June 2021 | Mitigated Negative Declaration

SADDLEBACK HIGH SCHOOL SPORTS COMPLEX

Santa Ana Unified School District

Prepared for:

Santa Ana Unified School District
Facilities Planning Services
Contact: Julie Molloy, Senior Facilities Planner
1601 East Chestnut Avenue
Santa Ana, CA 92701
714.480.5367

Prepared by:

PlaceWorks
Contact: Elizabeth Kim, Senior Associate
3 MacArthur Place, Suite 1100
Santa Ana, California 92707
714.966.9220
info@placeworks.com
www.placeworks.com

PLACEWORKS

Santa Ana Unified School District

Facilities & Governmental Relations
Orin L. Williams, Assistant Superintendent

Jerry Almendarez
Superintendent of Schools

MITIGATED NEGATIVE DECLARATION

Pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code (PRC) Sections 2100 et seq.) and the State CEQA Guidelines (California Code of Regulations (CCR) Sections 15000 et seq.), the Santa Ana Unified School District has completed this Mitigated Negative Declaration (MND) for the project described below based on the assessment presented in the attached Initial Study.

LEAD AGENCY: Santa Ana Unified School District

PROJECT TITLE: Saddleback High School Sports Complex

PROJECT LOCATION: The project site is within the main campus of Saddleback High School at 2802 S. Flower Street, Santa Ana, Orange County (Assessor's Parcel Number 410-012-06).

PROJECT DESCRIPTION: The proposed project consists of demolition of some sports facilities and construction of a new sports complex (see attached exhibit).

Demolition and Removal

» The project would require demolition of 9 basketball courts, 10 tennis courts, softball field, discus area, shot put throw area, and 3 large storage containers.

New Construction

» Bleachers and Press Box. Separate home and visiting team bleacher structures would provide a combined seating capacity for 3,000 spectators. The home side bleachers (grandstand) and press box would be on the west side of the field and have seating capacity for 2,000, and the 1,000-seat visitor side bleachers would be on the east side of the field.

» Lighting. Field lighting would consist of four in-ground precast concrete bases with galvanized steel poles with lighting fixtures mounted at different heights on the poles. The four 90-foot-high light poles would be installed at approximately the 10-yard line on the outside edge of the home and visitor bleachers. Lighting fixtures would be mounted at approximately 20, 25, 80, and 90 feet. The field lights would be in operation for a maximum of four hours during any single evening. The running track and all pedestrian pathways would be lit for safety and security of people leaving the sports complex.

» Public Address (PA) System. Speakers would be mounted on the four light standards on both the home and visitor sides of the playing field. Each light standard would have two speakers mounted at approximately 30 to 53 feet above ground, for a total of eight speakers.

» Concession Building. At the north end of the field a 4,295-square-foot, 19-foot, 4-inch-tall building would have a team room, public restrooms, ticket sales, concessions, concession storage, general storage, and utility rooms.

» **Fencing.** An 8-foot-high chain-link fence would be installed around the sports complex with six gates.

» **Other facilities.** The project also includes a discus cage and ring and a shot put throw ring along the outside the southwest corner of the sports complex.

Project construction is anticipated to start in late 2021 and take about 14 months to complete.

DOCUMENT AVAILABILITY: The MND is available for public review on the SAUSD website under current projects: https://www.sausd.us/Page/47196

SUMMARY OF IMPACTS: The attached Initial Study was prepared to identify the potential project-related effects on the environment and to evaluate the significance of those effects. Based on the environmental analysis, the proposed project would have no impacts or less-than-significant environmental impacts related to the following topics:

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

FINDINGS. It is hereby determined that, based on the information in the attached Initial Study, the proposed project, with mitigation measures for Noise, would not have a significant environment impact.

June 2021 | Initial Study

SADDLEBACK HIGH SCHOOL SPORTS COMPLEX

Santa Ana Unified School District

PLACEWORKS

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Abbreviations and Acronyms

AAQS	ambient air quality standards
AB	Assembly Bill
AQMD	air quality management district
AQMP	air quality management plan
bgs	below ground surface
BMP	best management practices
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDE	California Department of Education
CEQA	California Environmental Quality Act
cf	cubic feet
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
dB	decibel
dBA	A-weighted decibel
DPM	diesel particulate matter
EPA	United States Environmental Protection Agency
fc	foot-candle
FHSZ	fire hazard severity zone
GHG	greenhouse gases
IPCC	Intergovernmental Panel on Climate Change
kBTU	1,000 British thermal units
kWh	kilowatt hour
Ldn	day-night noise level
Leq	equivalent continuous noise level
LOS	level of service
LRA	local responsibility area
LST	localized significance thresholds
MND	(mitigated) negative declaration

Abbreviations and Acronyms

mph	miles per hour
MT	metric ton
MWh	megawatt hour
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
O_3	ozone
OCFA	Orange County Fire Authority
PM	particulate matter
PPV	peak particle velocity
PRC	Public Resources Code
RCNM	Roadway Construction Noise Model
RPS	Renewable Portfolio Standard
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SAUSD	Santa Ana Unified School District
SB	Senate Bill
SCAG	Southern California Association of Governments
SCE	Southern California Edison
SoCAB	South Coast Air Basin
SO_X	sulfur oxides
SRA	source receptor area (air quality)
SRA	state responsibility area (wildfire)
SWPPP	Storm Water Pollution Prevention Plan
VMT	vehicle miles traveled
VOC	volatile organic compound

Abbreviations and Acronyms

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1. Introduction

Santa Ana Unified School District (SAUSD or District) proposes to construct a new Sports Complex on the campus of Saddleback High School.

1.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

The environmental compliance process is governed by CEQA[1] and the State CEQA Guidelines.[2] CEQA was enacted in 1970 by the California Legislature to disclose to decision-makers and the public the significant environmental effects of projects and to identify ways to avoid or reduce the environmental effects through feasible alternatives or mitigation measures. Compliance with CEQA applies to California government agencies at all levels: local, regional, and state agencies, boards, commissions, and special districts (such as school districts and water districts).

SAUSD is the lead agency for this proposed project and is therefore required to conduct an environmental review to analyze the potential environmental effects associated with the proposed project.

California Public Resources Code (PRC) Section 21080(a) states that analysis of a project's environmental impact is required for any "discretionary projects proposed to be carried out or approved by public agencies…." In this case, SAUSD has determined that an initial study is required to determine whether there is substantial evidence that construction and operation of the proposed project would result in environmental impacts. An initial study is a preliminary environmental analysis to determine whether an environmental impact report (EIR), a mitigated negative declaration (MND), or a negative declaration (ND) is required for a project.[3]

When an initial study identifies the potential for significant environmental impacts, the lead agency must prepare an EIR;[4] however, if all impacts are found to be less than significant or can be mitigated to a less-than-significant level, the lead agency can prepare an ND or an MND that incorporates mitigation measures into the project.[5]

1.1.1 Environmental Process

A "project" means the whole of an action that has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following:

1. An activity directly undertaken by any public agency, including but not limited to public works construction and related activities, clearing or grading of land, improvements to existing public structures, enactment

[1] California Public Resources Code, § 21000 et seq (1970).
[2] California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, § 15000 et seq.
[3] 14 CCR § 15063.
[4] 14 CCR § 15064.
[5] 14 CCR § 15070.

and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code §§ 65100 to 65700.

2. An activity undertaken by a person which is supported in whole or in part through public agency contacts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.

3. An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.[6]

The proposed actions for the Saddleback High School Sports Complex by SAUSD constitute a "project" because the activity would result in a direct physical change in the environment and would be undertaken by a public agency. All "projects" in the State of California are required to undergo an environmental review to determine the environmental impacts associated with implementation of the project.

1.1.2 Initial Study

This Initial Study was prepared in accordance with CEQA and the CEQA Guidelines, as amended, to determine if the project could have a significant impact on the environment. The purpose of the Initial Study is to 1) provide the lead agency with information to use as the basis for deciding the proper type of CEQA document to prepare; 2) enable the lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration; 3) assist in the preparation of an EIR, if one is required; 4) facilitate environmental assessment early in the design of a project; 5) provide documentation of the factual basis for the findings in an MND or ND; 6) eliminate unnecessary EIRs; and 7) determine if the project is covered under a previously prepared EIR.[7] When an Initial Study identifies the potential for immitigable significant environmental impacts, the lead agency must prepare an EIR;[8] however, if all impacts are found to be less than significant or can be mitigated to less than significant, the lead agency can prepare an ND or an MND that incorporates mitigation measures into the project.[9] The findings in this Initial Study have determined that an MND is the appropriate level of environmental documentation for this project.

1.1.3 Mitigated Negative Declaration

The MND includes information and environmental analysis necessary for agencies to meet statutory responsibilities related to the proposed project. State and local agencies would use the MND when considering any permit or other approvals necessary to implement the project. A list of the 20 environmental topics are provided in the Initial Study Checklist in Chapter 2.

One of the primary objectives of CEQA is to enhance public participation in the planning process; public involvement is an essential feature of CEQA. Community members are encouraged to participate in the environmental review process, request to be notified, monitor newspapers for formal announcements, and submit substantive comments at every opportunity afforded by the SAUSD. The environmental review process

6 14 CCR § 15378(a)
7 14 CCR § 15063.
8 14 CCR § 15064.
9 14 CCR § 15070.

provides several opportunities for the public to participate through public notice and public review of CEQA documents and public hearing.

1.2 PROJECT LOCATION AND ENVIRONMENTAL SETTING

The project site is on the Saddleback High School campus at 2802 S. Flower Street, Santa Ana, Orange County (Assessor's Parcel Numbers 410-012-06) (see Figure 1, *Regional Location* and Figure 2, *Local Vicinity*). The specific project site is in the north part of the play field area and currently has tennis courts, asphalt hard courts, and turf fields.

1.2.1 Surrounding Land Uses

Surrounding roadways and land uses near the Saddleback High School campus include (see Figure 3, *Aerial Photograph*):

North: W. Segerstrom Avenue, a park (aka Segerstrom Triangle), and single- and multifamily residential

South: Union Pacific Railroad track right-of-way, Class I Bicycle path,[10] single-family residential

East: S. Flower Street, Class I Bicycle path, Orange County Flood Control District drainage channel, and a storage facility (Mini U Storage)

West: single-family residential

1.2.2 Existing Conditions

School. The Saddleback High School was built in 1967 and encompasses approximately 38.6 acres. The campus is developed with classroom buildings, various support services buildings, portable classrooms, surface parking lots, swimming pool, tennis courts, hardcourts, turf athletic fields, and a synthetic track and artificial turf football/soccer field (track and field). The high school enrollment for the 2020–21 school year was 1,575 students in grades 7 through 12.[11] The school has 319 parking spaces in two lots (145 spaces in the north lot and 176 spaces in the east lot). The school parking lots are accessed from two driveways on Segerstrom Avenue for the north lot and one driveway on Flower Street for the east lot (the southern driveway on Flower Street is gated and closed). There are sidewalks along the school frontage on Segerstrom Avenue and Flower Street.

Project Site. The project site currently has 9 basketball courts, 10 tennis courts, softball field, discus area, shot put throw area, a storage/office building, and 3 large storage containers. The project site is surrounded by on-campus facilities: baseball field and softball field to the west, north parking lot and main campus to the east, a track and field to the south, and Segerstrom Avenue and a park off-campus to the north.

[10] Shared-Use Paths: Class I Bicycle paths (also called multi-use paths) are paved rights-of-way for the exclusive use of bicyclists and pedestrians. Bike paths are physically separated from vehicular traffic, and are generally constructed in corridors not served by the street network and where vehicular cross-flows are minimized. https://www.santa-ana.org/sites/default/files/Documents/PotentialBikewayMasterPlan.pdf

[11] California Department of Education. DataQuest. 2020-2021 enrollment. https://dq.cde.ca.gov/dataquest/

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1.2.2.1 CURRENT FIELD AND TRACK USE

The existing sports fields are used on a regular basis for physical education classes, team sports practices and competitive games, and a variety of other scholastic-related events. When not in use for school events, they are available to the community. Because there is no nighttime lights, all the outdoor sports facility use is limited to daylight hours. Varsity football games are held at Segerstrom High School at 2301 W MacArthur Boulevard, Santa Ana. The following activities currently take place on the existing track and field.

Football. September, October, and November, freshmen/sophomore, junior varsity, and varsity football practices are from 2:00 pm to 5:30 pm most weekdays. Freshmen/sophomore and junior varsity games are from 2:00 pm to 6:00 pm on Thursdays. Attendance for these games is 200 to 250 spectators. Varsity home football games are currently held at Segerstrom High School.

Soccer. December, January, and February, varsity soccer practice is from 2:00 pm to 5:30 pm most weekdays and Saturdays. Varsity soccer games are from 3:00 pm to 7:00 pm—girls' soccer on Tuesdays and Thursdays, and boys on Wednesdays and Fridays. Attendance for these games is 75 to 100 spectators.

Marching Band, Cheerleading, and Color Guard. Marching band practice is Monday through Friday from 7:00 am to 8:00 am. Cheerleading and color guard practices are Monday through Thursday from 2:00 pm to 5:00 pm. Attendance for these practice sessions is approximately 20 to 60 participants.

Track. March, April, May, and June, track practice is from 2:00 pm to 4:30 pm, Monday through Friday. Track meets are from 3:00 pm to 5:00 pm on Mondays and Wednesdays.

Cross-Country. July and August, cross-country practice is on the track, Monday through Friday from 2:00 pm to 5:30 pm. Cross-Country meets are held on Saturdays at various places throughout the county.

Other school uses throughout the school year may include band and color guard competitions, classroom activities, rallies, and assemblies conducted during daylight hours.

Community Events. Pop Warner football is scheduled on Saturdays from 8:00 am until dark and has approximately 30 to 50 spectators. Adult soccer league plays on Sundays all year (approximately 30 games per year) from 8:00 am to 3:00 pm. Attendance for adult soccer league ranges from 100 to 150. All community events conclude before dark. Track and field use by community organizations is subject to approval by the District.

Figure 1 - Regional Location
1. Introduction

Note: Unincorporated county areas are shown in white.
Source: ESRI, 2020

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Scale (Miles)

1. Introduction

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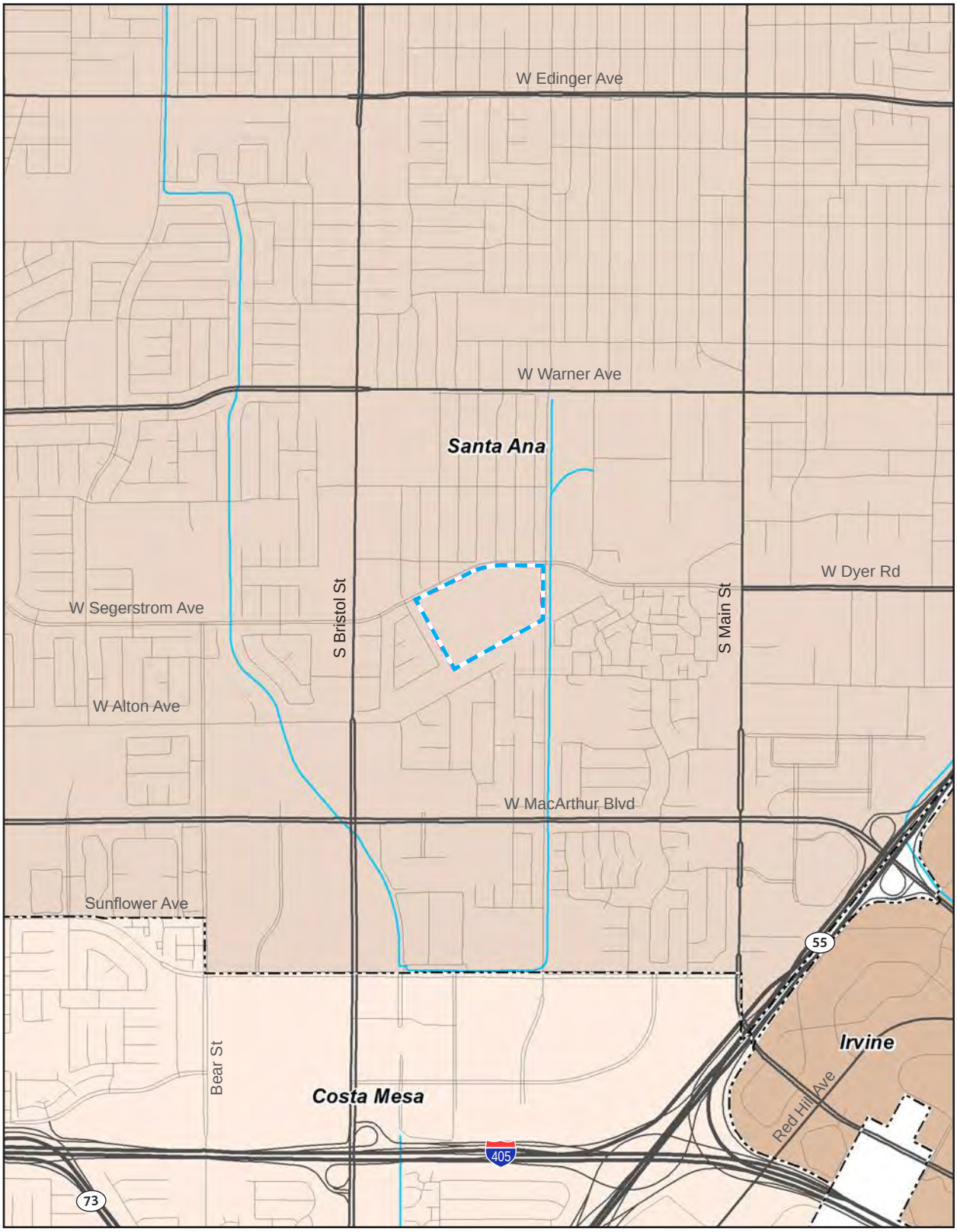
Figure 2 - Local Vicinity
1. Introduction



School Boundary

City Boundary

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Scale (Feet)

Source: ESRI, 2020

1. Introduction

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Figure 3 - Aerial Photograph
1. Introduction

School Boundary

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Scale (Feet)

Source: Nearmap, 2020

1. Introduction

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1.3 EXISTING ZONING AND GENERAL PLAN

The project site is designated INS (Institutional) by the City of Santa Ana General Plan[12] and zoned Open Space (O).[13]

1.3.1 Santa Ana Neighborhoods

Santa Ana is divided into 64 neighborhood associations; the high school is in the South Coast Neighborhood. The city has a number of neighborhoods with historic resources, including French Park, Floral Park, Wilshire Square, West Floral Park, Washington Square, and Heninger Park. It is also known for its original Mexican barrios, including the Logan, Lacy, Delhi, and Santa Anita neighborhoods, some of which date back to the late 1880s.[14] Santa Ana's historic districts are set apart from other areas of the city by age and architectural styles. Most of these historic districts are near the city center.[15] Three neighborhood associations surround the school (Sunwood Central Neighborhood Association to the north, Rosewood Baker Neighborhood Association to the north, South Coast Neighborhood Association to the south).

1.4 PROJECT DESCRIPTION

1.4.1 Background

In 2012, new bleachers with 2,000 seats, press box, speakers, and four nighttime sports lights were proposed at the existing track and field. A community meeting was held to inform the public about the project on December 20, 2012, at the Saddleback High School Auditorium. The CEQA Notice of Preparation and Initial Study were prepared and circulated for public review from March 1, 2013, to April 1, 2013. Because of significant community opposition, and prior to circulation of the Draft EIR, the project was put on hold. In response to the neighbors' concerns, the District has moved the sports complex from the south side of the campus adjacent to residential development to the north side of the campus. This new location for the sports complex is not directly adjacent to any homes.

1.4.2 Proposed Facilities

The proposed project consists of demolition of some sports facilities and construction of a new sports complex (see Figure 4, *Conceptual Site Plan*, and Figure 5, *Conceptual Illustrations*).

1.4.2.1 DEMOLITION

The project would require demolition of 9 basketball courts (about 84,300 square feet of asphalt concrete); 10 tennis courts (about 68,660 square feet of concrete); 124,700 square feet of turf field area consisting of

[12] Santa Ana General Plan, 1998. Land Use Element. https://www.santa-ana.org/sites/default/files/pb/general-plan/documents/Revised%20Elements/LandUse%20-%209-1-20.pdf
[13] Santa Ana zoning map. March 2020. https://gis-santa-ana.opendata.arcgis.com/datasets/b9605d5895d347e1b02d7c25d5e108c6
[14] Santa Ana, General Plan Housing Element 2014-2021. Policy Framework. https://www.santa-ana.org/sites/default/files/Documents/04_PolicyFramework_web.pdf
[15] Santa Ana Neighborhoods. June 2012. https://www.santa-ana.org/sites/default/files/nip/Neighborhoods/8-19%20NeighMap-C.pdf

1. Introduction

softball field, discus area, and shot-put throw area; and removal/relocation of 3 large storage containers. The total area of disturbance is approximately 6.4 acres, and approximately 1,500 cubic yards of soil would be exported. The tennis courts and basketball courts are not being used by the school or community groups, and there is no plan to replace these facilities.

