of the San Diego flume system); and a historic district (the Cabrillo Freeway National Register Historic District). Present and reasonably foreseeable future projects within the downtown area could result in impacts on buried prehistoric and historic resources during construction activities involving ground disturbance, such as building foundation preparation or grading activities. Present and reasonably foreseeable future projects would be required to undergo CEQA review with the City, and archaeological monitoring would be required for projects that have a potential to impact archaeological resources. Also, impacts on historic structures could occur as a result of present and reasonably foreseeable future projects as a result of building modifications, including building relocation and demolition, of structures that are documented in an historic register, or if structures are evaluated and determined to be eligible for listing in an historic register. Due to the lack of recorded prehistoric archaeological resources within one quarter mile of the Project site and the requirement for applicable future ground disturbing actions to conduct archaeological monitoring, prehistoric archaeological resource impacts from past, present, and reasonably foreseeable future projects are not considered cumulatively significant. However, as the Project site is in an area with several recorded historic features and the City has developed its CSDHRR to protect, preserve, and restore historic resources in the City, including the downtown area, present and reasonably foreseeable future projects would likely continue to impact historic cultural resources within the cumulative study area. As a result, historic cultural resource impacts from past, present, and reasonably foreseeable future projects are considered cumulatively significant.

The Proposed Project would result in potentially significant impacts to historic resources during construction of the WSM and LRFMP improvements as the Project site contains seven historic buildings, one historic structure, and seven historic features. As described under Issue 1 in EIR Section 3.2, WSM improvements would involve historic resources impacts as a result of upgrades to buildings 500, 600,

and 700; demolition of the student quad area; and the addition to building 100 (Impact CUL-1). Significant impacts on historic resources would also occur during the LRFMP improvements as a result of building 600 and 700 demolition (Impact CUL-2). Mitigation measures would reduce potential impacts on historic resources during construction of the WSM improvements to less than significant; however, impacts associated with construction of LRFMP improvements would remain significant and unavoidable at the Project level.

As described for Issue 2 in EIR Section 3.2, the Proposed Project also has the potential to result in significant impacts to historic archaeological resources during construction of the WSM and LRFRMP improvements (Impact CUL-3); however, mitigation would reduce this Project-level impact to less than significant by requiring a qualified archaeological Principal Investigator to review Project engineering and grading plans and determine if monitoring is necessary. Combined with the cumulatively significant impact on historic resources within the cumulative study area, the Proposed Project's contribution to significant impacts from past, present, and reasonably foreseeable future projects would be less than cumulatively considerable after mitigation is incorporated during construction of the WSM improvements. The contribution of the Project's impacts on historical resources would be cumulatively considerable after mitigation is incorporated as a result of demolition of buildings 600 and 700 during construction of the LRFMP improvements.

Level of Significance Prior to Mitigation

The Proposed Project's contribution to cumulative cultural resources impacts during construction of the WSM and LRFMP improvements would be cumulatively considerable.

Mitigation Measures

Cumulatively considerable contributions to cumulative cultural resources impacts would occur during construction of the WSM and LRFMP improvements and mitigation measures MM CUL-1, -2a, -2b, -3, and -4 would be required.

Level of Significance After Mitigation

The Proposed Project's contribution to cultural resources impacts associated with construction of the WSM improvements would not be cumulatively considerable with the incorporation of mitigation measures; however, the Proposed Project's contribution to cultural resources impacts associated with construction of the LRFMP improvements would be cumulatively considerable, resulting in a significant and unavoidable cumulative impact.

5.2.3 Geology and Soils

A significant cumulative impact on geology and soils would result if cumulative projects would result in impacts related to direct or indirect effects associated with the rupture of a known earthquake fault, strong seismic ground shaking, and the destruction of a unique paleontological resource, site, or unique geological feature. As discussed in EIR subsection 3.3.3, the Project would not result in impacts related to seismic-related ground failure, landslides, erosion and loss of topsoil, unstable geologic units, expansive soil, and soils incapable of supporting wastewater infrastructure; therefore, these topics are not evaluated relative to cumulative impacts.

The cumulative study area for geology and soils consists of immediately surrounding areas of the Project site for earthquake and seismic issues and includes areas of natural geologic formations along the coastal plain of San Diego County for paleontological resources where similar resources could occur. While information related to soil types can be site-specific, geologic issues like faulting and underlying bedrock formations can be more regional in nature. However, potential geologic or soil hazards resulting from development are generally localized to the Project site and immediately surrounding areas rather than a broad-reaching area. As a result, potential cumulative impacts resulting from seismic and geologic hazards would be minimized on a site-by-site basis to the extent that standard construction methods and code requirements are implemented. Throughout the downtown area, cumulative projects would also be susceptible to similar geologic condition of each individual project site, soil type, and project excavation requirements would dictate the severity of the potential geologic risks.

Past, present, and reasonably foreseeable future projects, including those in Table 5-1, have and will continue to increase the amount of infrastructure, structural improvements, and the number of people working and living in the downtown area. This trend has and will continue to place development and people in areas that are susceptible to fault rupture and strong seismic ground shaking that could result in damage to people and property. Present and reasonably foreseeable future projects have and will continue to incorporate modern building code requirements into the building design and older building will be retrofitted to be compliant with existing health and safety regulations. Cumulative projects that require substantial excavation have the potential to result in disturbance to paleontological resources. These projects would be subject to state and local regulations requiring the recovery and curation of paleontological resources. As a result, past, present, and reasonably foreseeable future projects are not considered to result in cumulatively significant geological impacts.