1.4.2.2 NEW CONSTRUCTION

The new sports complex would have about 1,550 square feet of asphalt, 41,500 square feet of concrete, 90,000 square feet of turf, and 162,000 square feet of synthetic turf and track.

Bleachers and Press Box. Separate home and visiting team bleacher structures would provide a combined seating capacity for 3,000 spectators. The bleachers would feature a scaffold design and open-back aluminum construction. A prefabricated, 345-square-foot press box would be installed atop the home team bleachers.

The home side bleachers (grandstand) and press box would be on the west side of the field and have seating capacity for approximately 2,000 people. The bleachers would be about 21 feet tall with an 8-foot-tall press box, approximately 242 feet wide, and approximately 47 feet deep. On the east side of the field, the 1,000-seat visitor bleachers would be about 15 feet high, 174 feet wide, and about 28 feet deep. Figures 6 and 7 illustrate the section views of the home- and visitor-side bleachers.

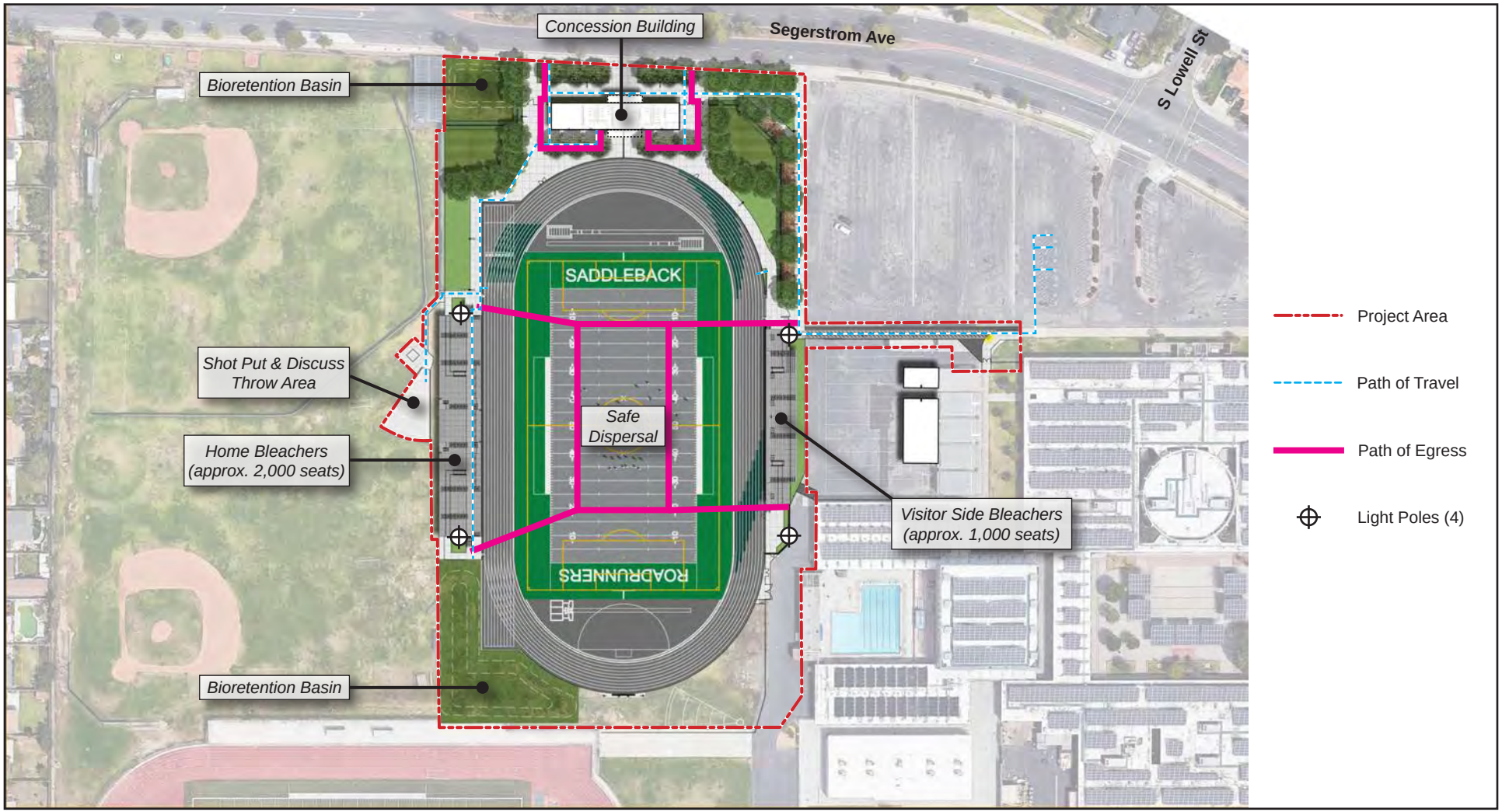
Both bleachers would be fully enclosed systems with aluminum planks and corrugated metal rear-panel backing and would have an additional 23- to 32-foot width to accommodate ADA accessible ramps. Bleachers would be installed on concrete pads.

Lighting. The intent of the lighting design is to meet the 50 foot-candle (fc) average set by the Illuminating Engineering Society of North America (IESNA) and the California Interscholastic Federation field lighting recommendations. This light level would be for football and soccer games and similar events that require the highest levels of light for players' safety and ability to play effectively under lights, and for the effective visual observation by spectators. The majority of all other events would operate at 30 fc or less. The lighting control system would be programmable for various lighting levels for different events.

Field lighting would consist of four in-ground precast concrete bases with galvanized steel poles with lighting fixtures mounted at different heights on the poles. The four 90-foot high light poles would be installed at approximately the 10-yard line on the outside edge of the home and visitor bleachers. Lighting fixtures would be mounted at approximately 20, 25, 80, and 90 feet.

The 90-foot pole heights are important for maintaining the 50 fc average value and minimizing spill light. The ideal pole height is based on the light beam angles per IESNA standards, the manufacturer's equipment, and the pole location standards.

Figure 4 - Conceptual Site Plan



Source: LPA, 2021

1. Introduction

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Figure 5 - Conceptual Illustrations

1. Introduction

Aerial View of Stadium Looking Northeast.

Aerial View of Stadium Looking Southeast.

Aerial View of Concession Building and Stadium looking Southeast.

Sidewalk View of Concession Building Looking Southeast.

Stadium View of Concession Building Looking North.

Street View of Concession Building Looking Southeast.

Track View of Concession Building Looking Northwest.

Street View of Concession Building Looking East.

Source: LPA, 2021

1. Introduction

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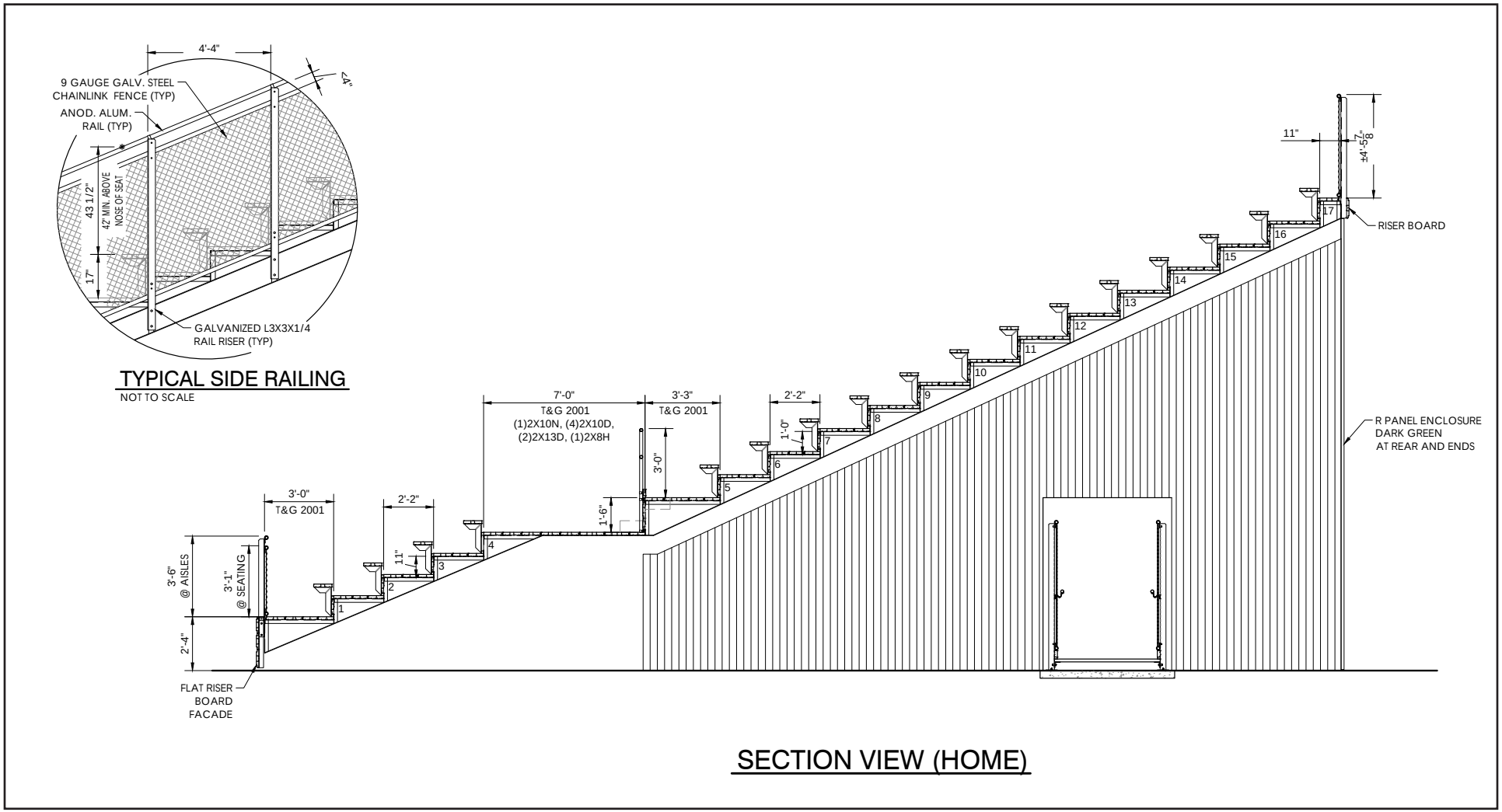
Figure 6 - Home Bleachers Section View



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Scale (Feet)

Source: Southern Bleacher Company, 2021

1. Introduction

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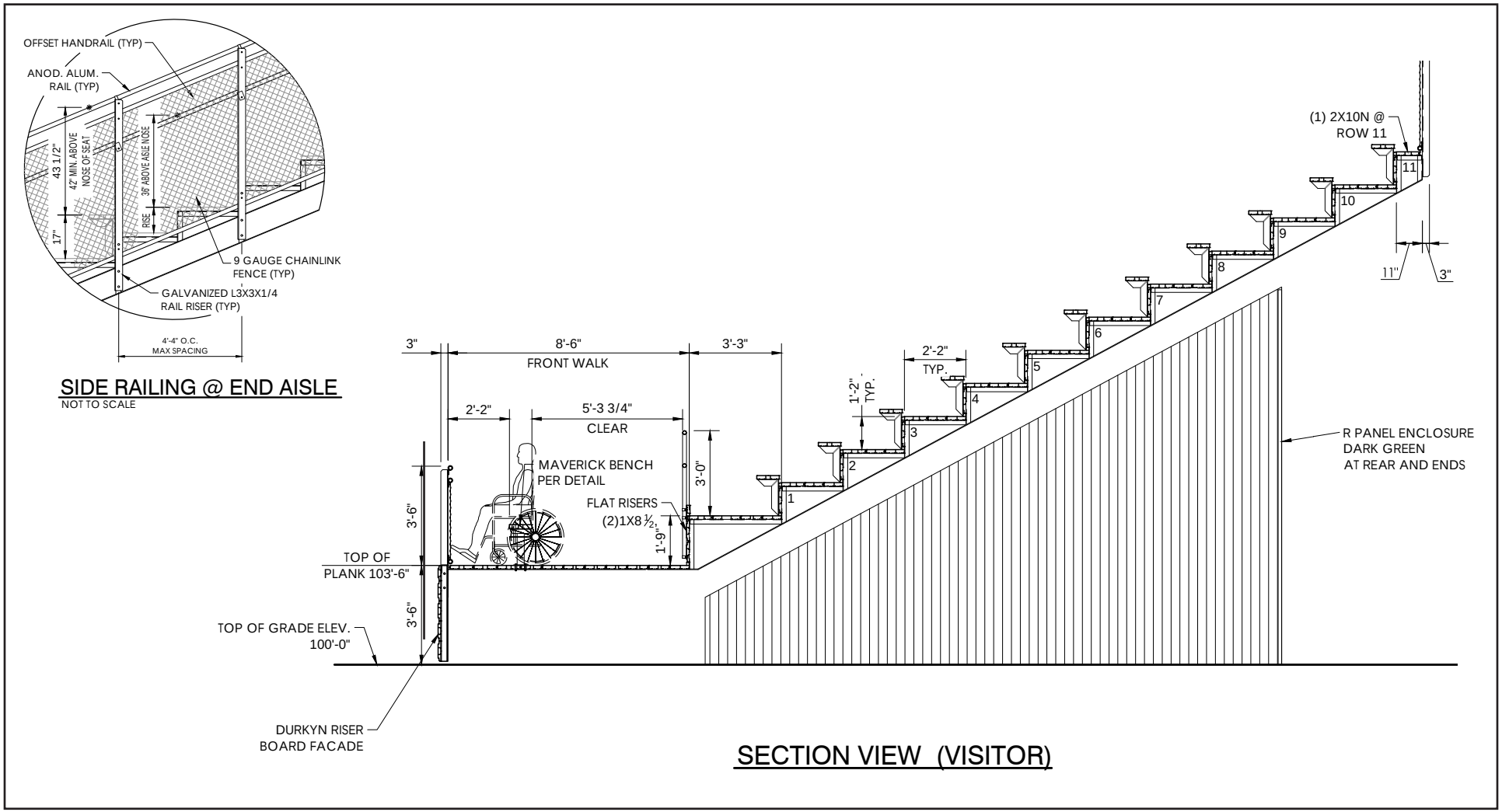
Figure 7 - Visitor Side Bleachers Section View



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Scale (Feet)

Source: Southern Bleacher Company, 2021

1. Introduction

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The LED fixtures are able to concentrate more light on the field area with 50 percent less light emitted outside the targeted areas compared to older systems. Additionally, the system can be switched to a "dimmed" setting by selecting the upper or lower banks of light fixtures separately, to achieve 30 to 60 percent of full light output. This feature allows the lights to be turned on to full brightness during a football game and turned down during events not requiring full brightness. The lights would be dimmed after the completion of an athletic event when less light is needed as team members exit the athletic field, spectators vacate the bleachers, and high school staff clean up the area. The lighting system has a manual, keyed switch for on-off control. This type of control allows for proper lighting throughout the duration of the scheduled events. The field lights would be in operation for a maximum of four hours during any single evening. The running track and all pedestrian pathways would be lit for safety and security of people leaving the sports complex. All campus parking lots currently have security lighting.

Public Address (PA) System. Speakers would be mounted on the four light standards on both the home and visitor sides of the playing field. Each light standard would have two speakers mounted at approximately 30 to 53 feet above ground, for a total of eight speakers. All speakers would point down, with one speaker aimed at near side bleachers and one aimed at far side bleachers. The speakers would be directional, with multiple settings to allow for more precise focusing of sound energy into the stands based on total spectators and type of event. The PA system would incorporate an electronic limiter to control maximum noise levels.

Concession Building. At the north end of the field an approximately 4,295-square-foot building would have a team room, public restrooms, ticket sales, concessions, concession storage, general storage, and utility rooms. The concession building would be approximately 15 feet and 4 inches tall to the top of the roof, and 19 feet and 4 inches tall to the top of the datum signage.

Fencing. An 8-foot-high chain-link fence would be installed around the sports complex and six exit gates would be provided for safe dispersal.

Other Facilities. The project also includes a discus cage and ring, and a shot put throw ring along the outside of the southwest corner of the sports complex.

Future Use and Scheduling. Soccer and football are regular nighttime events that would be played at the high school sports complex. Other school and community events would occur as the field and track schedule permits. As shown in Table 1, all events would end by 10:00 pm.

Table 1 Future Saddleback High School Sports Complex Events

Use/Activity	Season	Number per Season[c]	Attendance[d]	Day	Start	End	Lighted?
Football Game – Varsity[a]	*Sept–Nov*	*5*	*Max 3,000*[d]	*Fri*	*7:00 pm*	*10:00 pm*	*Y*
Football Game – JV		5	200-250	Thu	2:00 pm	6:00 pm	N
Football Game – Fros/Soph		5	200-250	Thu	2:00 pm	6:00 pm	N
Football Practice		11	50-100	Thu	6:00 pm	7:30 pm	Y
Football Practice		50	50-100	Mon–Fri	2:00 pm	5:30 pm	N
Marching Band Practice		Daily	40-60	Mon–Fri	7:00 am	8 am	N
Cheerleading Practice	Sept–Feb	20	20-40	Mon–Thu	3:00 pm	5:30 pm	N

1. Introduction

Table 1 Future Saddleback High School Sports Complex Events

Use/Activity	Season	Number per Season[c]	Attendance[d]	Day	Start	End	Lighted?
Color Guard Practice	Sept–Nov	20	20-40	Mon–Thu	3:00 pm	5:30 pm	N
Soccer Game – Girls Varsity	Dec–Feb	10	75-100	Tue & Thu	2:00 pm	7:00 pm	Y
Soccer Game – Boys Varsity		10	75-100	Wed & Fri	2:00 pm	7:00 pm	Y
Soccer Practice – Girls Varsity	Dec–Feb	50	20-40	Mon-Sat	2:00 pm	5:30 pm	N
Soccer Practice – Boys Varsity		50	30-55	Mon-Sat	2:00 pm	5:30 pm	N
Track Practice	Mar–June	48	75-100	Mon–Fri	2:00 pm	4:30 pm	N
Track Meets	Mar–June	4	100-150	Mon & Wed	3:00 pm	5:00 pm	N
Cross-Country Practice	Jul–Aug	10	100-150	Mon–Fri	2:00 pm	5:30 pm	N
Graduation[b]	***June***	***1***	***Max 3,000***	***Thu***	***11:00 am***	***3:30 pm***	***N***
Other Night School Events	Year round	--	--	--	5:00 pm	10:00 pm	Y
Community Events	Year round	--	--	--	5:00 pm	10:00 pm	Y

Note: New activities are shown in ***bold italics*** (currently held at Segerstrom High School); activities occurring on the existing track and field are shown in regular font. Some or all of the current activities at Saddleback High School may be moved to the new Sports Complex.

[a] Varsity football games are currently being held at Segerstrom High School, 2301 W. MacArthur Blvd, Santa Ana.

[b] Graduation is currently being held at the city's Eddie West Stadium, 602 N. Flower Street, Santa Ana.

[c] Number of games per season and attendance numbers are approximate based on previous events, and are not guaranteed for future events.

[d] Additional people other than spectators would include marching band = 40, color guard = 15, teams = 60, staff = 25: approximately 140 total.

High school football season is generally from September through the middle of November, depending on team playoff status. New games would typically be scheduled on Friday evenings, with varsity games played between the hours of 7:00 and 10:00 pm. Varsity games are anticipated to draw full-capacity crowds. Freshman/sophomore and junior varsity games would not change and would continue to be scheduled immediately following the end of the school day.

Soccer season takes place from December to early February, depending on team playoff status. Saddleback High School hosts approximately 10 soccer games per season. The scheduling of soccer games varies, but some games may be played in the evening and require use of the sports lighting system. The lights would generally be extinguished immediately following the games and would be on no later than 9:00 pm. Typical soccer game attendance is anticipated to be less than 100 spectators.

Track season takes place during the late winter and spring months. Meets are typically scheduled following the end of the school day and generally conclude by 5:00 pm. Saddleback High School hosts approximately four track meets per season. Because much of track season occurs during daylight savings time, track meets are usually held during daylight hours; however, some meets may require use of the lighting system. Typical track meet attendance is anticipated to be less than 150 spectators.

Nighttime use of the field and track may also accommodate other school-related events and a variety of community-sponsored events and activities. Field and track use by community organizations would be subject to approval by the District. The specific scheduling of community use of the field and track has not been determined; however, similar to existing events, public use events are not anticipated to generate full capacity. All community events would conclude by 10:00 pm.

Utilities. The project would require the relocation of water, storm drain, and sewer lines that are under the asphalt hardcourts. The project includes hydrologic features designed to slow, filter, and retain stormwater from the sports complex on-campus within landscaping and two detention basins.

Traffic Light. Rosewood Avenue serves vehicles to/from a residential neighborhood, and Segerstrom Avenue serves eastbound and westbound traffic throughout the city. The Rosewood Avenue northbound approach is stop-controlled at the 'T' intersection, and the east- and westbound Segerstrom Avenue has no stop controls. The intersection is approximately 700 feet east of the Bristol Street and Segerstrom Avenue intersection. The District would work with the City to install a traffic signal at the Rosewood Avenue and Segerstrom Avenue intersection.

1.4.2.3 CONSTRUCTION BEST MANAGEMENT PRACTICES

During construction, the District's construction contractors would implement the following best management practices to reduce noise levels.

- Prior to the start of and for the duration of construction, the contractor shall properly maintain and tune all construction equipment in accordance with the manufacture's recommendations to minimize noise emissions.
- Prior to use of any construction equipment, the contractor shall fit all equipment with properly operating mufflers, air intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer.
- The construction contractor shall post a sign, clearly visible at the site, with a contact name and telephone number of the District's authorized representative to respond in the event of a noise complaint.
- During construction, the construction contractor shall place stationary construction equipment as far from sensitive receptors as practical and feasible.

1.4.2.4 CONSTRUCTION SCHEDULE

Project construction is anticipated to start in 4th quarter of 2021 (Q4-2021) and is anticipated to be operational by Q1-2023. Site preparation and construction would take up to 14 months to complete. The staging area/construction lay-down area for equipment and materials storage would be west of the sports complex.

1.5 LEAD AGENCY

SAUSD is the lead agency under CEQA for the proposed project. As part of the project approval process, the Board of Education must adopt the MND as adequate in complying with the requirements of CEQA before taking any action on the proposed project. The Board is required to consider the information in the MND and any comments when making the decision to approve or deny the proposed project. In accordance with CEQA requirements, the analysis in the MND provides environmental review for the whole of the proposed project, including the planning, construction, and ongoing operation.

1.6 ANTICIPATED AGENCY ACTIONS

It is the intent of this CEQA document to enable the SAUSD and responsible agencies to evaluate the environmental impacts of the proposed project, thereby enabling them to make informed decisions with respect to the requested entitlements, permits, or approvals. Agency actions are identified in Table 2.

Table 2 Anticipated Agency Actions

Lead Agency	Action
Santa Ana Unified School District	Adopt Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.
	Approve Project
Responsible Agencies	**Action**
City of Santa Ana Fire Department	Approval of plans for emergency access and emergency evacuation. DSA approval of the fire/life safety portion of a project requires local fire authority review of: elevator/stair access for emergency rescue and patient transport; access roads, fire lane markings, pavers, and gate entrances; fire hydrant location and distribution; and fire flow (location of post indicator valve, fire department connection, and detector check valve assembly).
City of Santa Ana Public Works Department	Approval of any necessary off-site improvements and construction-related haul route.
California Department of General Services, Division of State Architect (DSA)	Plan review and construction oversight, including structural safety, fire and life safety, and access compliance.
California Department of Education, School Facilities Planning Division (CDE)	If the District is requesting funds from the State Allocation Board, it must have the plans reviewed and approved by the CDE (Education Code § 17070.50) prior to submitting a funding request. Approval of design for educational appropriateness.
Santa Ana Regional Water Quality Control Board (SARWQCB)	Issue National Pollution Discharge Elimination System (NPDES) permit; Clean Water Act § 401 Water Quality Certification.
State Water Resources Control Board (SWRCB)	Review of Notice of Intent (NOI) to obtain permit coverage; issuance of general permit for discharges of stormwater associated with construction activity; review of Storm Water Pollution Prevention Plan (SWPPP).
South Coast Air Quality Management District	Review and file submittals for Rule 403, Fugitive Dust.

2. Environmental Checklist

2.1 PROJECT INFORMATION

1. **Project Title:** Saddleback High School Sports Complex

2. **Lead Agency Name and Address:**
   Santa Ana Unified School District
   1601 East Chestnut Avenue
   Santa Ana, CA 92701

3. **Contact Person and Phone Number:**
   Julie Molloy, Senior Facilities Planner
   (714) 480-5367

4. **Project Location:** Saddleback High School at 2802 S. Flower Street, Santa Ana, Orange County (Assessor's Parcel Number 410-012-06).

5. **Project Sponsor's Name and Address:**
   Santa Ana Unified School District
   1601 East Chestnut Avenue
   Santa Ana, CA 92701

6. **General Plan Designation:** INS (Institutional)

7. **Zoning:** Open Space (O)

8. **Description of Project:**
   The proposed project consists of demolition of demolition of 9 basketball courts, 10 tennis courts, softball field, discus area, shot put throw area, and removal/relocation of 3 large storage containers from the northcentral part of the campus.

   The new Sports Complex would have bleachers for 3,000 spectators (2,000 seats on home bleachers and 1,000 seats on visitor bleachers), press box, public address system, four poles with field lights, concession building (including concession/ticket and storage spaces, restrooms, and team room), 8-foot-high chain-link fence with six gates, a discus cage and ring, and a shot put throw ring.

9. **Surrounding Land Uses and Setting:**
   Surrounding land uses near the Saddleback High School campus include a park (aka Segerstrom Triangle), single- and multifamily residential, Union Pacific Railroad track right-of-way, Class I Bicycle

2. Environmental Checklist

path, Orange County Flood Control District drainage channel, and a storage facility (Mini U Storage). Saddleback High School was built in 1967 and encompasses approximately 38.6 acres.

10. Other Public Agencies Whose Approval Is Required (e.g., permits, financing approval, or participating agreement): none

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

> Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.94 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Pursuant to Public Resources Code Section 21080.3.1, the District received a request for notification of projects from four tribes: Gabrieleno Band of Mission Indians - Kizh Nation, Torres Martinez Desert Cahuilla Indians, San Gabriel Band of Mission Indians, and Juaneno Band of Mission Indians Acjachemen Nation. The District notified the tribes in a written letter dated February 10, 2021 and delivered via U.S. Post and email. No tribes requested consultation within 30 days of the consultation notification letter. The District is in compliance with Public Resources Code section 21080.3.1

2.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture & Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology & Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology & Water Quality	☐ Land Use & Planning	☐ Mineral Resources
☐ Noise	☐ Population & Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities & Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

2.3 DETERMINATION

On the basis of this initial evaluation:

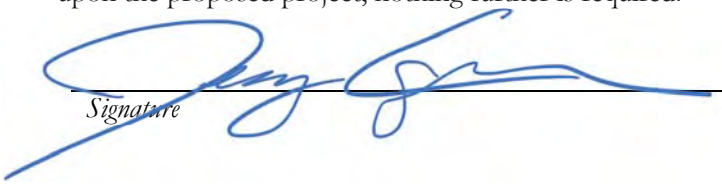
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

5·26·21

Date

2.4 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) **Earlier Analyses Used.** Identify and state where they are available for review.

   b) I**mpacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) **Mitigation Measures.** For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) 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?			X	

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			X	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
VIII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	

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Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X
X. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in a substantial erosion or siltation on- or off-site;			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
iv) impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X
XII. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
XIV. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X
XV. PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?				X
Parks?				X
Other public facilities?				X
XVI. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	
XVII. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	
XVIII. TRIBAL CULTURAL RESOURCES.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				X
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X	
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?		X		
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		X		
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

3. Environmental Analysis

Section 2.4 provided a checklist of environmental impacts. This section provides an evaluation of the impact categories and questions in the CEQA checklist and identifies mitigation measures to reduce significant impacts.

3.1 AESTHETICS

There are no locally designated or defined standards or methodologies for the assessment of aesthetic impacts, and characterizing aesthetics can be highly subjective. The evaluation of aesthetics requires the application of a process that identifies the nearby sensitive receptors and determines their relative views. This analysis attempts to identify and objectively examine factors that contribute to the perception of aesthetics. Nearby residents are considered sensitive viewers. The project-related changes to the aesthetic character of the site and surrounding areas are identified and qualitatively evaluated based on the proposed modifications to the existing setting and the viewer's sensitivity.

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. Vistas provide visual access or panoramic views to a large geographic area. The field of view from a vista location can be wide and extend into the distance. Panoramic views are usually associated with vantage points looking out over a section of urban or natural area that provides a geographic orientation not commonly available. Examples of panoramic views include an urban skyline, valley, mountain range, the ocean, or other water bodies.[16]

The project site is already developed as a high school, and the proposed project would not interfere with any scenic vista. The proposed project would not have a substantial adverse effect on a scenic vista.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. A highway is designated as scenic by the California Department of Transportation depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon a traveler's enjoyment of the view.[17] According to the California

[16] Los Angeles, City of. 2006. L.A. CEQA Thresholds Guide, Chapter A. https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/A07.pdf.

[17] California Department of Transportation. Scenic Highways - Frequently Asked Questions. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways/lap-liv-i-scenic-highways-faq2.

3. Environmental Analysis

Scenic Highway Mapping System, there are no state-designated scenic highways in or near the city.[18] The project site is already developed as a high school and is not located near a scenic highway.[19]

The City has identified scenic corridors that form the image of Santa Ana in the scenic corridors element of the existing General Plan. The scenic corridors are linear features for the movement of people and vehicles, such as streets, highways, and waterways and their associated pedestrian and bicycle trails. The nearest scenic corridor is Bristol Street;[20] the school is not visible from this corridor. The project would not result in impacts to scenic resources within a designated state scenic highway; therefore, no impact would occur.

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

Less Than Significant Impact. The campus is in a developed area that qualifies as an "urbanized area" and is surrounded by residential, commercial, recreational, and institutional uses. The school property is zoned Open Space (O).[21] The sports complex on campus would be visually compatible with the surrounding development. The project would not conflict with applicable zoning and other regulations governing scenic quality; impacts would be less than significant.

d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The two major causes of light pollution are glare and spill light.

The campus is fully developed and in an urban setting. The existing school generates nighttime light from parking lots, building lights (interior and exterior), the football/soccer field, and other sports fields. Surrounding land uses also generate significant light from streetlights, vehicle lights, and building lights.

Terminology

The foot-candle (fc) is a unit based on English measurements. Although foot-candles are considered obsolete in some scientific circles, they are nevertheless used because many existing light meters are calibrated in foot-candles. Moonlight produces approximately 0.01 fc, and sunlight can produce up to 10,000 fc. The general benchmarks for light levels are shown in Table 3.

[18] California Department of Transportation. Scenic Highways - Scenic Highway System Lists. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways
[19] California Department of Transportation. California Highway System. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=026e830c914c495797c969a3e5668538
[20] City of Santa Ana General Plan. Scenic Corridors Element. September 20, 1982. https://www.santa-ana.org/sites/default/files/pb/general-plan/documents/new-elements/ScenicCorridors.pdf
[21] Santa Ana zoning map. March 2020. https://gis-santa-ana.opendata.arcgis.com/datasets/b9605d5895d347e1b02d7c25d5e108c6

Table 3 General Light Levels Benchmark

Outdoor Light	Foot-Candles
Direct Sunlight	10,000
Full Daylight	1,000
Overcast Day	100
Dusk	10
Twilight	1
Deep Twilight	0.1
Full Moon	0.01
Quarter Moon	0.001
Moonless Night	0.0001
Overcast Night	0.00001
Gas station canopies	25–30
Typical neighborhood streetlight	1.0–5.0

Source: National Optical Astronomy Observatory (NOAO). 2021 (accessed). Recommended Light Levels. https://www.noao.edu/education/QLTkit/ACTIVITY_Documents/Safety/LightLevels_outdoor+indoor.pdf.

Horizontal foot-candle. The amount of light received on a horizontal surface such as a roadway or parking lot pavement.

Vertical foot-candle. The amount of light received on a vertical surface such as a billboard or building façade.

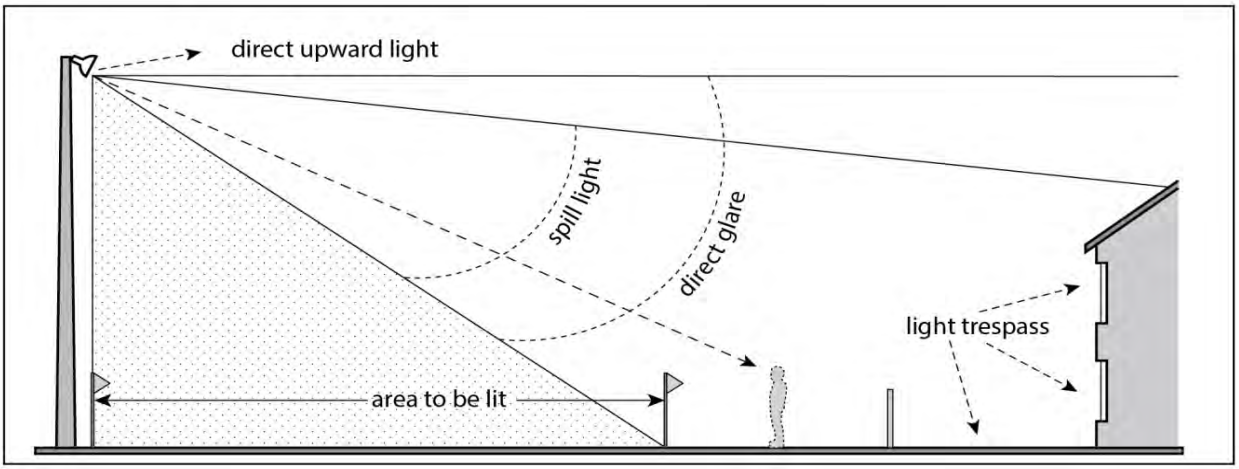
Glare means lighting entering the eye directly from a light fixture or indirectly from reflective surfaces that causes visual discomfort or reduced visibility. Glare can be generated by building-exterior materials, surface-paving materials, vehicles traveling or parked on roads and driveways, and sports lights. Any highly reflective façade material is a concern because buildings can reflect bright sunrays. The concepts of spill light, direct glare, and light trespass are illustrated in Exhibit 1, *Spill Light, Direct Glare, and Light Trespass*, adapted from the Institution of Lighting Engineers.[22]

Direct glare is caused by looking at an unshielded lamp or a light at maximum candlepower. Direct glare is dependent on the brightness of the light source, the contrast in brightness between the light source and the surrounding environment, the size of the light source, and its position.

[22] Institution of Lighting Engineers (ILE). 2003, May. Guidance Notes for the Reduction of Light Pollution. https://www.gov.je/SiteCollectionDocuments/Planning%20and%20building/SPG%20Lightpollution%202002.pdf.

3. Environmental Analysis

Exhibit 1 Spill Light, Direct Glare, and Light Trespass



Illuminance is the amount of light on a surface or plane, typically expressed in a horizontal plane (e.g., on the ground) or in a vertical plane (e.g., on the side of a building).

Lumen means the unit of measure used to quantify the amount of visible light produced by a light source or emitted from a luminaire (as distinct from "watt," a measure of power consumption).

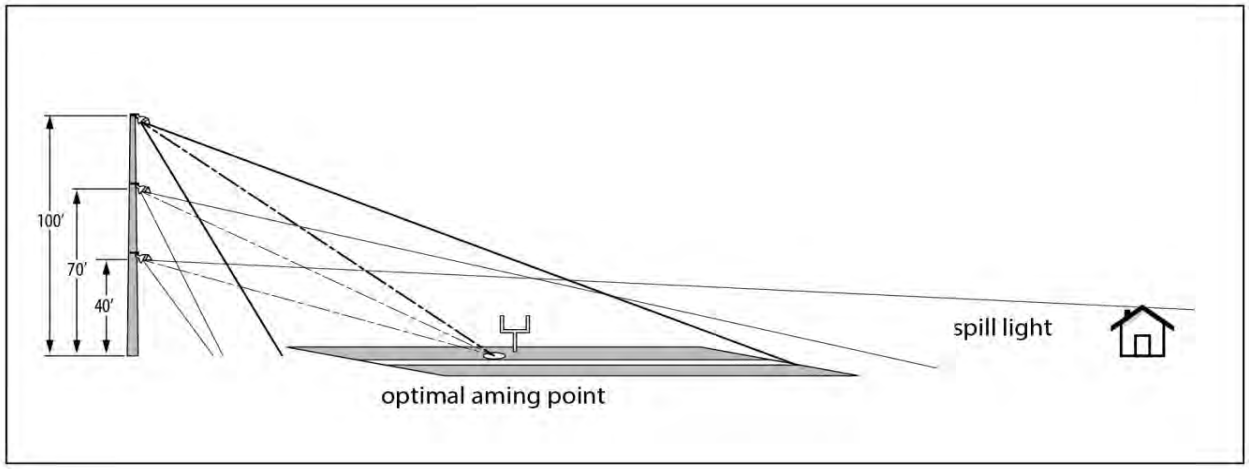
Luminaire means outdoor electrically powered illuminating devices that include a light source, outdoor reflective or refractive surfaces, lenses, electrical connectors and components, and all parts used to mount the assembly, distribute the light, and/or protect the light source, whether permanently installed or portable. An important component of luminaires is their shielding:

- **Fully shielded.** A luminaire emitting no light above the horizontal plane.
- **Shielded.** A luminaire emitting less than 2 percent of its light above the horizontal plane.
- **Partly shielded.** A luminaire emitting less than 10 percent of its light above the horizontal plane.
- **Unshielded.** A luminaire that may emit light in any direction.

Light trespass means light that falls beyond the property on which it originates. The amount of trespass is expressed in foot-candles and is measured in the vertical plane at five feet above grade at the property line of the site on which the light(s) is located. If the adjacent property is a street, alley, or sidewalk, the point at which trespassing light is measured is the center of the street, alley, sidewalk, or right-of-way. Field measurements to determine light trespass compliance do not include the effect of light produced by streetlights.

As a general rule, taller poles allow fixtures to be aimed more directly on the playing surface, which reduces the amount of light spilling into surrounding areas. Proper fixture angles ensure even light distribution across the playing area and reduce spill light, as shown in Exhibit 2, *Pole Heights and Lighting Angles*.

Exhibit 2 Pole Heights and Lighting Angles



Sky Glow is light that reflects into the night sky and reduces visibility of the sky and stars. It is a concern in many jurisdictions, especially those with observatories.

Light

The proposed project would have four 90-foot-tall light poles. Two light poles would be equipped with 15 luminaires per pole, and two light poles would have 14 luminaries per pole, for a total of 58 luminaries on four poles. Light poles would be placed on the opposite ends of the home- and visitor-side bleachers. Details of the lighting specifications are shown in Appendix A, *Lighting Plan*. The intent of the proposed lighting design is to meet the 50-fc average set by the Illuminating Engineering Society of North America (IESNA) Sports and Recreational Area Lighting and the California Interscholastic Federation field lighting recommendations for football games. These events require the highest levels of light for players' safety and ability to play effectively under lights, and for the effective visual observation by spectators.

Some of the design elements for light control and reduced spill lighting impact include mounting height and steep aiming angles, various lighting modes, visors and shielding, reflective housing around the lamp, number of lamps, and appropriate light levels. Higher poles could increase off-site glare and shorter poles could increase off-site spill light and detrimentally affect lighting levels and performance on the field. The proposed lighting poles incorporate all these elements, and each element can be arranged individually to control and minimize any potential spill lighting impacts. Each light assembly would be adjusted, and additional shields would be installed as necessary to ensure that light levels along the sensitive receptors do not exceed the light threshold and to reduce sky glow impacts.

The City of Santa Ana does not have specific spill light threshold levels. For the purposes of this analysis, an industry standard of 2.0 fc was used for a significance determination. The highest levels of nighttime light are anticipated during soccer and football games, when the average level on the field would be approximately 50 fc, and the light levels would range from a minimum of 37 fc to a maximum of 61 fc.