Several potential site-specific impacts were identified due to the presence of faulting on the site and the potential for discovery of paleontological resources. As described in EIR Section 3.3, *Geology and Soils*, potential impacts would be avoided or reduced below a level of significance through the implementation of mitigation measures MM GEO-1 and GEO-2, and conformance to established regulatory standards. Potential effects related to geologic and soils hazards are confined to the areas proposed for development within the school campus and would not contribute to cumulative impacts associated with other planned or proposed development. Project impacts related to paleontological resources would be reduced below a level of significance through the implementation of mitigation measure MM GEO-3 that implements state and local regulations requiring the recovery and curation of paleontological resources. The listed cumulative projects in Table 5-1 and other projects identified in planning documents in the area would also be subject to the established regulatory standards for development in seismically active and paleontologically-sensitive areas and the contribution of the Project's impacts on geology and soils would not be cumulative considerable.

Level of Significance Prior to Mitigation

The Proposed Project's contribution to cumulative geology and soils impacts associated with construction and operation of the WSM and LRFMP improvements would not be cumulatively considerable.

Mitigation Measures

Cumulatively considerable contributions to cumulative geology and soils impacts would not occur and mitigation measures would not be required during construction or operation of the WSM and LRFMP improvements.

Level of Significance After Mitigation

The Proposed Project's contribution to cumulative geology and soils impacts associated with construction and operation of the WSM and LRFMP improvements would not be cumulatively considerable.

5.2.4 Greenhouse Gas Emissions

The geographic scope for cumulative GHG emissions impacts is global because emissions contribute to global climate change. By nature, GHG impacts are cumulative as they are the result of combined worldwide emissions over many years, and additional development would incrementally contribute to this cumulative impact. GHG emissions associated with past, present, and reasonably foreseeable future projects throughout the region, state, nation, and world are cumulatively significant, as these projects have and will continue to generate GHG emissions. The discussion presented in EIR Section 3.4, *Greenhouse Gas Emissions*, also serves as the Project's cumulative impact analysis. As detailed in that section, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. As a result, the Project would not result in a cumulatively considerable contribution to impacts related to GHG emissions.

Level of Significance Prior to Mitigation

The Proposed Project's contribution to GHG emissions impacts associated with construction and operation of the WSM and LRFMP improvements would not be cumulatively considerable.

Mitigation Measures

Cumulatively considerable contributions to cumulative GHG emissions impacts would not occur and mitigation measures would not be required associated with construction and operation of the WSM and LRFMP improvements.

Level of Significance After Mitigation

The Proposed Project's contribution to GHG emissions impacts associated with construction and operation of the WSM and LRFMP improvements would not be cumulatively considerable.

5.2.5 Hazards

A significant cumulative impact related to hazards and hazardous materials would result if cumulative projects were to contribute to impacts related to safety hazards associated with airport operations. As discussed in EIR subsection 3.5.3, the Project would not result in impacts related to hazardous materials releases, hazardous materials sites, impairment of an emergency response or evacuation plan, or exposure to wildland fires; therefore, those topics are not evaluated in this section.

Potentially significant hazards associated with the Proposed Project are limited to airport compatibility and safety concerns associated with the SDIA due to the Project's location within the SDIA ALUCP. Compatibility and safety concerns related to development near an airport include exposure of people to aircraft noise, safety, and airspace protection (i.e., obstructing the flight pattern or penetrating an airspace surface). Much like the discussion for cumulative geology and soils impacts, airport compatibility issues are site-specific in nature, rather than cumulative, because they are intended to protect future users from risks associated with being near an airport as well as to protect aircraft operations from conflicting with site-specific development. However, other locations within the SDIA ALUCP throughout the downtown area would also be susceptible to some airport compatibility hazards as all of downtown is within the Airspace Protection Boundary (see EIR Figure 3.5-3). As a result, the cumulative study area for airport hazards include areas of downtown that are within the SDIA ALUCP's Airspace Protection Boundary.

Areas within the cumulative study area were mostly developed after the airport was constructed in 1928. Also, much of the downtown area, especially multi-story buildings, was constructed since the FAA and the SDCRAA established regulations and review procedures to determine if new projects would result in potential conflicts with airspace protection, noise, and safety. The FAA currently limits building height at the Project site and in the downtown area to 500 feet to avoid conflicts with aircrafts. Many past projects in the cumulative study area have been reviewed for consistency and safety with airport planning documents and procedures and current and future projects listed in Table 5-1 are and would continue to be subject to applicable ALUCPs and FAA regulations for notification and review. As a result, the effects of past, present, and reasonably foreseeable future projects within the cumulative study area would not result in a cumulatively significant hazard impacts related to airport compatibility and safety.

As discussed under Issue 5 in EIR Section 3.5, *Hazards*, the Proposed Project would have a less than significant direct impact on hazards related to safety hazards and excessive noise. The District would be required to notify the FAA due to the Project site location within a Part 77 Subpart B Notification Surface, as would the cumulative projects in the Table 5-1 (see Figure 3.5-1). One cumulative project, the NASNI ALUCP, was adopted in October 2020 during the preparation of this report. The Project site is located within the Airspace Protection Boundary for NASNI, which requires the same FAA Notification pursuant to Part 77, Subpart B as required by the SDIA ALUCP. No other restrictive layers identified in the draft NASNI ALUCP overlay the Project site. Effects from past, present, and reasonably foreseeable future projects are not cumulatively significant because each project is required to demonstrated consistency and follow the regulations as an individual project. As a result, the Proposed Project's incremental contribution to airport hazards would not be cumulatively considerable.

Level of Significance Prior to Mitigation

Cumulative airspace hazards impacts would be less than significant, and the Project would not result in a cumulatively considerable contribution to a significant cumulative airspace hazards impact during construction and operation of the WSM and LRFMP improvements.

Mitigation Measures

Cumulatively considerable contributions to airspace hazards impacts would not occur and mitigation measures would not be required associated with construction and operation of the WSM and LRFMP improvements.

Level of Significance After Mitigation

The Proposed Project's contribution to cumulative airspace hazards impacts associated with construction and operation of the WSM and LRFMP improvements would not be cumulatively considerable.

5.2.6 Noise and Vibration

A significant cumulative impact on noise and vibration would result if cumulative projects were to contribute to impacts related to exceedances in noise standards, groundborne vibration, or increased ambient noise levels.

Noise impacts are limited to the area directly surrounding the Project site, as noise attenuates with distance and only has the potential to combine with other noise sources in the immediate vicinity. As such, the cumulative study area for cumulative noise impacts includes the same areas surrounding the Proposed Project site that were evaluated and analyzed in EIR Section 3.6, *Noise and Vibration*. The Project-specific noise and vibration analysis considers NSLUs at San Diego City College and the Project site itself when school is in session in classrooms and exterior areas where outdoor educational activities occur.

Existing noise levels in the cumulative study area from past projects are associated with surrounding urban development in downtown (construction equipment, traffic, events), traffic noise along the I-5 freeway, and aircraft noise due to the proximity to the SDIA. As shown in EIR Table 3.6-1, existing ambient noise levels at the Project are 65.0 dBA L_{EQ} and lower, which complies with the City's Municipal Code for daytime noise levels. Construction and operation of present and reasonably foreseeable future projects in Table 5-1 would continue to contribute additional noise in the downtown area; however, as the nearest cumulative projects are about 0.25 mile from the campus, temporary and permanent increases in noise at the Project site are not anticipated from cumulative projects. Daytime noise levels at the Project listed in Table 5-1 is anticipated to noticeably increase ambient noise levels at the campus. Also, present and future projects in downtown would be required to comply with the same noise requirements as the Project. As a result, past, present, and reasonably foreseeable future projects would not result in a cumulatively significant noise impact within the areas surrounding the Project site.

Temporary impacts to on-site educational activities for noise and vibration would be reduced to less than significant levels with the incorporation of mitigation measures that restrict specific construction activities and equipment to minimum distances from specific instructional areas on campus (e.g., mitigation measures MM NOI-1, MM NOI-2, MM NOI-4, and MM NOI-5). These restrictions were identified to achieve compliance with the sound limits defined in the City's Municipal Code and Caltrans' Transportation and Construction Vibration Guidance Manual. Project construction would result in a temporary increase in noise levels and groundborne vibration in the immediate vicinity of active construction areas throughout the campus; however, temporary construction noise impacts would be limited to in-person educational instruction at the SDHS campus and would not impact off-site areas like San Diego City College.

Operational impacts associated with the Project would be limited to potentially significant noise impacts associated with the public address system at the aquatic center (Impact NOI-3). As there is no

site-specific information or detail related to the design of the aquatic center and associated public address system, mitigation measure MM NOI-3 is included to require that future design of the aquatic center and public address system shall comply with the City's one-hour average noise level requirements. Because site-specific information is not available for the aquatic center, impacts are concluded to be potentially significant and unavoidable (Impact NOI-3). Effects from past, present, and reasonably foreseeable future projects are not cumulatively significant, ambient noise levels at the Project site are at acceptable levels, and there are no identified cumulative projects within 0.25-mile. As a result, the Proposed Project's significant and unavoidable noise impact is project-specific and the Project's incremental contribution to noise and vibration impacts would not be cumulatively considerable.

Level of Significance Prior to Mitigation

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

Mitigation Measures

Cumulatively considerable contributions to significant cumulative noise and vibration impacts would not occur and mitigation measures would not be required associated with construction and operation of the WSM and LRFMP improvements.

Level of Significance After Mitigation

The Proposed Project's contribution to cumulative noise and vibration impacts associated with construction and operation of the WSM and LRFMP improvements would not be cumulatively considerable.

5.2.7 Transportation and Traffic

A significant cumulative impact on transportation and traffic would result if cumulative projects were to conflict with plans and regulations addressing the circulation system, conflict or be inconsistent with VMT requirements, substantially increase hazards, or result in inadequate emergency access.

The study area for cumulative traffic impacts includes the surrounding transportation network that was evaluated in the technical information prepared by Kimley-Horn in July 2020 (EIR Appendix F) as it relates to conflicts with plans and regulations addressing the circulation system and emergency access. Specifically, this includes areas of downtown adjacent to and near the Project site along Russ Boulevard, Park Boulevard, A Street, B Street, and 16th Street. The transportation network surrounding the Project site has been built to City standards for roadway design, including sidewalk and bicycle lane geometry, and emergency access. Current and future projects listed in Table 5-1 would be required to maintain or improve the surrounding transportation network as appropriate. Similarly, projects that would affect access on a temporary basis during construction would be required to obtain City approval of a traffic control plan and City issuance of a public right-of-way permit and/or a traffic control permit. Present and future projects in downtown are considered low VMT areas due to the mix and density of land uses and the availability of public transportation options. As a result, past, present, and reasonably foreseeable future projects would not result in a cumulatively significant transportation and traffic impact.

Project construction would be limited to areas within the Project site, with the exception of off-site improvements within Park Boulevard related to the combined SR 163 off-ramp and I-5 on-ramp during the LRFMP improvements. Materials deliveries and construction debris hauling would also occur during WSM and LRFMP improvements; however, conflicts with circulation plans and regulations and inadequate emergency access were concluded to be less than significant as the District would be required to receive City approval of a traffic control plan and issuance of a public right-of-way permit and/or a traffic control permit for those improvements. As a result, the Proposed Project's incremental contribution to less than cumulatively significant transportation and traffic impacts during construction would not be cumulatively considerable.

The Project's future driveway entrance into the Project site at the combined SR 163 off-ramp and I-5 on-ramp along Park Boulevard would alter the roadway configuration and traffic movement in the area. Coordination with Caltrans would be required for the design, permitting, and maintenance of that intersection. Proper review of improvements, consistent with the requirements for other cumulative projects, would ensure that the roadway modifications would not result in a cumulatively considerable impact to the transportation network.

As discussed in EIR Section 3.7, *Transportation and Traffic*, the Proposed Project is considered a "Locally Serving Public Facility." The City's TSM states that locally serving public facilities, such as public schools, are not required to be analyzed for traffic impacts related to VMT and are presumed to have a less than significant transportation and traffic impact. Because the Project is presumed to result in less than significant VMT impacts and because cumulative projects would not result in cumulatively significant impacts, the Proposed Project's incremental contribution to operational transportation and traffic impacts would not be cumulatively considerable.