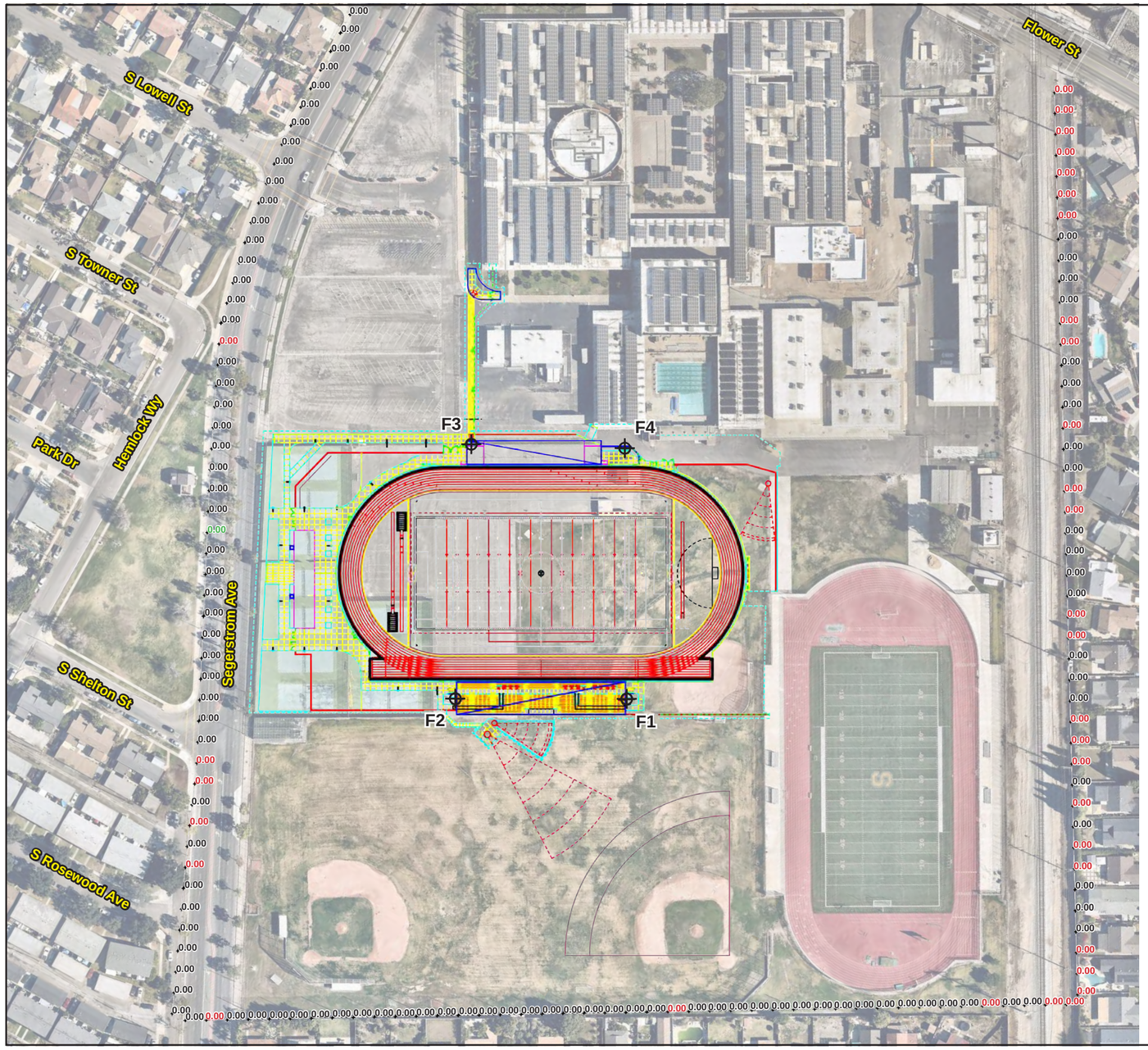
3. Environmental Analysis

As part of the project, an electrical engineer would take field measurements to demonstrate that actual project-related light levels at residential property lines do not exceed 2.0 fc. Each luminaire would be adjusted until light levels at residential property lines are at a minimum while still providing the recommended 50 fc average across the play field. Figure 8, *Photometric Plan*, shows the foot-candle levels at various points near the campus boundaries; as shown, the highest foot-candle level along the property line would be 0.01 fc. Therefore, the foot-candle threshold is not exceeded at any point outside the campus, and spill light impacts would be less than significant.

Glare

Field lighting would include high intensity lamps, which, if not installed properly, could cause glare impacts for people in the surrounding residential areas. The design elements for glare control include mounting height, visors and shielding, and reflective housing around the lamp. The sports lighting incorporates all of these elements, and each element can be arranged individually to control and minimize any potential glare impacts. The luminaires are equipped with large hoods and shields and are specially designed to direct the light onto the track and field with minimum glare. Specifically, each luminaire is equipped with two-tiered glare reflector shields designed to direct light downward onto the field and away from adjacent residences. Precise positioning of the fixtures, accurate focusing of the light beams, and the shielding of the arc of the beams would eliminate glare impacts at surrounding residential uses and roadways. As part of the project, an electrical engineer retained to install the lights would ensure that the lights are properly adjusted and maintained so that glare would not impact the surrounding community. Therefore, glare impacts would be less than significant.

Figure 8 - Photometric Study
3. Environmental Analysis



EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	F1	90'	0'	20'	TLC-BT-575	2	2	0
				80'	TLC-LED-900	2	2	0
				25'	CREE OSQ	1	0	1
				90'	TLC-LED-1500	10	10	0
2	F2-F3	90'	0'	20'	TLC-BT-575	2	2	0
				80'	TLC-LED-900	2	2	0
				90'	TLC-LED-1500	10	10	0
1	F4	90'	0'	20'	TLC-BT-575	2	2	0
				80'	TLC-LED-900	2	2	0
				25'	CREE OSQ	1	0	1
				90'	TLC-LED-1500	10	10	0
4	TOTALS					58	56	2

Saddleback High School Sports Center
Santa Ana, CA

GRID SUMMARY

Name:	**Property Line Spill**
Spacing:	30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	0.000
Maximum:	0.00
Minimum:	0.00
No. of Points:	137

LUMINAIRE INFORMATION

Applied Circuits:	A, B
No. of Luminaires:	**56**
Total Load:	68.92 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s).

0 200
Scale (Feet)

Source: Nearmap, 2021, MUSCO, 2021

3. Environmental Analysis

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3.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Farmland Mapping and Monitoring Program produces maps and statistical data for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status and is divided into five categories: Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, Unique Farmland, and Grazing Land. The best quality land is Prime Farmland.[25] Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Unique Farmland is farmland of lesser quality soils used for the production of the state's leading agricultural crops.

According to the Farmland Mapping and Monitoring Program, the project site is mapped as 'Urban and Built Up Land.'[23] There is no agricultural or farm use on or in the vicinity of the school. No farmland would be converted to nonagricultural use as a result of the proposed project. Therefore, no impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The school is zoned as O (Open Space). The sports complex on the high school campus would not conflict with existing zoning for agricultural use.

Williamson Act contracts restrict the use of privately owned land to agriculture and compatible open-space uses under contract with local governments; in exchange, the land is taxed based on actual use rather than potential market value. There is no Williamson Act contract in effect on the project site. Therefore, the project would not conflict with an existing Williamson Act contract. No impact would occur.

[23] California Department of Conservation. 2016. Farmland Mapping and Monitoring Program. http://www.conservation.ca.gov/dlrp/fmmp.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. Forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."[24] Timberland is defined as "land…which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees"[25].

The project site is zoned O (Open Space) and is developed as a high school; it is not zoned for forest, timberland, or timberland production. No impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The school; campus does not contain forest land, and no vegetation on-site is cultivated for forest resources. The project would not result in the loss or conversion of forest land. No impact would occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. There is no mapped farmland or forest land on or near the campus, and the project would not indirectly cause conversion of such land to non-agricultural or non-forest use. No impact would occur.

3.3 AIR QUALITY

The Air Quality section addresses the impacts of the proposed project on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthful pollutant concentrations. A background discussion on the air quality regulatory setting, meteorological conditions, existing ambient air quality in the vicinity of the project site, and air quality modeling can be found in Appendix B.

The primary air pollutants of concern for which ambient air quality standards (AAQS) have been established are ozone (O_3), carbon monoxide (CO), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and lead (Pb). Areas are classified under the federal and California Clean Air Act as either in attainment or nonattainment for each criteria pollutant based on whether the AAQS have been achieved. The South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (South Coast AQMD), is designated nonattainment for O_3, and $PM_{2.5}$ under the California and National AAQS, nonattainment for PM_{10} under the California AAQS, and nonattainment for lead (Los Angeles County only) under the National AAQS.[26]

[24] California Public Resources Code § 12220[g]
[25] California Public Resources Code § 4526
[26] California Air Resources Board (CARB). 2017, October 18. Area Designations Maps/State and National. http://www.arb.ca.gov/desig/desig.htm.

Furthermore, the South Coast AQMD has identified regional thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors, including VOC, CO, NO_x, SO_X, PM_{10}, and $PM_{2.5}$. Development projects below the regional significance thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation. Where available, the significance criteria established by the South Coast AQMD may be relied upon to make the following determinations.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The South Coast AQMD adopted the 2016 Air Quality Management Plan (AQMP) on March 3, 2017. Regional growth projections are used by South Coast AQMD to forecast future emission levels in the SoCAB. For southern California, these regional growth projections are provided by the Southern California Association of Governments (SCAG) and are partially based on land use designations in city/county general plans. Typically, only large, regionally significant projects have the potential to affect the regional growth projections. In addition, the consistency analysis is generally only required in connection with the adoption of general plans, specific plans, and significant projects.

The proposed project would involve the construction and operation of a high school sports complex, which would not directly or indirectly result in population growth. Thus, the proposed project is not considered a project of statewide, regional, or areawide significance that would require intergovernmental review under Section 15206(b) of the CEQA Guidelines. The project would not have the potential to substantially affect SCAG's demographic projections. Additionally, as demonstrated below in Sections 3.3(b), the regional emissions that would be generated by the operational phase of the proposed project would be less than the South Coast AQMD emissions thresholds and would therefore not be considered by South Coast AQMD to be a substantial source of air pollutant emissions that would have the potential to affect the attainment designations in the SoCAB. Therefore, the proposed project would not affect the regional emissions inventory or conflict with strategies in the AQMP. Impacts would be less than significant.

b) 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?

Less Than Significant Impact. The following describes project-related impacts from regional short-term construction activities and regional long-term operation of the proposed project.

Regional Short-Term Construction Impacts

Construction activities would result in the generation of air pollutants. These emissions would primarily be 1) exhaust from off-road diesel-powered construction equipment; 2) dust generated by construction activities; 3) exhaust from on-road vehicles; and 4) off-gassing of volatile organic compounds (VOC) from paints and asphalt.

Construction activities to develop the sports complex are anticipated to disturb about 6.4 acres. The project would involve demolition and debris haul, site preparation, grading and grading soil haul, athletic fields

installation and building construction, architectural coating, and paving. For the purposes of analysis, it was assumed that the construction would start in the last quarter of 2021 and finish in the first quarter of 2023. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2.25, and are based on the CalEEMod default construction duration, normalized to fit the project's preliminary construction period, and CalEEMod default phasing and equipment mix. Construction emissions modeling is shown in Table 4, which shows that maximum daily emissions for VOC, NO_x, CO, SO_2, PM_{10}, and $PM_{2.5}$ from construction-related activities would be less than their respective South Coast AQMD regional significance threshold values. Short-term air quality impacts from project-related construction activities would be less than significant.

Table 4 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lb/day)[a,b]					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 2021						
Demolition and Debris Haul	3	35	23	<1	3	2
Site Preparation 2021	4	41	22	<1	10	6
Year 2022						
Site Preparation 2022	3	33	20	<1	10	6
Grading and Grading Soil Haul	2	23	16	<1	4	2
Athletic Fields Installation and Building Construction 2022	2	16	17	<1	1	1
Paving 2022	1	11	15	<1	1	1
Year 2023						
Paving 2023	1	10	15	<1	1	1
Architectural Coating	3	1	2	<1	<1	<1
Maximum Daily Construction Emissions						
Maximum Daily Emissions	4	41	23	<1	10	6
South Coast AQMD Regional Construction Threshold	75	100	550	150	150	55
Significant?	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2.25.

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

[b] Includes implementation of fugitive dust control measures required by South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186–compliant sweepers.

Long-Term Operation-Related Air Quality Impact

Typical long-term air pollutant emissions are generated by area sources (e.g., landscape fuel use, aerosols, architectural coatings, and asphalt pavement), energy use (natural gas), and mobile sources (i.e., on-road vehicles). The proposed project would result in the development of a sports complex with nighttime lighting and a concession building on the project site. The proposed building would, at minimum, be designed and built to meet the 2019 Building Energy Efficiency Standards and the 2019 California Green Building Standards Code (CALGreen). As shown in Table 5, it is anticipated that operation of the proposed project would result in

overall minimal emissions and would not exceed the South Coast AQMD regional operation-phase significance thresholds. Therefore, impacts to the regional air quality associated with operation of the project would be less than significant.

Table 5 Maximum Daily Regional Operation Emissions

Source	Maximum Daily Emissions (lbs/day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.}$
Max Daily Emissions						
Area	<1	<1	<1	<1	<1	<1
Energy[a]	<1	<1	<1	<1	<1	<1
Mobile[b]	4	3	44	<1	16	4
Total	4	3	44	<1	16	4
South Coast AQMD Regional Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2.25.
Notes: lbs: Pounds. Highest winter or summer emissions are reported.
[a] For purposes of this analysis, the proposed sports complex is assumed to be designed and built to meet the 2019 Building Efficiency Standards and CALGreen Code.
[b] For purposes of this analysis, mobile trips were based on a maximum capacity event with 3,000 spectators.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The proposed project could expose sensitive receptors to elevated pollutant concentrations if it causes or significantly contributes to elevated pollutant concentration levels. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects.

Construction LSTs

Localized significance thresholds (LST) are based on the California AAQS, which are the most stringent AAQS to provide a margin of safety in the protection of public health and welfare. They are designated to protect sensitive receptors most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and people engaged in strenuous work or exercise. The screening-level construction LSTs are based on the size of the project site, distance to the nearest sensitive receptor, and Source Receptor Area (SRA). The nearest off-site sensitive receptors are the residences along Segerstrom Avenue to the northwest of the project site.

Air pollutant emissions generated by construction activities would cause temporary increases in air pollutant concentrations. Table 6 shows that the maximum daily construction emissions (pounds per day) for NO_x, CO, PM_{10}, and $PM_{2.5}$ construction emissions would be less than their respective South Coast AQMD screening-level LSTs. Therefore, air quality impacts from project-related construction activities would be less than significant.

3. Environmental Analysis

Table 6 Localized Construction Emissions

Construction Activity	Pollutants(lbs/day)[a]			
	NO_X	CO	PM_{10}[b]	$PM_{2.5}$[b]
South Coast AQMD ≤1.00 Acre LST	81	485	9.75	3.72
Demolition and Demolition Haul	31	22	2.64	1.61
Paving 2022	11	15	0.57	0.52
Paving 2023	10	15	0.51	0.47
Architectural Coating	1	2	0.07	0.07
Exceeds LST?	No	No	No	No
South Coast AQMD 1.31-Acre LSTs	92	557	11.50	4.26
Athletic Fields Installation and Building Construction	16	16	0.81	0.76
Exceeds LST?	No	No	No	No
South Coast AQMD 2.50 Acre LST	126	805	18.07	5.94
Grading and Grading Soil Haul	21	15	3.75	2.31
Exceeds LST?	No	No	No	No
South Coast AQMD 3.50-Acre LSTs	149	984	23.52	6.94
Site Preparation 2021	40	21	9.77	6.13
Site Preparation 2022	33	20	9.34	5.73
Exceeds LST?	No	No	No	No

Sources: CalEEMod Version 2016.3.2.25.
South Coast Air Quality Management District (South Coast AQMD). 2008, July. Final Localized Significance Threshold Methodology.
South Coast Air Quality Management District (South Coast AQMD). 2011. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds.
Notes: In accordance with South Coast AQMD methodology, only onsite stationary sources and mobile equipment are included in the analysis. For the project site in SRA 17, NO_x and CO screening-level LSTs are based on an 82 ft receptor (students), while PM_{10} and $PM_{2.5}$ screening-level LSTs are based on a 141 ft receptor (residences) as students would not be on campus 24 hours per day.
[a] Based on the preliminary information provided by the District. Where specific information for project-related construction activities or processes was not available modeling was based on CalEEMod defaults. These defaults are based on construction surveys conducted by the South Coast AQMD.
[b] Includes fugitive dust control measures required by South Coast AQMD under Rule 403, such as watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186–compliant sweepers.

Construction Health Risk

Emissions from construction equipment primarily consist of diesel particulate matter (DPM). In 2015, the Office of Environmental Health Hazards Assessment adopted guidance for preparation of health risk assessments, which included the development of a cancer risk factor and noncancer chronic reference exposure level for DPM over a 30-year time frame.[27] The proposed project is anticipated to be completed in approximately 14 months, which would limit the exposure of on-site and off-site receptors. Furthermore, construction activities would not generate on-site exhaust emissions that would exceed the screening-level construction LSTs. Currently, South Coast AQMD does not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project. Thus, construction emissions would not pose a health

[27] Office of Environmental Health Hazard Assessment (OEHHA). 2015, February. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments: Appendix D. https://oehha.ca.gov/media/downloads/crnr/2015gmappendices.pdf.

risk to on-site and off-site receptors, and project-related construction health impacts would be less than significant.

Operation LSTs

Operation of the proposed project would not generate substantial emissions from on-site stationary sources. Land uses that have the potential to generate substantial stationary sources of emissions include industrial land uses, such as chemical processing and warehousing operations where truck idling would occur on-site and would require a permit from South Coast AQMD. The proposed project does not fall within these categories of uses. While operation of the new buildings would use standard on-site mechanical equipment such as heating, ventilation, and air conditioning equipment, air pollutant emissions would be nominal. Localized air quality impacts related to operation-related emissions would be less than significant.

Carbon Monoxide Hotspots

Vehicle congestion has the potential to create pockets of CO called hotspots. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles are backed-up and idle for longer periods and are subject to reduced speeds. These pockets could exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations.

The SoCAB has been designated attainment under both the national and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—to generate a significant CO impact.[28] The project-related 600 new PM peak-hour vehicle trips would be minimal compared to the AAQS screening levels. The project would not substantially increase CO hotspots at intersections, and impacts would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. The proposed project would not result in objectionable odors. The threshold for odor is if a project creates an odor nuisance pursuant to South Coast AQMD Rule 402, Nuisance, which states:

> A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

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

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed project involves construction of a sports complex and would not fall within the types of land uses typically associated with generating objectionable odors. Emissions from construction, such as diesel exhaust and volatile organic compounds from architectural coatings and paving activities, may generate odors. However, these odors would be low in concentration, temporary, and would not affect a substantial number of people. Odor impacts would be less than significant.

3.4 BIOLOGICAL RESOURCES

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. The project site is already developed with athletic facilities as part of the high school campus. The project would not result in direct or indirect impacts on any candidate, sensitive, or special status species or the elimination or modification of any natural habitat that might provide habitat for any sensitive or special status species.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. Sensitive natural communities are communities that are considered rare in the region by regulatory agencies; known to provide habitat for sensitive animal or plant species; or known to be important wildlife corridors. Riparian habitats occur along the banks of rivers and streams. No sensitive natural community or riparian habitat is on the school campus, and no impact would occur.

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

No Impact. Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. The project site is currently developed and does not contain any wetland resources or other natural habitat. The project would not have an adverse effect on federally protected wetlands. No impacts would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. Wildlife corridors link areas of natural habitats separated by rugged terrain, changes in vegetation, or human disturbance. Corridors accommodate animal movement to enhance genetic interchange and recolonization of species and provide buffers for species populations to use in response to environmental changes and natural disasters. Large corridors (often referred to as habitat or landscape linkages) can provide both transitory and resident habitat for a variety of species. The project site is an existing high school and does not provide any natural habitats. No impact would occur.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The project site is already developed with athletic facilities as part of the high school campus. There are no protected biological resources within the school boundaries. In addition, the City of Santa Ana Municipal Code does not provide tree preservation policies or ordinances regarding non-street trees or nonpublic trees. No impact would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The project site is already developed. The City of Santa Ana is a built-up urban community and is not included in an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. No impacts would occur.

3.5 CULTURAL RESOURCES

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

No Impact. Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally, a resource is considered "historically significant" if it meets one of the following criteria:

i) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

ii) Is associated with the lives of persons important in our past;

iii) Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values;

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

3. Environmental Analysis

The project site is already developed as part of Saddleback High School campus. The high school is not listed under the National Register of Historic Places or the California Register of Historic Resources as having historical significance.[29] Although the high school was built in 1967, it is not listed in the city's historic resource listings.[30] No impact to historical resources would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less Than Significant Impact. Archaeological resources are cultural resources of prehistoric or historic origin that reflect human activity. Archaeological resources include both structural ruins and buried resource (buildings, structures, objects, and sites of the built environment). The term "unique archaeological resources" is defined in PRC § 21083.2(g) as:

> … 'unique archaeological resources' means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
>
> (1) Has information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
>
> (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
>
> (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

The project site is already developed, and the land has had extensive excavation and grading for construction of the school. The project would require limited excavation for the concession stand, utilities, and bleacher and light-pole-footing installation. Because of the previous earthwork, it is highly unlikely that any archaeological resources would be discovered during project construction. However, if a potential archaeological find is discovered, standard practice dictates that construction be stopped or temporarily diverted in the vicinity of the find until a qualified archaeologist can analyze the find. And if artifacts are uncovered and determined to be significant, pursuant to CEQA Guidelines Sections 15064.5 and 15126.4(b), an archaeological observer will determine appropriate actions for exploration and/or salvage in cooperation with the District. Any subsequent archaeological work at the site would be conducted under the direction of the certified archaeologist. Therefore, impacts related to potential archaeological resources on-site would be less than significant.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. There are no known human remains or cemeteries on the project site. The project site is on a high school campus and has been previously disturbed by construction and earthwork. The

[29] Office of Historic Preservation (OHP). 2019, May 30. California Historical Resources, Listed California Historical Resources, Riverside County. http://ohp.parks.ca.gov/ListedResources/?view=county&criteria=33.

[30] Santa Ana, City of. 2020, February. Historic Resources. https://www.santa-ana.org/pb/planning-division/historic-preservation.

likelihood of human remains being discovered during site clearing and grading activities is considered negligible. However, in the unlikely event that human remains are uncovered, Government Code §§ 27460 et seq. mandate that there shall be no further excavation or disturbance until the Sheriff-Coroner-Public Administrator has determined that the remains are not subject to the provisions of § 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner, and cause of death; and the required recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to their authorized representative, in the manner provided in § 5097.98 of the PRC.

Pursuant to California Health and Safety Code § 7050.5, the coroner shall make a determination within two working days of notification of the discovery of the human remains. If the coroner determines that the remains are not subject to their authority and recognizes or has reason to believe that they are those of a Native American, the coroner shall contact the Native American Heritage Commission by telephone within 24 hours. Human remains impacts would be less than significant.

3.6 ENERGY

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The proposed project would result in short-term construction and long-term operational energy consumption. The following discusses the potential energy demands from activities associated with the construction and operation of the sports complex.

Short-Term Construction Impacts

Construction of the proposed project would create temporary increased demands for electricity and vehicle fuels compared to existing conditions and would result in short-term transportation-related energy use.

Electrical Energy

Electricity use during construction of the proposed project would vary during different phases of construction. The majority of construction equipment during would be gas- or diesel-powered, and electricity would not be used to power most of the construction equipment. Later construction phases could result in the use of electricity-powered equipment for interior construction and architectural coatings. However, it is anticipated that the majority of electric-powered construction equipment would be hand tools (e.g., power drills, table saws) and lighting, which would result in minimal electricity usage during construction activities. Therefore, project-related construction activities would not result in wasteful or unnecessary electricity demands, and impacts would be less than significant.

3. Environmental Analysis

Natural Gas Energy

It is not anticipated that construction equipment used for the proposed project would be powered by natural gas, and no natural gas demand is anticipated during construction. Therefore, impacts would be less than significant with respect to natural gas usage.

Transportation Energy

Transportation energy use during construction of the proposed project would come from delivery vehicles, haul trucks, and construction employee vehicles. In addition, transportation energy demand would come from use of off-road construction equipment. It is anticipated that the majority of off-road construction equipment, such as those used during demolition and grading, would be gas or diesel powered. The use of energy resources by these vehicles would fluctuate according to the phase of construction.

To limit wasteful and unnecessary energy consumption, the construction contractors are anticipated to minimize nonessential idling of construction equipment during construction, in accordance with 13 CCR § 2449. In addition, construction trips would not result in unnecessary use of energy since the project site is centrally located and is served by numerous regional freeway systems (e.g., SR-55 and I-405) that provide the most direct routes from various areas of the region. Furthermore, electrical energy would be available for use during construction from existing power lines and connections, precluding the use of less efficient generators. Moreover, all construction equipment would cease operating upon completion of project construction. Thus, energy use during construction of the proposed project would not be considered inefficient, wasteful, or unnecessary. Impacts would be less than significant.

Long-Term Impacts During Operation

Operation of the proposed project would generate new demand for electricity, natural gas, and transportation energy on the project site. Operational use of energy would include heating, cooling, and ventilation of buildings; water heating; operation of electrical systems, use of on-site equipment and appliances; and indoor, outdoor, perimeter, and sports complex lighting.

Electrical Energy

Operation of the proposed sports complex would consume electricity for various purposes, including but not limited to heating, cooling, and ventilation of buildings, water heating, operation of electrical systems, lighting, and use of on-site equipment and appliances. Electrical service to the proposed project would be provided by Southern California Edison (SCE) through connections to existing off-site electrical lines and new on-site infrastructure. As shown in Table 7, *Electricity Consumption*, implementation of the proposed project would result in 37,218 kilowatt hours of electricity use per year.

Table 7 Electricity Consumption

Land Use	Electricity (kWh/year)
Proposed Project Conditions	
Saddleback High School Sports Complex[a]	37,218
Total	37,218

Source: CalEEMod Version 2016.3.25.
Note: kWh = kilowatt hour(s)
[a] Includes the electricity use from sports complex lighting (13,698 kWh/year).

While the proposed project would result in a higher electricity demand than existing conditions, it would be consistent with the requirements of the Building Energy Efficiency Standards. Additionally, the proposed project would also be required to comply with CALGreen. Therefore, operation of the proposed project would not result in wasteful or unnecessary electricity demands and would not result in a significant impact related to electricity.

Natural Gas Energy

The potential natural gas consumption for the project site is shown in Table 8, *Natural Gas Consumption*. As shown in the table, implementation of the proposed project would generate an average natural gas demand of 46,920 kilo British thermal units per year, primarily due to natural gas use by concessions building. While the proposed project would result in a higher natural gas demand than existing conditions, it would be consistent with the requirements of the Building Energy Efficiency Standards and would not result in wasteful or unnecessary natural gas demands. Therefore, operation of the proposed project would result in less than significant impacts with respect to natural gas usage.

Table 8 Natural Gas Consumption

Land Use	Natural Gas (kBTU/year)
Proposed Project Conditions	
Saddleback High School Sports Complex	46,920
Total	46,920

Source: CalEEMod Version 2016.3.25
Note: kBTU = kilo British thermal units

Transportation Energy

The proposed project would consume transportation energy during operations from the use of motor vehicles. The efficiency of these motor vehicles is unknown, such as the average miles per gallon. Estimates of transportation energy use are based on the overall vehicle miles traveled (VMT) and associated transportation energy use. The project-related VMT would primarily come from the sports complex visitors. As seen in Table 9, the annual VMT for the proposed project is estimated to be 145,134 miles. However, the proposed project involves development of a sports complex for the existing Saddleback High School athletic programs that are currently being held at nearby Segerstrom High School; therefore, the proposed project would benefit the local population by providing closer options for events. The proposed project would not necessarily generate new

trips, but redistribution of trips to a closer location, thus reducing VMT and transportation-related fuel usage. Therefore, it is expected that operation-related fuel usage associated with the proposed project would not be inefficient, wasteful, or unnecessary. Therefore, impacts would be less than significant with respect to operation-related fuel usage.

Table 9 Project Annual Operation-Related Fuel Usage

	Gasoline		Diesel		CNG		Electricity	
	Annual VMT	Annual Gallons	Annual VMT	Annual Gallons	Annual VMT	Annual Gallons	Annual VMT	Annual kWh
Proposed Project[1]								
Passenger Vehicles	139,686	4,667	2,417	135	12	5	3,019	985
Total Annual VMT	139,686 VMT + 2,417 VMT + 12 VMT + 3,019 VMT = 145,134 VMT							

Source: EMFAC2017 v. 1.0.2. Annual VMT is based on data provided by Garland Associates and CalEEMod default trip length.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The state's electricity grid is transitioning to renewable energy under California's Renewable Energy Program. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. Electricity production from renewable sources is generally considered carbon neutral. Executive Order S-14-08, signed in November 2008, expanded the state's renewable portfolios standard (RPS) to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Senate Bill (SB) 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. On September 10, 2018, Governor Brown signed SB 100, which supersedes the SB 350 requirements. Under SB 100, the RPS for publicly owned facilities and retail sellers consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. Additionally, SB 100 established a new RPS requirement of 50 percent by 2026. The bill also established a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under SB 100 the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

The statewide RPS goal is not directly applicable to individual development projects, but to utilities and energy providers such as SCE, which is the utility that would provide all of electricity needs for the proposed project. Compliance of SCE in meeting the RPS goals would ensure the State meets its objective in transitioning to renewable energy. The proposed project also would comply with the latest 2019 Building Energy Efficiency Standards and CALGreen. Therefore, implementation of the proposed project would not conflict or obstruct plans for renewable energy and energy efficiency, and no impact would occur.

3.7 GEOLOGY AND SOILS

The analysis is in this section is based in part of the following technical study:

- *Geotechnical and Geohazard Investigation Report, Saddleback High School Stadium Project, Santa Ana Unified School District,* Converse Consultants, February 24, 2021. (Appendix C)

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. The Alquist-Priolo Earthquake Fault Zoning Act was signed into California law on December 22, 1972. The intent of the Act is to reduce losses from surface fault rupture. California created this law following the destructive 1971 San Fernando earthquake (magnitude 6.6), which was associated with extensive surface fault ruptures that damaged numerous structures.

Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California.[31] Wherever an active fault exists, if it has the potential for surface rupture, a structure for human occupancy cannot be placed over the fault and must be a minimum distance from the fault (generally 50 feet). An active fault, for the purposes of the Alquist-Priolo Act, is one that has ruptured in the last 11,000 years.[32]

The City of Santa Ana is not within a fault-rupture hazard zone as defined by the Alquist-Priolo Special Studies Zones Act.[33] Alquist-Priolo Earthquake Fault Zone impacts would be less than significant.

ii) Strong seismic ground shaking?

Less Than Significant Impact. Southern California is a seismically active region. Impacts from ground shaking could occur many miles from an earthquake epicenter. The potential severity of ground shaking depends on many factors, including the distance from the originating fault, the earthquake magnitude, and the nature of the earth materials beneath a given site.

No active, potentially active, or inactive faults are known to exist in Santa Ana. Two major faults, the Newport-Inglewood Fault Zone at 8 miles and Whittier-Elsinore Fault Zone at 12.5 miles, are the closest

[31] A trace is a line on the earth's surface defining a fault.
[32] California Department of Conservation. Alquist-Priolo Earthquake Fault Zones. https://www.conservation.ca.gov/cgs/alquist-priolo
[33] Santa Ana General Plan. Seismic Safety Element. September 20, 1982. https://www.santa-ana.org/general-plan/current-general-plan

to the City of Santa Ana. The school campus is in Seismic Zone 4 of the California Building Code, as is most of Southern California. The high school campus could be damaged by a large-scale earthquake occurring at a major fault.

The sports complex would result in an increased number of people on campus during varsity football and graduation events; other events are already taking place at the high school. Due to the seismic history of the region, the project would be designed in compliance with seismic requirements of the California Building Code (CBC), Title 24 California Code of Regulations (CCR), and the Division of the State Architect (DSA) criteria for seismic safety. Compliance with established standards would reduce the risk of structural collapse or other shaking related hazards to a less than significant level.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction refers to loose, saturated sand or gravel deposits that lose their load-supporting capability when subjected to intense shaking. Liquefaction potential varies based upon three main contributing factors: 1) cohesionless, granular soils having relatively low densities (usually of Holocene age);[34] 2) shallow groundwater (generally less than 50 feet); and 3) moderate to high seismic ground shaking. Cohesionless and granular soils are sand or gravel, typically with little or no clay content. Soil liquefaction generally occurs in submerged granular soils and non-plastic silts during or after strong ground shaking.

The Seismic Hazards Mapping Act (1990) directed the State Geologist to delineate regulatory "zones of required investigation" to reduce the threat to public health and safety and to minimize the loss of life and property posed by earthquake-triggered ground failures. Zones of required investigation, referred to as "Seismic Hazard Zones" in CCR Article 10, § 3722, are areas shown on Seismic Hazard Zone Maps where site investigations are required to determine the need for mitigation of potential liquefaction and/or earthquake-induced landslide ground displacements.

The project site is within the Newport 7.5 Minute Quadrangle Seismic Hazard Zone map and is in an area designated as susceptible to liquefaction.[35] The current and historical high groundwater level contours are approximately 10.8 feet and 5 feet below the ground surface (bgs), respectively. The project site was analyzed for liquefaction and consequent seismically induced settlement as part of the geotechnical investigation using the following parameters:

- Historical high groundwater level of 5 feet bgs.
- Earthquake moment magnitude of Mw of 7.68.
- Peak ground acceleration (PGA) of 0.656g, where g is the acceleration of gravity.

Based on this analysis, liquefaction at the project site is likely to occur at depths between 40 and 45 feet bgs. The Geotechnical investigation indicates that the project site would be over-excavated and replaced with engineered fill to a minimum depth of three feet below the bottom of foundation, or six feet below

[34] The Holocene epoch began 12,000 to 11,500 years ago.
[35] EQ Zapp: California Earthquake Hazards Zone Application, Earthquake Zones of Required Investigation, Liquefaction Zones, https://maps.conservation.ca.gov/cgs/EQZApp/app/

the lowest adjacent grade, whichever is deeper. Therefore, the potential liquefaction impact at depths between 40 and 45 bgs would not adversely impact the proposed project. The proposed project is required to comply with established CBC and DSA building codes and standards regulating grading and building construction for seismic safety. The project would not subject people or structures to substantial liquefaction hazards, and impacts would be less than significant.

iv) Landslides?

No Impact. Landslides are a type of erosion in which masses of earth and rock move down slope as a single unit. Susceptibility of slopes to landslides and lurching (earth movement at right angles to a cliff or steep slope during ground shaking) depend on several factors that are usually present in combination—steep slopes, condition of rock and soil materials, presence of water, formational contacts, geologic shear zones, and seismic activity.

The school campus and adjacent properties are flat and exhibit no substantial elevation changes or unusual geographic features. In the absence of significant ground slopes, the potential for landslides is considered negligible. No impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Topsoil is the thin, rich layer of soil where most nutrients for plants are found and where most land-based biological activity takes place. The loss of topsoil through erosion is a major agricultural problem. Erosion is a normal and inevitable geologic process whereby earthen materials are loosened, worn away, decomposed, or dissolved; removed from one place; and transported to another. Precipitation, running water, and wind are all agents of erosion. Ordinarily, erosion proceeds imperceptibly, but when the natural equilibrium of the environment is changed, the rate of erosion can be greatly accelerated. Accelerated erosion in a developed area can cause damage by undermining structures; blocking storm drains; and depositing silt, sand, or mud on roads and in tunnels. Eroded materials can eventually be deposited in local waters, where the carried silt remains suspended in the water for some time, constituting a pollutant and altering the normal balance of plant and animal life.

The campus is developed and does not have exposed soil that is susceptible to erosion.

Construction Phase

Construction activities would disturb about 6.4 acres and would remove the existing tennis courts, hardcourts, and turf field, and expose soil to erosion during heavy winds or rainstorms. As part of the project, an erosion control plan would be prepared and implemented. The SAUSD would incorporate best management practices (BMP) to control sediment and erosion and prevent contaminants from draining off-site during construction. Categories of potential BMPs are described in Table 10.

3. Environmental Analysis

Table 10 Construction BMPs

Category	Purpose	Examples
Erosion Controls and Wind Erosion Controls	Cover and/or bind soil surface, to prevent soil particles from being detached and transported by water or wind.	Mulch, geotextiles, mats, hydroseeding, earth dikes, swales.
Sediment Controls	Filter out soil particles that have been detached and transported in water.	Barriers such as straw bales, sandbags, fiber rolls, and gravel bag berms; desilting basin; cleaning measures such as street sweeping.
Tracking Controls	Minimize the tracking of soil off-site by vehicles.	Stabilized construction roadways and construction entrances/exits; entrance/outlet tire wash.
Non-storm Water Management Controls	Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct various construction operations, including paving, grinding, and concrete curing and finishing, in ways that minimize non-stormwater discharges and contamination of any such discharges.	BMPs specifying methods for: paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; concrete curing; concrete finishing.
Waste Management and Controls (i.e., good housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Spill prevention and control, stockpile management, and management of solid wastes and hazardous wastes.

Source: California Stormwater Quality Association (CASQA), California Construction Best Management Practices Handbook, January 2015.

The SAUSD would comply with South Coast Air Quality Management District rules that prohibit earthwork during high wind events. Construction-related erosion impacts would be less than significant.

Operational Phase

Because of the pavement, vegetation, and the flat topography, the existing site does not generate significant wind- or stormwater-related soil erosion. After completion of the project, ground surfaces would be either a building, hardscaped or paved, synthetic track and turf, or maintained landscaping and turf and would not be susceptible to erosion. In addition, the project includes hydrologic features designed to slow, filter, and retain stormwater on-site within landscaping and two detention basins. Operational phase soil erosion impacts would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant Impact. Hazards arising from liquefaction and landslides would be less than significant, as discussed above in Sections 5.7.a (iii) and (iv).

To investigate the subsurface conditions at the project site, 12 exploratory borings (BH-1 through BH-12) were drilled on December 11, 2020, to depths ranging from 5 feet to 51.5 feet bgs. The subsurface soil conditions consisted of artificial fill underlain by native alluvial deposits. Artificial fill was encountered in the borings to a

maximum depth of 6.5 feet bgs. The fill material consists of silt (ML) with sand and gravel, possibly brought to the site during the previous site development. The native alluvium materials within the project limit consist of lean and fat clays, sands, and silts.

Lateral spreading. Seismically induced lateral spreading involves primarily lateral movement of earth materials over underlying materials which are liquefied due to ground shaking. Lateral spreading is demonstrated by near-vertical cracks with predominantly horizontal movement of the soil mass involved. Due to the relatively flat nature of the project site and low potential for liquefaction, as discussed above in Section 3.7(a)(iii), the potential for lateral spreading is low. Impacts would be less than significant.

Subsidence. Land subsidence is a gradual settling or sudden sinking of the earth's surface due to subsurface movement of earth materials.[36] The project site is in an area of land subsidence due to groundwater pumping.[37] The project site is subject to subsidence as the native materials settle from the equipment load applied during grading and the volume of excavated and recompacted soils would decrease. However, because the project site has been previously graded for existing high school development, the Geotechnical Investigation determined subsidence potential at the project site to be negligible.[38] Additionally, the proposed project would be developed in compliance with applicable laws pertaining to school construction, including the California Building Code, and implement recommendations per the final engineering-level geotechnical report. Therefore, project implementation would not pose substantial hazards to people or structures due to ground subsidence, and impacts would be less than significant.

Collapsible Soils. Collapsible soils are typically geologically young, unconsolidated sediments of low density that may compress under the weight of structures. A collapse test was performed to evaluate the moisture sensitivity (collapse/swell potential) for the project site soils and concluded that the on-site soil has slight collapse potential at 0.39 percent.[39] The proposed project would be developed in compliance with applicable laws pertaining to school construction, including the California Building Code, and implement recommendations per the final engineering-level geotechnical report. Therefore, the project would not pose substantial hazards to people or structures due to collapsible soils, and impacts would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. Expansive soils are characterized by their ability to undergo significant volume change (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from rainfall, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may cause unacceptable settlement or heave of structures, concrete slabs, pavements, and track surfaces supported-on-grade over these materials.[40] Soils at the project site are considered to have very low

[36] USGS, Land Subsidence in California. https://www.usgs.gov/centers/ca-water-ls/
[37] US Geological Survey, Land Subsidence in California, Areas of Land Subsidence in California. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html
[38] Converse Consultants. 2021, February 11. Geotechnical and Geohazard Investigation Report, Saddleback High School Stadium Project.
[39] Converse Consultants. 2021, February 11. Geotechnical and Geohazard Investigation Report, Saddleback High School Stadium Project.
[40] Ibid.

expansion potential as the expansion index of the upper five feet of on-site soil was in range of 0.0 to 1.0.[41] Therefore, the project would not expose people or the new school buildings to adverse effects associated with expansive soils. Impacts would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The project site would be served by sewer mains in adjacent roadways. Project development would not use septic tanks or other alternative wastewater disposal systems. No impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. A paleontological resource is a natural resource characterized as faunal or floral fossilized remains but may also include specimens of non-fossil material dating to any period preceding human occupation. These resources are valued for the information they yield about the history of the earth and its past ecological settings. The resources are found in geologic strata conducive to their preservation, typically sedimentary formations. They often appear as simply small outcroppings visible on the surface; other times they are below the ground surface and may be encountered during grading.