Level of Significance Prior to Mitigation

Cumulative transportation and traffic impacts would be less than significant, and the Project would not result in a cumulatively considerable contribution to a significant cumulative impact.

Mitigation Measures

Cumulatively considerable contributions to significant cumulative traffic and transportation impacts would not occur and mitigation measures would not be required.

Level of Significance After Mitigation

The Proposed Project's contribution to cumulative traffic and transportation impacts associated with construction and operation of the WSM and LRFMP improvements would not be cumulatively considerable.

5.2.8 Tribal Cultural Resources

Tribal cultural resource impacts are inherently cumulative as they are concerned with general areas where a Tribe has cultural connections. Cumulative impacts are expected to be limited by the fact that cumulative projects would be required to comply with standard mitigation measures applied to projects that could potentially impact significant tribal cultural resources. These mitigation measures require monitoring during grading into any areas considered sensitive. Should any tribal cultural resource be encountered during monitoring of cumulative projects, information associated with these discoveries

would need to be recorded before impacts may occur. Thus, cumulative impacts on tribal cultural resources would be less than significant.

As noted in EIR Section 3.8, the Jamul tribe was offered consultation on August 7, 2019 and a follow-up letter was sent on January 24, 2020 followed by a meeting on February 20, 2020. The District also sent an administrative review draft of this EIR on November 13, 2020; however, the tribe did not request additional consultation or provide specific comments relative to the Project design and the potential for significant impacts on an identified tribal cultural resource. Further, in the event that tribal cultural resources are inadvertently encountered during construction, the District would implement MM TCR-1 and MM TCR-2. Implementation of mitigation measures TRC-1 and TRC-2 would reduce potentially significant related to potential damage or loss of tribal cultural resources during construction of the WSM and LRFMP improvements to less than significant. As a result, the Project is not anticipated to contribute to cumulative impacts to tribal cultural resources.

Level of Significance Prior to Mitigation

Cumulative tribal cultural resources impacts would be less than significant, and the Project would not result in a cumulatively considerable contribution to a significant cumulative impact.

Mitigation Measures

Cumulatively considerable contributions to tribal cultural resources impacts would not occur and mitigation measures would not be required.

Level of Significance After Mitigation

The Proposed Project's contribution to cumulative tribal cultural resources impacts associated with construction and operation of the WSM and LRFMP improvements would not be cumulatively considerable.

6.0 **PROJECT ALTERNATIVES**

6.1 OVERVIEW

This chapter describes and analyzes a range of reasonable alternatives that could feasibly attain most of the basic Project objectives while avoiding or substantially lessening one or more of the significant effects of the Proposed Project. The primary purpose of this chapter is to provide a comparative analysis with enough detail to foster informed decision making and public participation in the environmental review process.

Section 15126.6(a) of the State CEQA Guidelines requires an EIR to analyze a range of project alternatives that would "feasibly attain most of the basic project objectives of the project but which would avoid or substantially lessen any of the significant effects of the project." Alternatives analysis must include a comparative evaluation of a "No Project Alternative," which assumes that none of the Project's features would be constructed or implemented and that the site would continue to exist and operate as it does in its current condition. The factors considered when addressing the feasibility of other potential alternatives include site suitability, economic viability, availability of infrastructure, general plan consistency, and whether access to an alternative site can be reasonably acquired or controlled (State CEQA Guidelines Section 15126.6(f)(1)). Alternative locations may be analyzed if the lead agency determines that implementation of a project on an off-site location is possible. The decision to select alternative locations needs to be based on whether off-site locations would avoid or substantially reduce any of the significant effects of the Project. The lead agency may also make the determination that no feasible alternative locations exist, and the reasoning must be disclosed in the alternatives analysis.

Three alternatives to the Proposed Project are analyzed in this chapter and discussed in terms of their merits relative to the Proposed Project. A discussion of each alternative is provided below and includes the following:

- Alternative 1 No Project Alternative
- Alternative 2 Buildings 600 and 700 Preservation Alternative
- Alternative 3 No Aquatic Center Public Address System Alternative

In accordance with State CEQA Guidelines Section 15126.6(a), the Project alternatives are assessed relative to their ability to: (1) meet the basic objectives of the Project; and (2) avoid or substantially lessen the significant effects of the Project. As described in EIR subsection 2.2.1.1, *Project Objectives*, the following are the primary Project objectives:

- 1. Use Propositions S and Z, and Measure YY funds for the renovations, repairs, and/or upgrades of the campus that would benefit student learning and health, safety, and security;
- 2. Improve student learning and instruction;
- 3. Conduct major building systems repair and replacement of existing aging facilities throughout the campus;
- 4. Provide for additional campus access from Park Boulevard;

- 5. Improve school accessibility and code compliance through modernization improvements;
- 6. Improve parking opportunities for faculty, students, and visitors; and
- 7. Improve existing athletic facilities and provide for additional athletic facilities.

The alternatives should also avoid or substantially lessen one or more significant environmental impacts that would occur under the Proposed Project. As such, this analysis focuses on the issues discussed in EIR Section 3.1 through 3.8 because of their potential to result in significant impacts on the environment. Issues discussed in Chapter 4 are not carried forward into this alternatives analysis because it was determined that they would result in less than significant impacts on the environment. Table 6-1, Summary of Significant Effects of the Proposed Project, summarizes the environmental impacts of the Proposed Project that would remain significant and unavoidable and those that would be less than significant with mitigation. As shown, significant and unavoidable impacts on cultural resources (historic structures) and noise and vibration would occur as a result of the Project after the incorporation of mitigation measures and less than significant impacts with mitigation would occur related to geology and soils. Specifically, demolition of buildings 600 and 700 during construction of the LRFMP improvements and operation of a public address system at the proposed aquatic center during operation of the LRFMP improvements would result in significant and unavoidable impacts after the implementation of mitigation measures. Impacts related to historic archaeological resources, geology and soils, construction noise, groundborne vibration, and tribal cultural resources resulting from the WSM and LRFMP improvements would be less than significant with the incorporation of mitigation measures. All other environmental topics were concluded to result in less than significant impacts in Chapter 3 and less than significant or no impact in Chapter 4.

Environmental Topic/Impact	Significant and Unavoidable	Less than Significant with Mitigation		
Cultural Resources (EIR Section 3.2)				
Impact CUL-1: historic buildings (WSM)		Х		
Impact CUL-2: historic buildings (LRFMP)	Х			
Impact CUL-3: historic archaeology (WSM)		Х		
Impact CUL-4: historic archaeology (LRFMP)		Х		
Geology and Soils (EIR Section 3.3)				
Impact GEO-1: strong seismic ground shaking (WSM)		Х		
Impact GEO-2: strong seismic ground shaking (LRFMP)		Х		
Impact GEO-3: paleontological resources (WSM)		Х		
Impact GEO-4: paleontological resources (LRFMP)		Х		

 Table 6-1

 SUMMARY OF SIGNIFICANT EFFECTS OF THE PROPOSED PROJECT

Environmental Topic/Impact	Significant and Unavoidable	Less than Significant with Mitigation
Noise and Vibration (EIR Section 3.6)		
Impact NOI-1: construction noise (WSM)		Х
Impact NOI-2: construction noise (LRFMP)		Х
Impact NOI-3: operational noise (LRFMP)	Х	
Impact NOI-4: groundborne vibration (WSM)		Х
Impact NOI-5: groundborne vibration (LRFMP)		Х
Tribal Cultural Resources (EIR Section 3.8)		
Impact TCR-1: unknown tribal cultural resources (WSM)		Х
Impact TCR-2: unknown tribal cultural resources (LRFMP)		Х

Table 6-1 (cont.) SUMMARY OF SIGNIFICANT EFFECTS OF THE PROPOSED PROJECT

WSM = Whole Site Modernization; LRFMP = Long-Range Facilities Master Plan

6.2 SELECTION OF ALTERNATIVES

6.2.1 ALTERNATIVES CONSIDERED BUT REJECTED

Section 15126.6(c) of the State CEQA Guidelines requires that an EIR identify alternatives that were considered and rejected as infeasible and briefly explain the reasons for their rejection. Alternatives considered but rejected from further study for the Project is limited to the Project Location Alternative.

Project Location Alternative

The State CEQA Guidelines provide that off-site alternatives should be considered if development of another site is feasible and would reduce or avoid the significant impacts of the Project. Factors that need to be considered when identifying an off-site alternative include the size of the site, its location relative to the greater SDUSD district boundaries, the General Plan land use designation (or other applicable planning document), and the ability to meet the Project objectives. The Project is located on the existing 34-acre San Diego High School campus, which is owned by the City and leased by the District.

District schools are sited based on population and projected needs for school-aged children to provide educational opportunities throughout the District. SDHS provides educational opportunities for grades 9 through 12 for residents in downtown and the surrounding areas, which generally includes areas west of I-805 and I-15, south of I-8, and east of the SDIA. Other high school campuses within the District are located at 15 locations through the region. These campuses have either been upgraded with similar modernization improvements or are planned to be upgraded in the near future to continue serving their service populations. There are no known locations in or near downtown that could accommodate a 34-acre high school campus within the school's attendance boundary.

The modernization and redevelopment of other school locations is part of the District's ongoing maintenance of its facilities and the proposed improvements at SDHS could not be completed at another existing school site instead of at the Project site. Specifically, Objective 4 identifies a long-term need for school access from Park Boulevard, which does not currently exist. Objectives 1, 3, 5, and 7

address making improvements to existing athletic facilities, parking opportunities, school accessibility and code compliance, and replacing aging facilities, none of which would be accomplished by constructing a new high school at another site in the area. Therefore, this alternative was rejected from further consideration because it could not feasibly achieve most of the basic Project objectives.

6.2.2 ALTERNATIVES EVALUATED IN DETAIL

Alternative 1: No Project Alternative

Section 15126.6(e) of the State CEQA Guidelines provides that a "no project" alternative shall be analyzed in an EIR. Because the Proposed Project is a development project, the following requirement from Section 15126.6(e)(3)(B) of the State CEQA Guidelines is applicable:

If the project is...a development project on an identifiable property, the no project alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this no project consequence should be discussed. In certain instances, the no project alternative means no build wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.

The Project involves City approval of a lease renewal with the District for continued use of the Project site as a high school and District approval of short-term (WSM) and long-term (LRFMP) campus improvements through the year 2035. If the City does not execute a lease renewal with the District, none of the WSM or LRFMP improvements would occur at the Project site because the District would not issue construction contracts without a new lease. In this instance, no new or replaced buildings or other site improvements would occur. The Project site is dedicated parkland and its use is governed by City Charter Section 55, which requires that the Project site be used for dedicated parkland purposes unless a school use is approved by two-thirds of the City's voters or if an amendment to the City Charter allowing a school use at the Project site is approved by a majority of the City's voters. Potential actions by others at the Project site if the City does not approve the lease agreement cannot be predicted at this time; however, it is assumed that a lease would be approved in the future consistent with the November 2016 voter approved Measure I, which amended City Charter Section 55 authorizing the City Council to lease the Project site to the District for "educational, cultural, recreational, and civic programs and activities, provided that the property is used for a public high school."