The project site is already developed as part of the Saddleback High School campus construction, which included significant subsurface disturbances. Artificial fill was encountered in the borings to a maximum depth of 6.5 feet bgs, underlain by subsurface materials primarily composed of young (Holocene-aged) alluvial and fluvial sedimentary deposits associated with the Santa Ana River floodplain[42]. These deposits primarily consist of unconsolidated to moderately consolidated fine-grained clay, silt, and sand deposits. The proposed project would not result in excavation beyond artificial fill materials; therefore, it is highly unlikely that any paleontological resources would be discovered during construction activities. However, if a potential paleontological find is discovered, standard practice dictates that construction be stopped or temporarily diverted in the vicinity of the find until a qualified paleontologist can analyze the find. And if fossils are uncovered and determined to be significant, the paleontological observer would determine appropriate actions in cooperation with the District for exploration and/or salvage. Any subsequent paleontological work at the site would be conducted under the direction of the certified paleontologist. Therefore, impacts related to potential paleontological resources onsite would be less than significant.

3.8 GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as greenhouse gases (GHGs), into the atmosphere. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG

[41] Ibid.
[42] Ibid.

identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons.[43]

Information on manufacture of cement, steel, and other "life cycle" emissions that would occur as a result of the project are not applicable and are not included in the analysis.[44] Black carbon emissions are not included in the GHG analysis because the California Air Resources Board (CARB) does not include this pollutant in the state's Assembly Bill 32 (AB 32) inventory and treats this short-lived climate pollutant separately.[45] A background discussion on the GHG regulatory setting and GHG modeling can be found in Appendix B to this Initial Study.

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

Project-related construction and operation-phase GHG emissions are shown in Table 11. As shown in the table, the proposed project would generate GHG emissions from vehicle trips (e.g., student drop-off), energy use (indirectly from purchased electricity use and directly through fuel consumed for building heating), and area sources (e.g., landscaping equipment used on-site, consumer products, coatings). For the purposes of this analysis and as seen in Section 3.19, *Utilities and Service Systems*, the sports complex is assumed to already generate water demand and wastewater in addition to solid waste. Upon buildout, events occurring elsewhere in the District would transfer to the proposed sports complex. Thus, operation of the proposed project would not generate any additional water demand, wastewater, or solid waste. Annual average construction emissions were amortized over 30 years and included in the emissions inventory to account for one-time GHG emissions from

[43] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

[44] Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions found that lifecycle analyses was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see California Natural Resources Agency. 2018, November. Final Statement of Reasons for Regulatory Action http://resources.ca.gov/ceqa/docs/2018_CEQA_Final_Statement_of%20Reasons_111218.pdf.). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials are also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (See Governor's Office of Planning and Research (OPR). 2008, June. CEQA and Climate Change: Addressing Climate Change through CEQA Review. Technical Advisory. http://opr.ca.gov/docs/june08-ceqa.pdf.).

[45] Particulate matter emissions, which include black carbon, are analyzed in Section 3.3, Air Quality. Black carbon emissions have sharply declined due to efforts to reduce on-road and off-road vehicle emissions, especially diesel particulate matter. The state's existing air quality policies will virtually eliminate black carbon emissions from on-road diesel engines within 10 years (See California Air Resources Board. 2017, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. https://www.arb.ca.gov/cc/shortlived/shortlived.htm.).

the construction phase of the project.[46] Overall, development and operation of the proposed project would not generate annual emissions that exceed the South Coast AQMD's bright-line threshold of 3,000 metric tons of carbon dioxide equivalency ($MTCO_2e$) per year.[47] Therefore, the proposed project's cumulative contribution to GHG emissions would be less than significant.

Table 11 Project-Related Operation GHG Emissions

Source	GHG ($MTCO_2e$/Year)
Area	<1
Energy[a]	12
Mobile (Vehicle Trips)	42
Solid Waste	0
Water	0
Amortized Construction Emissions[b]	14
Total	67
South Coast AQMD Bright-Line Threshold	3,000 $MTCO_2e$/Yr
Exceeds Bright-Line Threshold?	No

Source: CalEEMod, Version 2016.3.2.25.

Notes: MTons = metric tons; $MTCO_2e$ = equivalent of a metric ton of carbon dioxide

[a] Energy-related emissions reflects annual emissions from lighting calculated off model added to CalEEMod default annual energy emissions.

[b] Total construction emission are amortized over 30 years per South Coast AQMD methodology.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan and SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). A consistency analysis with these plans is presented below.

CARB Scoping Plan

On December 24, 2017, CARB adopted the Final 2017 Climate Change Scoping Plan Update (Scoping Plan) to address the 2030 interim target to achieve a 40 percent reduction below 1990 levels by 2030, established by SB 32.[48] The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

[46] South Coast Air Quality Management District (South Coast AQMD). 2009, November 19. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 14. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2.

[47] South Coast Air Quality Management District (South Coast AQMD). 2010, September 28. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf.

[48] California Air Resources Board. 2017, November. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

Since adoption of the 2008 Scoping Plan to achieve the GHG reduction goals of AB 32, state agencies have adopted programs identified in the plan, and the legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the Corporate Average Fuel Economy standards, and other early action measures as necessary to ensure the state is on target to achieve the GHG emissions reduction goals of AB 32 and SB 32. Also, new buildings are required to comply with the latest applicable Building Energy Efficiency Standards and CALGreen. While measures in the Scoping Plan apply to state agencies and not the proposed project, the project's GHG emissions would be reduced by statewide compliance with measures that have been adopted pursuant to AB 32 and SB 32. Therefore, the proposed project would not obstruct implementation of the CARB Scoping Plan, and impacts would be less than significant.

SCAG's Regional Transportation Plan/Sustainable Communities Strategy

SCAG adopted the 2020-2045 RTP/SCS (Connect SoCal) in September 2020. Connect SoCal finds that land use strategies that focus on new housing and job growth in areas that are rich with destinations and mobility options are consistent with a land use development pattern that supports and complements the proposed transportation network. The overarching strategy in Connect SoCal is to plan for the southern California region to grow in more compact communities in transit priority areas and priority growth areas; provide neighborhoods with efficient and plentiful public transit; establish abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserve more of the region's remaining natural lands and farmlands.[49] Connect SoCal's transportation projects help more efficiently distribute population, housing, and employment growth; forecast development is generally consistent with regional-level general plan data to promote active transportation and reduce GHG emissions. The projected regional development, when integrated with the proposed regional transportation network in Connect SoCal, would reduce per-capita GHG emissions related to vehicular travel and achieve the GHG reduction per capita targets for the SCAG region.

The Connect SoCal Plan does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency to governments and developers. The proposed project would provide a sports complex for existing and future students of Saddleback High School. The project would also serve the local population within the nearby surrounding communities. Serving the local community may reduce vehicle miles traveled by giving students and the community a closer option for events such as after-school sports, games, and public events. Therefore, the proposed project would not interfere with SCAG's ability to implement the regional strategies outlined in the Connect SoCal Plan, and impacts would be less than significant.

[49] Southern California Association of Governments (SCAG). 2020, May 7 (adopted). Connect SoCal Plan: The 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy of the Southern California Association of Governments. https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Less Than Significant Impact. The term "hazardous material" is defined in different ways by different regulatory programs. For purposes of this environmental document, the definition of "hazardous material" is similar to that in the California Health and Safety Code § 25501:

> Hazardous materials that, because of their quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

"Hazardous waste" is a subset of hazardous materials, and the definition is essentially the same as in California Health and Safety Code § 25517 and 22 CCR § 66261.2:

> Hazardous wastes are those that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Construction of the sports complex would not require extensive or ongoing use of acutely hazardous materials or substances. While grading and construction may involve activities requiring the transport, storage, use, or disposal of some hazardous materials, such as onsite fueling or servicing of construction equipment, the activities would be short term and would be subject to federal, state, and local health and safety requirements.

The types of hazardous materials associated with operation of the sports complex would be similar to those on the rest of the campus and limited to chemicals associated with maintenance, janitorial, and repair, such as commercial cleansers, lubricants, paints, etc. All hazardous materials would be in small qualities and stored, handled, and disposed of in accordance with county, state, and federal laws that protect public safety. Furthermore, the storage, handling, and disposal of hazardous materials are regulated by the EPA, Occupational Safety and Health Administration, and the Orange County Environmental Health Services Department. The requirements of these agencies would be incorporated into the design and operation of the complex. This would include providing for and maintaining appropriate storage areas for hazardous materials and installing or affixing appropriate warning signs and labels.

Compliance with applicable health and safety requirements would ensure that hazards to the public, the students, and the environment would not result through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. General construction activities would comply with federal, state, and local health and safety requirements, and these types of routine construction activities are not expected to result in the release of hazardous materials in the environment.

Operation of the sports complex would not result in a significant hazard or release hazardous materials into the environment. Storage, transport, and disposal of hazardous materials on-site would be conducted in accordance with the requirements of the agencies. Compliance with the previously discussed regulations are already standard practice at SAUSD schools, including training school staff to safely contain and clean up hazardous materials spills; maintaining hazardous materials spill containment and cleanup supplies on-site; implementing school evacuation procedures as needed; and contacting the appropriate hazardous materials emergency response agency immediately pursuant to requirements of regulatory agencies. Impacts from reasonably foreseeable upset and accident conditions would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. Project construction would emit diesel exhaust, which is considered hazardous; however, construction would be temporary. Exposure to diesel exhaust would not pose substantial hazards to persons near the site. Project construction would not expose persons on a school campus to substantial hazardous emissions, materials, substances, or waste.

Operation of the sports complex would not emit hazardous emissions, and no significant amounts of hazardous materials, substances, or wastes would be transported, used, or disposed of in conjunction with the facility's operation. Project-related impacts would be less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact. California Government Code § 65962.5 requires that lists of hazardous materials sites be compiled and available to the public: hazardous waste facilities subject to corrective action; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; aboveground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated. Five environmental lists were searched for hazardous materials on the high school:

- GeoTracker. State Water Resources Control Board[50]

[50] State Water Resources Control Board (SWRCB). 2019, May 30. GeoTracker. http://geotracker.waterboards.ca.gov/.

- EnviroStor. Department of Toxic Substances Control[51]
- EJScreen. US Environmental Protection Agency[52]
- EnviroMapper. US Environmental Protection Agency[53]
- Solid Waste Information System (SWIS). California Department of Resources Recovery and Recycling[54]

The high school campus was listed as a leaking underground storage tank cleanup site for potential soil contamination due to gasoline, but the case was closed as of June 1986. Therefore, no adverse impacts are anticipated from this case. No other listings identified the school property. The project would not result in significant impacts to the public or environment. No impacts would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less Than Significant Impact. The school is within an airport land use plan area and within two miles of a public use airport. The nearest airport is John Wayne Airport, approximately 1.8 miles southeast of the high school. Although the school is within the Airport Environs Land Use Plan Height Restriction Zone for John Wayne Airport, it is outside of the John Wayne Airport Impact Zones. Federal Aviation Regulation 77.23 generally requires a 200-foot height restriction for development in the Height Restriction Zone.[55] The maximum height for the new field lighting would be 90 feet. Additionally, the school already exists, and new facilities on the campus would not result in a significant noise impact from the airport. The new school would not result in a safety hazard or excessive noise for people residing or working in the project area. Impacts would be less than significant.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The project would not conflict with any adopted emergency response or evacuation plans. The surrounding roadways would continue to provide emergency access through the area and to surrounding neighborhoods during the project's construction.

No roadway modifications or closures are proposed. The SAUSD would prepare and implement an emergency evacuation plan for the sports complex in accordance with their standard practice and CDE requirements. The

51 Department of Toxic Substances Control (DTSC). 2018. EnviroStor. http://www.envirostor.dtsc.ca.gov/public/.
52 US Environmental Protection Agency (USEPA). 2019. EJSCREEN. https://ejscreen.epa.gov/mapper/.
53 US Environmental Protection Agency (USEPA). 2019. EnviroMapper for EnviroFacts. https://enviro.epa.gov/enviro/em4ef.home
54 California Department of Resources Recycling and Recovery (CalRecycle). Last updated: 2019. SWIS Facticity/Site Search. https://www2.calrecycle.ca.gov/SolidWaste/Site/Search
55 Airport Land Use Commission. Airport Environs. Land Use Plan for John Wayne Airport. Amended April 17, 2008. https://www.ocair.com/commissions/aluc/docs/JWA_AELUP-April-17-2008.pdf; and https://www.ocair.com/generalaviation/docs/deir627/chapters/DPEIR%20627%20JWA%20GIAP_4.6%20Land%20Use%20Planning.pdf

contractor would be required to comply with recommendations from the Orange County Fire Authority (OCFA) for review and approval of emergency response or evacuation plans. Onsite emergency response would continue to be facilitated through the use of the school's driveways, parking lot, and paved areas. The project would not interfere with adopted plans that have been established for response and evacuations. No impacts would occur.

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

No Impact. The school is located in a developed urban community, and no significant areas of brush, grass, trees or other natural fuel sources are near enough to present a significant fire hazard. No impacts would occur.

3.10 HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. A significant impact would occur if the project discharges water that does not meet the quality standards of agencies that regulate surface water quality and discharges into stormwater drainage system.

New development projects may result in two types of water quality impacts: (1) short-term impacts from discharge of soil through erosion, sediments, and other pollutants during construction and (2) long-term impacts from impervious surfaces (buildings, roads, parking lots, and walkways) that prevent water from being absorbed or soaking into the ground, thereby increasing the pollutants in stormwater runoff. Impervious surfaces can increase the concentration of pollutants, such as oil, fertilizers, pesticides, trash, soil, and animal waste, in stormwater runoff. Runoff from short-term construction and long-term operation can flow directly into storm drains, channels, streams, and lakes.

The project would be constructed on an existing school campus, in an area with adjacent paved streets and urban development, and that currently generates nonpoint-source pollutants that are carried by storm and irrigation water into storm drains.

Construction Phase

Clearing, grading, excavation, and construction activities have the potential to impact water quality through soil erosion and silt and debris carried in runoff. Additionally, the use of construction materials, such as fuels, solvents, and paints, may present a risk to surface water quality. Finally, the refueling and parking of construction vehicles and other equipment on-site during construction may result in oil, grease, or related pollutant leaks and spills that may discharge in stormwater runoff. The SAUSD would incorporate BMPs as shown in Table 10, to control sediment, erosion, and hazardous materials contamination of runoff during construction and prevent contaminants from draining off-site. Construction impacts to stormwater quality would be less than significant.

3. Environmental Analysis

Operation Phase

After completion of the project, ground surfaces would be buildings, hardscape (pavers, concrete and asphalt), synthetic turf and track, and maintained landscaping and turf. The project includes hydrologic features designed to retain, filter, and infiltrate stormwater on-site within landscaping and two bioretention basins. One retention basin with a capacity of 1,130 cubic feet (cf) would be located west of the concession building, and another retention basin with 10,120 cf capacity would be located south of the home bleachers. The basins have been designed to hold stormwater from a 25-year storm event. The project would not increase stormwater runoff from the site or carry increased pollutants compared to existing conditions. The project would not substantially degrade surface- or groundwater quality. Water quality impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The high school campus is not used for intentional groundwater recharge. Additionally, groundwater was not encountered during test borings to a maximum depth of 51.1 feet bgs and has historically been at a depth greater than 50 feet bgs; therefore, the site would not provide any recharge.[56] Development of impermeable surfaces would not have a substantial adverse impact on groundwater recharge. The project would not involve groundwater wells and would not directly withdraw water from the groundwater basin. The project would relocate the existing varsity football and graduation events from Segerstrom High School; therefore, the project would not increase regional groundwater demand. The sports complex would not deplete groundwater supplies and would not interfere with groundwater recharge. Impacts to groundwater recharge and groundwater supply would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in a substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Site preparation, grading, and construction activities would disturb and expose soil and could increase soil erosion and sedimentation if effective control measures are not used. As described in Section 3.7(b), the SAUSD would include erosion and sediment control measures during construction to minimize off-site impacts, such as mulch, geotextiles, mats, hydroseeding, earth dikes, swales, straw bales, sandbags, fiber rolls, gravel bag berms, desilting basins, and cleaning measures such as street sweeping (see Table 10). During operation soils would not be exposed on-site and would not be susceptible to erosion or siltation on- or off-site. Erosion and siltation impacts would be less than significant.

[56] Converse Consultants. 2021, February 11. Geotechnical and Geohazard Investigation Report, Saddleback High School Stadium Project.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less Than Significant Impact. Project development would include construction of two retention basins: one with 1,130 cf capacity and one with 10,120 cf capacity. The retention basins would hold stormwater from a 25-year storm event. These bioretention basins would not have outlets and would retain and infiltrate stormwater into the ground. Drainage from the site at project completion would be no more than existing conditions. The project would not result in flooding on- or off-site, and impacts would be less than significant.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. As described under item (ii), stormwater from the sports complex would be directed to two retention basins. The project would not increase stormwater runoff from the site compared to existing conditions; therefore, it would not contribute runoff water that would exceed the capacity of the stormwater drainage system. The project would not generate substantial additional sources of polluted runoff.

iv) Impede or redirect flood flows?

Less Than Significant Impact. The school is delineated as Zone X by the Flood Insurance Rate Map (FIRM) (Map ID# 06059C0259J). Zone X is an area determined to be outside 100-year and 500-year flood hazard zones.[57] The school campus is adjacent to the Santa Ana Delhi Channel, which is in an AE zone. An AE zone is a floodway area that must be kept free of encroachment so that the 1 percent annual chance flood can be carried without substantial increase in flood heights. No changes to the adjacent floodway would result from the project implementation. The sports complex on the high school campus would not impede or redirect flood flows.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. As described under item 3.10(c)(ii), the project would not result in a flood hazard. No large water bodies that could cause a significant flooding impact are in the vicinity of the school. Implementation of the proposed project would not expose people or structures to a significant flooding impact.

Tsunamis are a type of earthquake-induced flooding produced by large-scale sudden disturbances of the sea floor. The school is over seven miles inland; therefore, the site is outside the tsunami hazard zone and would not be affected by a tsunami.

A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water.

[57] Federal Emergency Management Agency (FEMA). 2009, December 3. Flood Insurance Rate Map, Map ID 06059C0259J. National Flood Insurance Program.

There are no bodies of water in the area. There are no reservoirs or water storage tanks at or above ground level that would pose a flood hazard to the site due to a seiche. The project would not release pollutants as the result of floods, tsunami, or seiche. No impact would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. Similar to item 3.10(a), the project would not substantially degrade surface or groundwater quality; therefore, the project would not conflict or obstruct water quality and groundwater management plans; impacts would be less than significant.

3.11 LAND USE AND PLANNING

Would the project:

a) Physically divide an established community?

No Impact. The project site is already developed as part of the existing high school campus. No community would be physically divided, and no impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The project site is already developed as part of the existing high school campus. No land use changes would occur. The sports complex would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

3.12 MINERAL RESOURCES

Would the project:

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

No Impact. An MRZ-2 designation is for areas with significant mineral deposits present, and MRZ-3 is for areas with mineral occurrences of undetermined resource significance.[58] The school is not in an area of known mineral resources (MRZ-2 and MRZ-3 zones)—no active mines or oil fields are mapped anywhere in the city. Additionally, the school property is not available for mining. Therefore, the project would not result in the loss of availability of a known mineral resource valuable to the region and the state, and no impact would occur.

[58] California Geological Survey (CGS). Office of Mine Reclamation (OMR). Mines Online. http://maps.conservation.ca.gov/mol/index.html.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The project site is not designated as an area which could potentially contain a locally important mineral resource, such as petroleum fields, natural gas and geothermal resources, and mineral deposits. The project site is surrounded by urban development. There are no locally important mineral resources on or near the school. Therefore, the project would not cause a loss of availability of a resource, and no impact would occur.

3.13 NOISE

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, the State of California, and the City of Santa Ana have established criteria to protect public health and safety and to prevent disruption of certain human activities. Characterization of noise and vibration, existing regulations, and calculations for construction noise and vibration levels can be found in Appendix D to this Initial Study.

Terminology and Noise Descriptors

The following are brief definitions of terminology used in this chapter:

- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Decibel (dB).** A unitless measure of sound on a logarithmic scale.
- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear. Equivalent Continuous Noise Level (L_{eq}). The energy-average noise level over a specified measurement period (typically one hour). The L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.
- **Equivalent Continuous Noise Level (L_{eq}), also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.
- **Statistical Sound Level (L_n).** The statistical sound levels, or n-exceeded sound levels, are noise metrics that represent fractional percentages of the measurement period that are exceeded for 'n' percent of the time. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time (i.e., half the time the noise level exceeds this level and half the time the noise level is less than this level). This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_{02}, L_{08}, and L_{25} represent the noise levels that are exceeded 2, 8, and 25 percent of the time, respectively (or 1, 5, and

15 minutes per hour). These statistical sound levels are typically used to demonstrate compliance with a noise ordinance for stationary noise sources.

- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the sound levels occurring during the period from 7:00 pm to 10:00 pm, and 10 dB added to the sound levels occurring during the period from 10:00 pm to 7:00 am.

- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

- **L_{max}.** The maximum root-mean-square noise level during a measurement period.

- **Peak Particle Velocity (PPV)**. The peak rate of speed at which soil particles move (e.g., inches per second) due to ground vibration.

- **RCNM.** Federal Highway Administration Roadway Construction Noise Model.

Existing Noise Conditions

Noise monitoring was conducted in the project area during evening hours (when games with sports lighting would occur) on Wednesday, December 16, 2020, as described below. The sound level meter used for noise monitoring (Larson Davis LxT) satisfies the American National Standards Institute standard for Type 1 instrumentation. The sound level meters were set to "slow" response and "A" weighting (dBA). The meters were calibrated prior to and after the monitoring period. All measurements were at least five feet above the ground and away from reflective surfaces. Noise measurement locations are described below and shown in Figure 9, *Approximate Noise Monitoring Locations*, and noise monitoring results are summarized in Table 12. Four short-term (ST) 15-minute noise measurements were conducted.

- **ST-1** was conducted on December 16, 2020, beginning at 7:21 pm. The measurement was taken at the southwestern property line adjacent to residences. Primary noise sources were distant traffic on Segerstrom Avenue and occasional aircraft overflights.

- **ST-2** was conducted on December 16, 2020, beginning at 7:52 pm. The measurement was taken at the northwestern property line adjacent to residences. The primary noise source was traffic on Segerstrom Avenue. Occasional aircraft overflights and dogs barking also contributed to the ambient noise environment.

- **ST-3** was conducted on December 16, 2020, beginning at 8:24 pm. The measurement was taken at the corner of Segerstrom Avenue and Rosewood Avenue in front of a residence. The primary noise source was traffic on Segerstrom Avenue.

- **ST-4** was conducted on December 16, 2020, beginning at 8:54 pm. The measurement was taken in front of 2630 Towner Street at the corner of Hemlock Way. The primary noise source was traffic on Segerstrom Avenue.

Table 12 Short-Term Noise Measurement Results (dBA)

Monitoring Site	L_{eq}	L_{50}	L_{25}	L_8	L_2	L_{max}
ST-1, 7:21 pm	51.8	50.8	52.1	54.0	57.0	63.8
ST-2, 7:52 pm	63.9	58	62.4	65.3	67.6	85.9
ST-3, 8:24 pm	62.8	58.8	63.3	67.1	70.2	78.2
ST-4, 8:54 pm	56.6	54.4	57.5	60.6	62.7	68.3

Note: Noise monitoring conducted on December 16, 2020, during the hours of 7 pm–9 pm.

Applicable Noise Regulations

The City of Santa Ana Municipal Code applies performance standards to stationary (non-transportation) noise sources in Section 18.312 (referred to here as the "Noise Ordinance") to ensure that noise-generating uses do not adversely affect noise-sensitive land uses.

The Noise Ordinance specifies noise level criteria at adjacent properties for a specified time period for residential uses:

- 55 dBA for more than 30 minutes in an hour (the L_{50} level) during daytime hours (7:00 am to 10:00 pm);
- 50 dBA for more than 30 minutes in an hour (the L_{50} level) during nighttime hours (10:00 pm to 7:00 am);
- Above standards plus 5 dBA shall not be exceeded for a cumulative period of more than 15 minutes in any hour (the L_{25} level); or
- The noise standards plus 10 dBA shall not be exceeded for a cumulative period of more than 5 minutes in any hour (the $L_{8.3}$ level); or
- The noise standards plus 15 dBA shall not be exceeded for a cumulative period of more than 1 minute in any hour (the $L_{1.6}$ level); or
- The noise standard plus 20 dBA shall not be exceeded for any period of time (the L_{max} level).

In the event the existing ambient noise level exceeds any of the above noise limit categories, the cumulative period applicable to the category shall be increased to reflect the ambient noise level.

Section 18.314 of the City's Noise Ordinance specifically excludes several noise sources from these standards, including but not limited to noise from:

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a) Activities conducted on the grounds of any public or private nursery, elementary, intermediate or secondary school or college;

(c) Activities conducted at any park or playground, provided such park or playground is owned and operated by a public entity;

(e) Noise sources associated with construction, repair, remodeling, or grading of any real property, provided it does not take place between the hours of 8:00 pm and 7:00 am on weekdays, including Saturday, or any time on Sunday or a Federal holiday.

Would the project result in:

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

Less Than Significant Impact with Mitigation.

Construction Noise

The nearest sensitive noise receptors (residences to the west and northwest) to proposed demolition and construction activities are approximately 600 feet from the center of the construction area. Construction activities are anticipated to last for a total of approximately 14 months. The transport of workers and materials to and from the construction site would incrementally increase noise levels along local roadways. Individual construction vehicle pass-bys may create momentary noise levels of up to approximately 85 dBA (L_{max}) at 50 feet from the vehicle, but these occurrences would generally be short lived and during daytime hours. Therefore, noise impacts from construction-related truck traffic would be less than significant at noise-sensitive receptors along the construction routes, and no mitigation measures would be required.

Noise generated by on-site construction equipment is based on the type of equipment used, its location relative to sensitive receptors, and the timing and duration of noise-generating activities. Each stage of construction involves different kinds of equipment and has distinct noise characteristics. Noise levels from construction activities are typically dominated by the loudest several pieces of equipment. The dominant equipment noise source is typically the engine, although work-piece noise (such as dropping of materials) can also be noticeable.

Figure 9 - Approximate Noise Monitoring Locations
1. Introduction

School Boundary
Project Area
ST-X Short-Term Noise Measurement Locations (4)

0 250
Scale (Feet)

Source: Nearmap, 2021; PlaceWorks, 2021

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The noise produced at each construction stage is determined by combining the L_{eq} contributions from each piece of equipment used at a given time, while accounting for the ongoing time variations of noise emissions (commonly referred to as the usage factor). Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels of up to 85 dBA at 50 feet. However, overall noise emissions vary considerably depending on the specific activity being performed at any given moment. Noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase would result in different noise levels from construction activities at a given receptor. Since noise from construction equipment is intermittent and diminishes at a rate of at least 6 dBA per doubling of distance (conservatively ignoring other attenuation effects from air absorption, ground effects, and shielding effects), the average noise levels at noise-sensitive receptors could vary considerably, because mobile construction equipment would move around the site with different loads and power requirements. Noise levels from project-related construction activities were calculated from the simultaneous use of the three loudest pieces of construction equipment at spatially averaged distances (i.e., from the acoustical center of the general construction site) to the property line of the nearest receptors. Although construction may occur across the entire phase area, the area around the center of construction activities best represents the potential average construction-related noise levels at the various sensitive receptors.

Based on the anticipated construction equipment mix, noise levels at various distances to nearby residences were estimated for each construction phase using the Federal Highway Administration Roadway Construction Noise Model (RCNM). Results of noise modeling indicate that construction noise levels could reach up to 63 dBA L_{eq} at the nearest residences during the demolition phase. Noise levels during grading, building construction, and paving would be lower and would decrease with distance at more distant receptors.

Residents surrounding the replacement park sites would experience increased noise levels during construction. However, impacts would not be considered significant because construction activities would occur during the daytime hours when many people would be out of their houses, and not in the evening or night hours when residential land uses are more sensitive to noise, consistent with the Santa Ana Municipal Code, Section 18.314(e). Additionally, the following best management practices would be taken to further reduce noise levels during construction.

- Prior to the start of and for the duration of construction, the contractor shall properly maintain and tune all construction equipment in accordance with the manufacture's recommendations to minimize noise emissions.

- Prior to use of any construction equipment, the contractor shall fit all equipment with properly operating mufflers, air intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer.

- The construction contractor shall post a sign, clearly visible at the site, with a contact name and telephone number of the District's authorized representative to respond in the event of a noise complaint.

- During construction, the construction contractor shall place stationary construction equipment as far from sensitive receptors as practical and feasible.

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Given the temporary nature of the construction noise, and the adherence to the City of Santa Ana's Municipal Code for construction activities, the proposed project would result in a less than significant noise impact. No mitigation measures are required.

Stationary-Source Noise

Operational stationary noise sources from the proposed sports complex PA system and crowd noise were modeled using the SoundPLAN computer program. SoundPLAN uses industry-accepted propagation algorithms based on International Organization for Standardization and ÖAL-28 standards for outdoor sound propagation. The modeling calculations account for classical sound-wave divergence (spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption and ground effects. SoundPLAN also provides for other correction factors, including level increases due to reflections, source directivity, and source tonality.

As summarized under "Applicable Noise Regulations" (above), activities conducted on the grounds of any public or private nursery, elementary, intermediate or secondary school or college, and activities conducted at any park or playground, provided such park or playground is owned and operated by a public entity, are exempt from the Noise Ordinance exterior noise standards. Activities conducted at the proposed sports complex would be exempt from the City's Noise Ordinance standards, so a threshold of 10 dBA above the ambient is used for periodic increases in ambient noise from proposed sports complex events. An increase of 10 dBA is generally perceived as a doubling of volume. Above a 10 dBA increase, periodic events (such as sports complex events) would be considered significant.

Noise modeling was conducted for residential locations closest to the project site. The sports field is in an area that is mostly flat. Operation of the sports complex would generate noise associated with crowds and amplified music and speech from the proposed PA system, and would require use of lights in the evening hours. The bleacher and PA noise from the new sports complex was modeled assuming project operational noise between the hours of 7:00 pm and 10:00 pm. The operational noise analysis assumed full capacity of the sports complex. Detailed information about sports complex events is included in Section 1.4, *Project Description*. Each speaker set was modeled as an individual point source, and both bleachers were modeled as area sources. The SoundPLAN modeling outputs are included in Appendix D and the sports complex noise contours are shown Figure 10, *Project Sports Complex Noise Contours*.

As shown in Table 13, *Sports Complex Noise Levels (dBA)*, during short-term noise monitoring in the project vicinity, noise levels ranged from approximately 51.8 to 63.9 dBA L_{eq}. Results of SoundPLAN modeling indicate that future operational noise levels from a full-capacity sports complex event are predicted to increase ambient noise levels up to 11 dBA L_{eq} in the vicinity of ST-1 at the southwestern property line with residences (see Figure 9, *Approximate Noise Monitoring Locations*. This would exceed the significance threshold of 10 dBA for periodic events. Special events of less than full capacity would be expected to increase ambient noise levels to a lesser degree. Therefore, because operational noise from special events would cause a periodic substantial increase in ambient noise levels, this impact would be considered significant. However, with incorporation of Mitigation Measure NOI-1, the ambient noise increase at the nearby residences would be kept to 10 dBA or less. Therefore, this impact would be reduced to a less than significant level.

Table 13 Sports Complex Noise Levels (dBA)

Location	Measured (L_{eq})	Modeled (L_{eq})	Increase (dBA)
ST-1	51.8	63	11.2
ST-2	63.9	62.2	0
ST-3	62.8	65.2	2.4
ST-4	56.6	64.1	7.5

Note: **Bold** = Exceedance of 10 dBA threshold.

Project-Related Roadway Noise

Cumulative traffic noise would increase on roadway segments in the traffic study area based on traffic volume data provided by Garland Associates and the following formula: 10*LOG (2023 With Project/Existing). These are the periodic nose increases estimated to be experienced at sensitive receptor locations during special events. The highest traffic noise increase is estimated to be up to 1.1 dBA along Lowell Street north of the project site. A maximum increase of 1.1 dBA on roadway segments would be considered a minor periodic increase in traffic noise, and the project-related roadway noise impact would be less than significant.

Mitigation Measure

NOI-1: Prior to holding the first sports complex event, the Santa Ana Unified School District (District) shall install signs at entry points that state prohibited activities during the event (e.g., use of air horns, unapproved audio amplification systems, bleacher foot-stomping, loud activity in parking lots upon exiting the facility). In addition, and prior to holding the first amplified event at the sports complex, the District sound system contractor shall create a Public Address System Design Plan. This plan shall include a noise limit of 89 dBA L_{eq} at a distance of 25 feet from the PA speakers. Prior to the first sports complex event, the sound system contractor shall perform a system check to verify that the PA system meets this standard. Design measures may include, but are not limited to, bandwidth and peak limiter installation, and speaker angle and directivity techniques.

b) Would the project expose people to or generate excessive groundborne vibration or ground borne noise levels?

Less Than Significant Impact. The proposed project does not include any vibration-generating sources or activities; therefore, no persons would be exposed to excessive groundborne vibration during operation.

Construction activities can generate varying degrees of ground vibration, depending on the construction procedures, construction equipment used, and proximity to vibration-sensitive uses. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. Ground vibrations from construction activities rarely reach levels that can damage structures. "Architectural damage" is defined as minor surface cracks (in plaster, drywall, tile, or stucco) or the sticking of

doors and windows. This is below the severity of "structural damage," which compromises structural soundness or threatens the basic integrity of the building shell. Building damage is typically not a concern for most projects, with the occasional exception of blasting, pile driving, and vibratory rollers during construction (FTA 2018). During paving, the use of a vibratory roller would attenuate to below the FTA threshold of 0.2 inches per second peak particle velocity beyond approximately 25 feet. Since the use of a vibratory roller is not proposed within 25 feet of nearby buildings and structures, this impact would be less than significant.

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

No Impact. The closest airport is the John Wayne Airport, approximately 1.8 miles to the southeast of the project site. However, the project site is outside of the Airport Environs Land Use Plan (AELUP) John Wayne Airport Impact Zones for John Wayne Airport and is outside of the 60 CNEL contour. There are no private airstrips in the vicinity of the project site. No impact would occur, and no mitigation measures are necessary.

3.14 POPULATION AND HOUSING

Would the project:

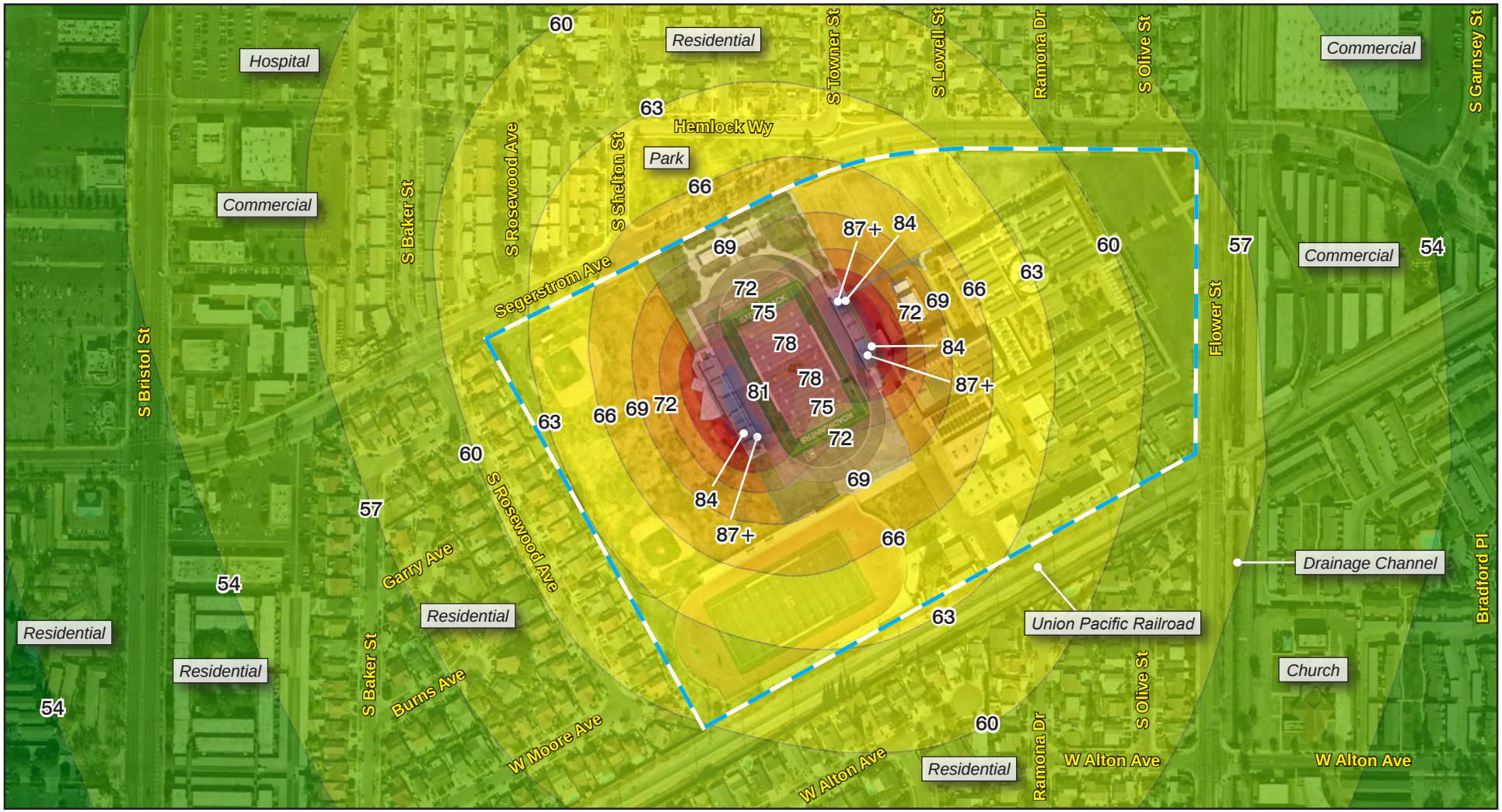
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The project would be served by existing roads and other infrastructure. No new roads, expanded utility lines, or housing would be constructed or required as part of the project. The project would serve students already living in the area. No impacts related to population growth would occur.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. No housing exists on the high school campus. Project development would not require relocation or construction of replacement housing; therefore, no impact would occur.

Figure 10 - Project Sports Complex Noise Contours



Source: Nearmap, 2021

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3.15 PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

Less Than Significant Impact. The Orange County Fire Authority provides fire protection and emergency services to Santa Ana, including the project site. OCFA serves 23 member cities and the unincorporated area of the county by providing fire protection and suppression, inspection services, paramedic emergency medical services, and hazardous material response. The OCFA divides its service area into 6 divisions and 9 battalions, and the project site is part of Division 6, Battalion 9. There are 10 fire stations in the city, and Fire Station No. 76 at 950 W. MacArthur Boulevard is the nearest to the project site, approximately 0.40 mile to the south. Station No. 76 is equipped with one PAU (paramedic assessment unit) truck and staffed with 3 fire captains, 3 fire apparatus engineers, and 6 firefighters.

The proposed project would predominantly serve existing school population and programs at Saddleback High School. Although new events would be added, these events currently take place at Segerstrom High School, approximately one mile to the west, which is also within OCFA's service boundaries. Therefore, events at the new sports complex would not necessarily be new events that require additional fire protection facilities. The District is required to comply with the OCFA review process, and the proposed project would not create the need for additional or expanded OCFA facilities. Impacts would be less than significant.

b) Police protection?

Less Than Significant Impact. Police services are provided by the Santa Ana Police Department (SAPD). SAPD is divided into four geographic policing districts, with patrol officers assigned to teams within each district. The project site is in the Southcoast District.

Police protection services on the school campus are provided by the Santa Ana Unified School District Police Department (District police). The District police department is an approved agency in accordance with the Commission on Peace Officer Standards and Training (P.O.S.T.), and it is the primary law enforcement agency for the District.

The proposed project would result in spectator events and nighttime activities at the high school campus. The proposed project would generally serve the existing school programs and population. The new events to be held at the project site are currently occurring at other stadiums within the District boundaries under the surveillance of the District police. Therefore, the proposed project would reallocate police services rather than create new police service demands. The proposed project would not result in an increase in student population for the District or for the Saddleback High School campus. The District police department is expert in providing protection services in a school environment, including during spectator events, and it is anticipated that efforts necessary to control and manage unwanted behavior by the event attendees would be similar to

efforts at other venues with similar events. And though increases in pedestrian and traffic activities in and around the Saddleback High School campus are expected, such increases would be typical of any school event handled by the District police and would not substantially increase the demand to provide police services. No new or expanded facilities would be necessary, and no adverse physical impacts related to police services would result from the proposed project. Police protection service impacts would be less than significant.

c) Schools?

No Impact. The project would not increase the demand for public schools and would not require construction of new or expanded school facilities. The project would support the existing students within the District boundaries and would not increase the population in the attendance boundary or otherwise increase demand for school services. The sports complex would be a benefit to the existing and future students, staff, and community. Therefore, no impact would occur.

d) Parks?

No Impact. Impacts to public parks and recreational facilities are generally caused by population or employment growth. The project would serve the existing District population and programs as well as community members by allowing the scheduled use of the facility by the community. The project would not induce growth or influence housing in the area to create additional demands for parks. Therefore, no physical impacts to parks and recreation would occur.

e) Other public facilities?