Alternative 2: Buildings 600 and 700 Preservation Alternative

Under the Buildings 600 and 700 Preservation Alternative, the City would approve the lease agreement and the District would approve and implement the proposed WSM improvements; however, in order to avoid significant and unavoidable impacts to cultural resources, demolition of buildings 600 and 700 during the LRFMP improvements would not occur. Instead, improvements to buildings 600 and 700 would occur during the WSM improvements only and would involve HVAC installation, exterior painting, interior building reconfiguration, realignment of plumbing at building 600, and the addition of an emergency public address system at building 700. During the LRFMP improvements, no additional modifications or changes to buildings 600 and 700 would occur. All other components of the Project associated with the LRFMP improvements would occur, including demolition of building 400 and construction of the performing arts building, auxiliary gymnasium, parking structure, field house, and aquatic center.

Alternative 3: No Aquatic Center Public Address System Alternative

Under the No Aquatic Center Public Address System Alternative, the City would approve the lease agreement and the District would approve and implement the proposed WSM and LRFMP improvements; however, in order to avoid significant and unavoidable impacts to noise and vibration, the aquatic center would not include a public address system during the LRFMP improvements.

6.3 ANALYSIS OF ALTERNATIVES

This section discusses each of the Project alternatives and determines whether each alternative would avoid or substantially reduce any of the significant impacts of the Proposed Project. This section also identifies additional impacts resulting from the alternatives that would not result from the Proposed Project (if applicable) and considers the alternatives' respective relationships to the Project objectives. A summary comparison of the impacts of the Proposed Project and the alternatives under consideration is included as Table 6-2, *Comparison of Project and Alternatives Impacts*.

Environmental Topic	Proposed Project	No Project Alternative	Buildings 600 and 700 Preservation Alternative	No Aquatic Center Public Address System Alternative
Air Quality	N	N-	N-	Ν
Cultural Resources	SU	N	SM	SU
Geology and Soils	SM	N	SM-	SM
Greenhouse Gas Emissions	N	N+	N-	Ν
Hazards	N	N-	N	Ν
Noise and Vibration	SU	N	SU-	SM
Transportation and Traffic	N	N-	N-	Ν
Tribal Cultural Resources	SM	N	SM	SM

Table 6-2 COMPARISON OF PROJECT AND ALTERNATIVES IMPACTS

SM = significant but mitigable impacts; SU = significant and unmitigated impacts; N = no significant impacts

- = reduced impact level(s) relative to the Project; + = increased impact level(s) relative to the Project

6.3.1 Alternative 1 – No Project Alternative

Air Quality

No site preparation, grading, building demolition and construction, paving, and architectural coatings associated with the WSM and LRFMP improvements would occur under the No Project Alternative. As a result, there would be no potential to increase air pollutant emissions at the Project site. While air quality impacts associated with the Proposed Project were determined to be less than significant and would not require mitigation measures, this alternative would result in reduced air quality effects during

construction because no construction activities would occur. Operations under the No Project Alternative are unknown; however, this alternative would not include the proposed aquatic center that would be available for public use under the Proposed Project. The additional 140 ADT associated with public use of the aquatic center would not occur under this alternative and air quality emissions associated with operations would be incrementally reduced.

Cultural Resources

Under this alternative, none of the proposed WSM and LRFMP improvements would occur. Specifically, none of the CSDHRR-eligible features at the Project site would be significantly impacted, including the WSM improvements at buildings 100, 500, 600, and 700 and the student quad area. Buildings 600 and 700 would also not be demolished during the LRFMP improvements and significant impacts to these CSDHRR-eligible buildings would not occur. Also, mitigation consisting of preparing photo documentation of buildings 600 and 700 for public display, as well as interpretive signage or display panels that describe the history and significance of SDHS would not be developed or displayed on the SDHS campus.

Geology and Soils

The No Project Alternative would not result in additional development or related disturbance on the Project site and no impacts would occur to geology and soils. This alternative would eliminate the geology and soils impacts related to the potential for new habitable structures to be placed on or near an active fault. However, the Project site and habitable buildings would remain on or near an active fault. Risks associated with fault rupture or strong seismic ground shaking would remain under the No Project Alternative and potential impacts may be greater due to the older age of many of the buildings at the Project site that would not be replaced by modern buildings that are more resistant to impacts associated with seismic activity. As described in EIR Section 3.3, Project impacts associated with the development of habitable buildings on or near an active fault would be reduced below a level of significance by requiring additional geotechnical field evaluation and design considerations for buildings exceeding 2,000 person-hours per year to be offset 50 feet from the closest suspected fault location.

This alternative would also avoid the potential paleontological resources impacts associated with site disturbance during construction of the WSM and LRFMP improvements. No impacts to paleontological resources would result and impacts associated with disturbance of the San Diego Formation would be avoided. As described in EIR Section 3.3, Project impacts associated with site disturbance into the San Diego Formation would be reduced below a level of significance by implementing a paleontological mitigation program prior to construction of WSM and LRFMP improvements.

Greenhouse Gas Emissions

Similar to air quality, this alternative would not have the potential to increase site-specific GHG emissions associated with construction and operation of the Proposed Project. This alternative would also not result in the installation of PV panels, canopy shade outside of buildings, and new and replacement windows and HVAC during the WSM improvements. Also, no replacement of older buildings with newer, more efficient buildings that require less energy to operate would occur during the LRFMP improvements. Therefore, this alternative may result in slightly greater operational GHG emissions.

Hazards

Under the No Project Alternative, no new buildings or structures would be constructed at the Project site and FAA notification in compliance with FAA Part 77 would not be required. While this alternative would avoid the less than significant impact identified for the Project, the SDHS campus would continue to be located within the airspace protection surfaces that are identified above the Project site due to the campus' proximity to SDIA and NASNI.

Noise and Vibration

None of the building demolition and construction activities associated with the Proposed Project would occur and the proposed public address system associated with the proposed aquatic center would also not operate. Therefore, significant noise impacts during construction and operation that would be associated with these activities under the Project would be avoided under this alternative.

Transportation and Traffic

No development or redevelopment is proposed under the No Project Alternative and no additional traffic related to construction or operation would occur. Specifically, this alternative would not involve construction traffic related to materials deliveries and construction debris hauling during construction. This alternative would also not involve the construction of improvements to site access from Park Boulevard and Russ Boulevard, or the generation of 140 ADT associated with the aquatic center. While the Proposed Project would result in less than significant impacts on transportation and traffic, the No Project Alternative would have no impacts.

Tribal Cultural Resources

Under this alternative, none of the proposed WSM and LRFMP construction activities would occur. Therefore, the less than significant impacts with mitigation associated with the unanticipated discovery of tribal cultural resources during ground-disturbing construction activities would be avoided under this alternative.

Conclusion

The No Project Alternative would avoid significant and unmitigable (or unavoidable) cultural resources impacts associated with building modification and demolition (historic buildings) as well as noise impacts during operation of a public address system at the aquatic center. It would also avoid significant, but mitigable, impacts related to cultural resources associated with ground disturbance (historic archaeology), tribal cultural resources associated with construction activities, and noise related to building demolition and construction. Additionally, significant but mitigable impacts associated with paleontological resources would be avoided. Related to faulting and seismicity, this alternative would avoid triggering the need for additional geotechnical review for faulting at the site; however, leaving older buildings on a potential fault as opposed to replacing them with modern buildings would not result in improved safety conditions at SDHS. Impacts would be similar but somewhat reduced for air quality, GHGs, and transportation and traffic under the No Project Alternative. Impacts related to hazards would be similar to the Proposed Project.

The No Project Alternative would not use Propositions S and Z and Measure YY funds, improve student learning and instruction, conduct major building systems repair, replace aging facilities, provide campus

access from Park Boulevard, or improve school accessibility or parking opportunities (Objectives 1 through 6). It also would not improve existing athletic facilities or provide for additional athletic facilities (Objective 7). Therefore, the No Project Alternative would fail to meet any of the basic Project objectives.

6.3.2 Buildings 600 and 700 Preservation Alternative

Air Quality

This alternative would result in reduced temporary air pollutant emissions when compared to the Project because it would not involve demolition of buildings 600 and 700 or construction of the food service and custodial building. The remaining components of the Project would be built, and Project operations would be similar under this alternative, including the air emissions due to an increase in 140 ADT associated with the aquatic center. As a result, this alternative would incrementally reduce less than significant air quality impacts associated with the Project.

Cultural Resources

The Buildings 600 and 700 Preservation Alternative would result in reduced impacts on cultural resources when compared to the Project because it would not involve the demolition of buildings 600 and 700, both of which are eligible for listing in the CSDHRR, during the LRFMP improvements. By avoiding demolition of buildings 600 and 700, this alternative would be consistent with the SOI Standards for the Treatment of Historic Properties. This alternative would involve the same building 100 addition and student quad area improvements during the WSM improvements that were identified as less than significant with mitigation under the Proposed Project for historic archaeology. The Buildings 600 and 700 Preservation Alternative would result in reduced impacts to cultural resources (historic buildings) compared to the Project during the LRFMP improvements; however, mitigation would still be required to reduce potentially significant impacts to cultural resources during the WSM improvements.

Geology and Soils

This alternative would involve less building construction with the potential to be located near an active fault. Risks associated with fault rupture or strong seismic ground shaking would remain under the Buildings 600 and 700 Preservation Alternative and may be somewhat increased due to the older age of buildings 600 and 700 and their reduced ability to handle fault rupture and strong seismic ground shaking.

This alternative would incrementally reduce the paleontological resources impacts associated with site disturbance during construction of the WSM and LRFMP improvements. Similarly, less than significant impacts with mitigation to paleontological resources would result and impacts associated with disturbance of the San Diego Formation would be reduced as buildings 600 and 700 would not be demolished and a building foundation would not be prepared for the food service and custodial building.

Greenhouse Gas Emissions

This alternative would result in slightly reduced site-specific GHG emissions when compared to the Project as there would be less construction due to the avoidance of demolishing buildings 600 and 700 and constructing a food service and custodial building. Operations would be similar to the Proposed

Project; however, it would not involve the removal of an older building and its replacement with a modern, more energy-efficient building.

Hazards

The Buildings 600 and 700 Preservation Alternative would result in similar airport hazards impacts when compared to the Project. There would be less building construction due to the avoidance of constructing a food service and custodial building to replace building 700; however, FAA notification in compliance with FAA Part 77 would still be required for the other proposed buildings that would be constructed under this alternative. As none of the proposed buildings under this alternative or the Proposed Project would exceed 35 feet in height, FAA notification is not expected to identify an environmental impact and as such, this alternative would not reduce environmental impacts associated with airport hazards.

Noise and Vibration

This alternative would result in slightly reduced construction noise and vibration activities when compared to the Project due to the reduction in construction activities as buildings 600 and 700 would not be demolished and building 700 would not be replaced with a food service and custodial building. Operational noise impacts at San Diego City College (off-site) would remain potentially significant and unavoidable as a result of the proposed public address system at the aquatic center associated with the LRFMP improvements.

Transportation and Traffic

The Buildings 600 and 700 Preservation Alternative would result in slightly reduced construction traffic trips when compared to the Project due to the reduction in construction activities as buildings 600 and 700 would not be demolished and building 700 would not be replaced. Operational traffic increases associated with school operations and public use of the aquatic center would be similar to the Proposed Project.

Tribal Cultural Resources

The Buildings 600 and 700 Preservation Alternative would result in similar impacts on tribal cultural resources when compared to the Project because both involve ground-disturbing construction activities that have the potential to inadvertently encounter tribal cultural resources. Both the Proposed Project and this alternative would require similar mitigation measures to reduce significant impacts to previously unknown tribal cultural resources to a less than significant level.

Conclusion

The Buildings 600 and 700 Preservation Alternative would avoid significant and unmitigable cultural resources impacts associated with demolition of buildings 600 and 700 and would result in similar significant but mitigable cultural resources impacts on historic archaeology. The Buildings 600 and 700 Preservation Alternative would also result in similar significant but mitigable impacts to tribal cultural resources. Significant and unavoidable noise impacts associated with the aquatic center's public address system would remain, similar to the Proposed Project. This alternative would also result in reduced significant, but mitigable, impacts related to paleontological resources identified in geology and soils, and construction noise and groundborne vibration. Related to faulting and seismicity, this alternative would leave buildings 600 and 700 on a potential fault as opposed to replacing them with modern

buildings, which would not result in improved safety conditions at SDHS. Impacts would be similar but somewhat reduced for air quality, GHGs, and transportation and traffic under the Buildings 600 and 700 Preservation Alternative. Impacts related to hazards would be similar to the Proposed Project.

The Buildings 600 and 700 Preservation Alternative would use Propositions S and Z and Measure YY funds, improve student learning and instruction, provide campus access from Park Boulevard, improve school accessibility and parking opportunities, and improve existing athletic facilities or provide for additional athletic facilities (Objectives 1, 2, 4, 5, 6, and 7). This alternative would only partially fulfill Objective 3 involving replacing aging facilities throughout the campus. In summary, this alternative would fulfill six and partially fulfill one of the seven Project objectives.

6.3.3 No Aquatic Center Public Address System Alternative

Air Quality

This alternative would result in similar air pollutant emissions when compared to the Project because it would involve all of the components of the Proposed Project except for the public address system at the aquatic center. As a result, this alternative would not reduce air quality impacts associated with the Project and they would remain less than significant.

Cultural Resources

The No Aquatic Center Public Address System Alternative would result in similar impacts on cultural resources when compared to the Project because it would involve all of the components of the Proposed Project, except for the public address system. This alternative would include demolition of building 600 and 700, both of which are eligible for listing in the CSDHRR. The No Aquatic Center Public Address System Alternative would not result in reduced impacts to cultural resources compared to the Project and impacts would similarly remain significant and unavoidable.

Geology and Soils

This alternative would involve similar impacts related to fault rupture and strong seismic ground shaking as it would involve new and replacement buildings with the potential to be located near an active fault. Risks associated with fault rupture or strong seismic ground shaking would remain under the No Aquatic Center Public Address System Alternative.

This alternative would result in the same paleontological resources impacts associated with site disturbance during construction of the WSM and LRFMP improvements. Less than significant impacts with mitigation to paleontological resources would result and impacts associated with disturbance of the San Diego Formation would be the same as the Proposed Project as all of the Project components would be constructed with the exception of the public address system.

Greenhouse Gas Emissions

This alternative would result in similar site-specific GHG emissions when compared to the Project as there would be a similar amount of construction activity. Operations would be similar to the Proposed Project with the exception of the public address system that would not be included; however, the exclusion of the public address system would not substantially change GHG emissions when compared to the Project.

Hazards

The No Aquatic Center Public Address System Alternative would result in the same less than significant airport hazards impacts when compared to the Project. FAA notification in compliance with FAA Part 77 would be required for the proposed buildings that would be constructed under this alternative, the same as the Proposed Project. As none of the proposed buildings under this alternative or the Proposed Project would exceed 35 feet in height, FAA notification is not expected to identify an environmental impact and as such, this alternative would result, in the same less than significant environmental impacts associated with airport hazards as the Proposed Project.

Noise and Vibration

This alternative would result in similar construction noise and vibration activities when compared to the Project as the only change from the Proposed Project involves exclusion of the public address system at the aquatic center. Potentially significant and unavoidable operational noise impacts at San Diego City College (off-site) associated with the Project's public address system at the aquatic center would be avoided as no public address system would be built under this alternative.

Transportation and Traffic

The No Aquatic Center Public Address System Alternative would result in similar construction traffic trips when compared to the Project because installation of the public address system would not generate additional construction traffic. Operational traffic increases associated with school operations and public use of the aquatic center also would be similar to the Proposed Project.

Tribal Cultural Resources

The No Aquatic Center Public Address System Alternative would result in similar impacts on tribal cultural resources when compared to the Project because it would involve all of the components of the Proposed Project, except for the public address system. This alternative would include ground-disturbing construction activities, which have the potential to inadvertently discover tribal cultural resources. The No Aquatic Center Public Address System Alternative would not result in reduced impacts to tribal cultural resources compared to the Project and impacts would similarly remain less than significant with mitigation.

Conclusion

The No Aquatic Center Public Address System Alternative would avoid potentially significant and unmitigable noise impacts associated with operation of the aquatic center's public address system. Significant and unmitigable impacts to historic structures as well as significant but mitigable cultural resources impacts on historic archaeology, geology and soils (including paleontological resources), noise and vibration during construction, and tribal cultural resources would remain, similar to the Proposed Project. Impacts would be similar for air quality, GHGs, hazards, and transportation and traffic under the No Aquatic Center Public Address System Alternative.

The No Aquatic Center Public Address System Alternative would use Propositions S and Z and Measure YY funds, improve student learning and instruction, conduct major building systems repair and replacement of aging facilities throughout the campus, provide campus access from Park Boulevard, improve school accessibility and parking opportunities, and improve existing athletic facilities or provide for additional athletic facilities (Objectives 1 through 7). In summary, this alternative would fulfill all seven of the Project objectives.

6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The State CEQA Guidelines require the identification of an environmentally superior alternative among the alternatives analyzed in an EIR. The guidelines also require that if the No Project Alternative is identified as the environmentally superior alternative, another environmentally superior alternative must be identified.

Based on a comparison of the overall environmental impacts for the described alternatives, the No Project Alternative is identified as the environmentally superior alternative. This alternative would not result in any contribution to significant and unmitigable impacts related to cultural resources or noise and vibration, which would occur with the Project. The significant but mitigable impacts to geology and soils would also be avoided. The No Project Alternative, however, does not meet any of the Project objectives.

Of the remaining alternatives, the environmentally superior alternative is the Buildings 600 and 700 Preservation Alternative. This alternative would meet most of the Project objectives and would avoid significant and unmitigable impacts to historic buildings.

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