No Impact. Physical impacts to public services are usually associated with population in-migration and growth, which increase the demand for public services and facilities. The project would not result in impacts associated with the provision of other new or physically altered public facilities (e.g., libraries, hospitals, childcare, teen or senior centers). The project would not induce population growth. No impacts to other public facilities would occur.

3.16 RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed project would not lead to an increased demand for neighborhood or regional parks. The demand for such parks is determined by the population of the parks' service areas. The project would not add population to the surrounding area and would serve the existing school population. The existing facilities on the Saddleback High School campus are not being used by the members of the community or students. Students would not use off-campus recreation facilities due to implementation of the proposed project. Therefore, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities and would not cause physical deterioration of these facilities. No impact would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Less than Significant Impact. The project involves the construction of a sports complex to serve the existing high school and community. The environmental effects of the construction and operation are considered throughout the environmental analysis in this Initial Study. The project would not require the construction or expansion of additional recreational facilities that could have an adverse effect on the environment. Impacts would be less than significant.

3.17 TRANSPORTATION

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact. Construction of the project would entail large construction equipment, transportation of equipment to and from the site, and worker vehicles. However, construction traffic would be temporary, and all construction activity and staging areas would be on the project site. Therefore, the proposed project would not obstruct traffic lanes or have any long-term effects on the circulation system.

Roadways

The streets that provide access to the project vicinity include Flower Street, Segerstrom Avenue, Dyer Road, Bristol Street, Main Street, Warner Avenue, Alton Avenue, Lowell Street, and Rosewood Avenue. The following paragraphs provide a brief description of the characteristics of these roadways. Figure 1 of the Traffic Impact Analysis (TIA), included as Appendix E to this Initial Study, illustrates the study area street network and shows the roadway characteristics, such as number of lanes, speed limits, and the lane configuration at each intersection.

- **Flower Street** is a two- to four-lane north-south street that abuts the east side of the school campus. It has four lanes south of Warner Avenue and two lanes north of Warner Avenue. A school access driveway is located on the west side of Flower Street south of Segerstrom Avenue. The speed limit on Flower Street is 40 miles per hour (mph) south of Warner Avenue and 30 mph north of Warner Avenue.

- **Segerstrom Avenue** is a four-lane east-west street that abuts the north side of the school campus. The school's main access driveway is at a signalized intersection on Segerstrom Avenue at Lowell Street. The speed limit on Segerstrom Avenue is 40 mph.

- **Dyer Road** is a four- to six-lane east-west street that is the continuation of Segerstrom Avenue east of Flower Street. It has four lanes between Flower Street and Main Street and six lanes east of Main Street. The speed limit on Dyer Road is 40 mph west of Main Street and 45 mph east of Main Street.

- **Bristol Street** is a six-lane north-south street approximately one-quarter mile west of the school campus. The speed limit on Bristol Street is 40 mph.

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- **Main Street** is a five- to six-lane north-south street approximately one-half mile east of the school campus. It has six lanes south of Dyer Road and five lanes north of Dyer Road (three southbound and two northbound). The speed limit on Main Street is 40 mph north of Dyer Road and 45 mph south of Dyer Road.

- **Warner Avenue** is a four-lane east-west street approximately one-half mile north of the school campus. The speed limit on Warner Avenue is 40 mph.

- **Alton Avenue** is a two-lane east-west street approximately one-eighth mile south of the school campus. The speed limit on Alton Avenue is 25 mph.

- **Lowell Street** is a two-lane north-south street that intersects with Segerstrom Avenue at the school's main access driveway. The access driveway forms the south leg of the signalized Segerstrom Avenue/Lowell Street intersection. The speed limit on Lowell Street is 25 mph.

- **Rosewood Avenue** is a two-lane north-south street approximately 150 feet west of the school campus. It provides access to a residential neighborhood that is immediately west of the school site. Rosewood Avenue intersects with Segerstrom Avenue at a "T" intersection that currently has a stop sign on the Rosewood Avenue approach. The City of Santa Ana is evaluating the feasibility of signalizing the Rosewood Avenue/Segerstrom Avenue intersection. The traffic analysis analyzes this intersection for both the stop sign and traffic signal scenarios. The speed limit on Rosewood Avenue is 25 mph.

Project-Generated Trips

The proposed project would generally accommodate the existing sports programs at Saddleback High School, shown in Table 1. The new events to be held at the proposed sports complex are varsity football games on Friday nights and graduation. These events could attract the maximum capacity of 3,000 spectators. Table 14, *Project-Generated Traffic*, estimates volumes of traffic that would be generated by the proposed project when operating at capacity. As shown, the 3,000-seat sports complex would generate an estimated 600 vehicle trips during the peak hour (570 inbound and 30 outbound). The peak hour for this analysis represents the one-hour time period prior to the beginning of an event, when patrons are traveling to the sports complex, which would typically occur on a Friday evening between 6:00 and 7:00 pm. Approximately the same level of traffic would be generated at the end of an event when patrons are exiting (with the inbound and outbound traffic volumes reversed).

Table 14 Project-Generated Traffic

Facility	Evening Hour – Pre-event			Trips
	Inbound	Outbound	Total	
Trip Generation Rates				
Sports Complex (vehicle trips per seat)	0.19	0.01	0.20	0.47
Generated Traffic Volumes				
Proposed Sports Complex (3,000 seats)	570	30	600	1,410

The sports complex may also generate traffic at other times of the day; however, such traffic activity would be minor compared to a capacity-level event with the traffic volumes shown in Table 14. The estimated traffic volume generated by the sports complex on the day of a capacity-level event would be 1,410 vehicle trips per day. The traffic impacts associated with the sports complex would not occur on a daily basis but only when a major event is held at the facility, which is typically a high school football game. Such events would take place six to ten times throughout the year on a Thursday or Friday evening or a Saturday afternoon. The analysis addressed the Friday evening scenario because the ambient traffic volumes would typically be higher on Friday than on Thursday evening or Saturday afternoon.

In addition to the high school events that would be held at the sports complex in the fall (primarily football games) and soccer games in the winter, the sports complex could also be used for track and field events in the spring and possibly for Pop Warner football on Sundays. However, these events are unlikely to use lights, and the attendance would be substantially lower than for capacity-level events. Therefore, such activities would result in fewer trips than shown in Table 14. The sports complex could also be used for graduation ceremonies, which could potentially attract full-capacity attendance, similar to a football game and with similar impacts, though graduation only happens once a year.

Changes to the California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018 that require all lead agencies to replace automobile delay-based level of service (LOS) with VMT as the new measure for identifying transportation impacts for land use projects in compliance with SB 743. This statewide mandate took effect on July 1, 2020. PRC Section 21099(b)(2) defines automobile delay as described solely by LOS as not "a significant impact on the environment pursuant to [CEQA] except in locations specifically identified in the guidelines." In 2018, the Secretary of the Natural Resources Agency promulgated and certified CEQA Guidelines Section 15064.3 to implement Public Resources Code Section 21099(b)(2). Therefore, traffic impacts based on LOS cannot be considered a significant impact on the environment under CEQA and are not analyzed in this Initial Study. However, the District prepared an analysis of the impacts of the increased traffic on intersection LOS for information purposes only, and this TIA is included as Appendix E to the Initial Study.

Nonmotorized Transportation and Transit

The proposed project would generate a demand for nonmotorized travel because some event patrons would travel to and from the school as pedestrians or on bicycles. The streets in the school vicinity have sidewalks along both sides of the street, and the signalized intersections are equipped with painted crosswalks, pedestrian signals, and pedestrian push buttons to activate the signals. Bike racks are available at the school, and bus loading/unloading zones are provided on-site.

With regard to public transit, the Orange County Transportation Authority (OCTA) operates several bus lines in the vicinity of the school site, including Route 53 on Main Street, Route 57 on Bristol Street, and Route 72 on Warner Avenue. The proposed project may increase pedestrian and bicycle travel during evening events. However, the project site is already operating as a high school with adequate pedestrian and bicycle facilities. Therefore, the proposed sports complex would not adversely affect the performance of these transit or nonmotorized transportation facilities and would not conflict with any plans or policies relative to these transportation modes.

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The project would not conflict with a program, plan, ordinance, or policy addressing the bicycle and pedestrian facilities, and impacts would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Less Than Significant Impact. CEQA Guidelines section 15064.3 eliminates auto delay, LOS, and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts:

> Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided ... (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.

The City of Santa Ana adopted the "Local Guidelines for Implementing the California Environmental Quality Act" in June 2019, which included VMT impact thresholds. Under this threshold, neighborhood schools are presumed to have a less than significant VMT impact and can be screened from further VMT analysis assuming that the project is consistent with SCAG's RTP/SCS. The proposed project is a sport complex project for an existing high school that will serve the existing school programs; therefore, the City's project type screening would apply to the proposed project.

Saddleback High School currently uses Segerstrom High School's sport complex for varsity football games and graduation. Segerstrom High School is approximately one mile west of the project site. Therefore, it is anticipated that implementation of the proposed project would redistribute trips from Segerstrom High School to the project site and would not necessarily create new traffic to generate additional VMT. Additionally, the project site is more centrally located to the population it serves than is Segerstrom High School, potentially reducing the VMT. The project site is also adjacent to two Class I bike paths, one to the south and one to the east, that afford opportunities to reduce VMT.

The proposed project is screened from VMT analysis under the City's screening threshold; therefore, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and impacts would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact.

Construction

During construction, equipment, trucks, and workers would drive to and from the staging area on the project site. Construction trips would be spread throughout the workday and would not occur during peak traffic periods. The District's construction contractor would prepare a construction worksite traffic control plan prior to commencement of construction. It is anticipated that all construction staging would occur within the campus. This plan would establish methods to avoid conflicts between the construction traffic and the existing

vehicle, pedestrian, and bicycle traffic. The District's construction BMPs, identified in the construction worksite traffic control plan, would include the location of any haul routes, hours of operation, protective devices, warning signs, and access to abutting properties. All proposed truck routes would be approved by the City before beginning construction. Additionally, construction fencing would be used on the project to separate construction zones and to ensure safety. Impacts would be less than significant.

Operation

The proposed project would occur within the existing high school and would not modify the existing on- or off-site circulation system. The area of disturbance would generally be limited to the existing tennis courts, hardcourts, and athletic fields, and no sharp curves or dangerous intersections would be created due to project implementation. The project site would continue to be accessed via two driveways on Segerstrom Avenue and one driveway on Flower Street (the southern driveway on Flower Street is gated and closed). There are existing sidewalks and crosswalks that serve the high school. Therefore, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible uses. Impacts would be less than significant.

d) Result in inadequate emergency access?

Less Than Significant Impact. The project would not result in inadequate emergency access. The access and circulation would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. On-site emergency access lanes would be provided for access to the new sports complex from all three existing driveways (two on Segerstrom Avenue and one from Flower Street). Impacts would be less than significant.

3.18 TRIBAL CULTURAL RESOURCES

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

No Impact. AB 52 requires meaningful consultation with California Native American tribes on potential impacts to tribal cultural resources, as defined in PRC Section 21074. Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources.[59] No historical resources or historic properties were discovered within the school campus. The project does not have the potential to result in adverse impacts or effects to significant historical resources or properties.

[59] California Natural Resources Agency. 2019. AB 52 Regulatory Update. http://resources.ca.gov/ceqa/.

No tribal cultural resources on or within one mile of the site are listed in the National Register of Historic Places,[60] California Register of Historical Resources, California State Historical Landmarks, or Points of Historical Interest.[61] The project would not impact tribal cultural resources listed on any of the registers of historic resources. No impact would occur.

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact. As part of the AB 52 process, Native American tribes must submit a written request to SAUSD (lead agency) to be notified of projects within their traditionally and culturally affiliated area. SAUSD must provide written, formal notification to those tribes within 14 days of deciding to undertake a project. The tribe must respond to SAUSD within 30 days of receiving this notification if they want to engage in consultation on the project, and SAUSD must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes when either 1) the parties agree to mitigation measures to avoid a significant effect on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached.

Pursuant to Public Resources Code Section 21080.3.1, the District received a request for notification of projects from four tribes: Gabrieleno Band of Mission Indians - Kizh Nation, Torres Martinez Desert Cahuilla Indians, San Gabriel Band of Mission Indians, and Juaneno Band of Mission Indians Acjachemen Nation. The District notified the tribes in a written letter dated February 10, 2021, and delivered via U.S. Post and email. No tribes requested consultation within 30 days of the consultation notification letter. Project-related impacts to a California Native American tribe resource pursuant to criteria in PRC Section 5024.1(c) would be less than significant.

3.19 UTILITIES AND SERVICE SYSTEMS

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact.

[60] National Park Service. 2020, July 15 (accessed). National Register of Historic Places. https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466

[61] Office of Historic Preservation (OHP). 2020, July 15 (accessed). California Historical Resources. https://ohp.parks.ca.gov/ListedResources/?view=county&criteria=15

Water Treatment

Water treatment facilities filter and/or disinfect water before it is delivered to customers. City of Santa Ana Water Resources Division already provides water services to Saddleback High School. The city maintains 444 miles of transmission and distribution mains, 9 reservoirs with a storage capacity of 49.3 million gallons, 7 pumping stations, 20 wells, and 7 import water connections.[62] The project would result in minimal increase in water use during full-capacity events and would be accommodated by the existing facilities. The increase would be offset by the decrease in demand at Segerstrom High School; therefore, the overall demand for water treatment would not increase. The project would not require the relocation or construction of new or expanded water treatment facilities; impacts would be less than significant.

Wastewater Treatment

The City's wastewater is treated by the Orange County Sanitation District's two regional treatment plants. The school is developed and served by existing wastewater facilities.

The project includes a concession building with restrooms. The project would result in a minimal increase in wastewater generation during full-capacity events and would be accommodated by the existing facilities. The increase would be offset by the decrease in demand at Segerstrom High School; therefore, the overall demand for wastewater treatment would not increase. The project would not require the relocation or construction of new or expanded wastewater treatment facilities; impacts would be less than significant.

Stormwater Drainage

Stormwater from the school is either absorbed into the ground or carried off-site through underground drainage pipes. The project would create significantly more impervious surfaces, such as pavement and buildings, which do not allow stormwater percolation.

The project includes hydrologic features designed to retain, filter, and infiltrate stormwater on-site within landscaping and the two retention basins. The basins would hold stormwater from a 10-year, 5-day storm. The project would not increase stormwater runoff from the site compared to existing conditions. The project would not require the construction of new or expanded off-site stormwater drainage facilities. Impacts would be less than significant.

Electricity and Natural Gas

Electricity is provided by Southern California Edison (SCE) and natural gas by SoCalGas, and the project would connect to existing off-site infrastructure. The electricity and natural gas demands from the proposed project (i.e., LED sports lighting and the concession building) would be minimal compared to the existing high school operation. And the events to be held at the new sports complex are currently being held at Segerstrom High School. Therefore, the proposed project would not expand total demands within the District for electricity or

[62] Arcadis U.S., Inc. 2015 Urban Water Management Plan. June 2016. santa-ana.org/sites/default/files/Documents/urban_water_management_plan.pdf

gas. The project would not require the construction of new or expanded facilities. Impacts would be less than significant.

Telecommunications

The proposed sports complex would be located within the existing high school campus in an urbanized neighborhood. There are existing telecommunications facilities and services in the immediate area for the proposed project to connect to. The project would not require off-site construction or relocation of utilities and therefore would not cause significant environmental effects from such action. Impacts would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. The City's Water Resources Division provides water service within the city's 27-square-mile service area. The majority of city's water demand is from residential uses, which account for approximately 67 percent of the total water demand; other uses combined, such as commercial, institutional, and industrial, make up approximately 33 percent.[63] Landscaping comprises approximately 0.4 percent. The proposed project provides restrooms and drinking fountains, and therefore would result in a minimal increase in water use during full-capacity events. Full-capacity events would occur fewer than 10 times per year. Additionally, the increase would be offset by the decrease in demand at Segerstrom High School. Therefore, the overall demand for water service would not increase, and the proposed project would not affect the city's water supplies during normal, dry, and multiple dry years. It is anticipated that existing water resources would be adequate to handle the proposed project, and impacts would be less than significant.

c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. The proposed project would include a restroom facility, and therefore generate wastewater. Additionally, the new sports complex would serve the existing athletic programs and graduation, which are currently held at Segerstrom High School. Therefore, the minimal wastewater treatment demand would be offset by the decrease in demand at Segerstrom High School. The proposed project would not increase the school's population, or the amount of wastewater treatment required. The project would not affect wastewater treatment capacity. Impacts would be less than significant.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. Solid waste would be generated by the project both on a short-term basis during the project's construction and on a long-term basis during operation. The project would generate some demolition debris from site clearance and waste and debris from construction. However, construction solid

[63] Arcadis U.S., Inc. 2015 Urban Water Management Plan. June 2016. santa-ana.org/sites/default/files/Documents/urban_water_management_plan.pdf

waste generation would be minimal due to the relatively small-scale construction effort and lack of any buildings on the project site to be disturbed by the proposed project. CALGreen Section 5.408.1.1 requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. The proposed project would comply with the required regulation pertaining to construction and demolition waste and would not exceed the capacity of regional landfills or impair the attainment of solid waste reduction goals in the City.

During operation, the project would be served by landfills with sufficient permitted capacity to accommodate the project's solid waste disposal needs. Solid waste generated in Santa Ana is delivered to 17 landfills. Of these, Frank R. Bowerman Sanitary Landfill received the largest amount of waste in 2019 (227,124 tons), and Olinda Alpha Sanitary Landfill received 31,849 tons, the second largest.[64] Solid waste disposed from Santa Ana in 2019 totaled 284,561 tons.[65] AB 939 requires all counties to demonstrate that they have 15 years of available countywide solid waste landfill capacity, either in their jurisdiction or contracted with another entity. Orange County has 15 years of available countywide solid waste landfill capacity at the Olinda Alpha, Frank R. Bowerman, and Prima Deshecha Landfills.[66]

Full-capacity nighttime events that would be held at the proposed sports complex already take place at Segerstrom High School, also in the City of Santa Ana and served by the same landfills. The increase in solid waste generation from the proposed project would be offset by the decrease from Segerstrom High School. Even if new events that are not currently held at Segerstrom High School take place at the new sports complex given the currently scheduled events, the availability would be limited, therefore, the increase in solid waste from these events would be negligible compared to the City's overall solid waste stream, and nearby landfills would not receive a substantial increase in solid waste. The increase in solid waste to area landfills would not be significant, and there are adequate capacities to accommodate the proposed project. The project would not substantially increase solid waste generation in excess of regional landfill infrastructure, and impacts would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. The proposed project is required to comply with federal, state, and local statutes and regulations related to solid waste and would continue this practice. CALGreen Section 5.408 requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operation be recycled and/or salvaged for reuse. The District would also comply with the requirements of AB 341 that mandates recycling for commercial and multifamily residential land uses as well as schools and school districts. Solid waste demand from the proposed sports complex would be minimal and would not impact the City's ability to comply with AB 939 and maintain the 15-year countywide solid waste

[64] California Department of Resources Recycling and Recovery (CalRecycle). 2021, April (accessed). Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility, Year 2019, Jurisdiction, Orange – Santa Ana. https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility

[65] Ibid.

[66] Santa Ana, City of. 2020, August. Santa Ana General Plan Update Draft Program Environmental Impact Report, State Clearinghouse # 2020029087.

landfill capacity. Project development would not conflict with laws governing solid waste disposal, and impacts would be less than significant.

3.20 WILDFIRE

Wildland fire protection in California is the responsibility of either the local government, state, or the federal government. State Responsibility Areas (SRA) are the areas where the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. Local responsibility areas (LRA) include incorporated cities, cultivated agriculture lands, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, and CAL FIRE under contract to local governments. CAL FIRE uses an extension of the state responsibility area fire hazard severity zone model as the basis for evaluating fire hazard in local responsibility areas. The local responsibility area hazard rating reflects flame and ember intrusion from adjacent wildlands and from flammable vegetation in the urban area.

CAL FIRE is mandated by California Public Resources Code Sections 4201 to 4204 and California Government Code Sections 51175 to 51189 to identify fire hazard severity zones (FHSZ) for all communities in California. These are areas of significant fire hazard based on fuels, terrain, weather, and other relevant factors. In SRAs, CAL FIRE has mapped three hazard ranges—moderate, high, and very high. In a local responsibility area, the law only requires identification of very high FHSZs. Local governments accept CAL FIRE's determination or make other, local determinations. The nearest FHSZ in an SRA to Santa Ana is a high FHSZ about 4.0 miles east along the western edge of Loma Ridge. The nearest FHSZ in an LRA is about 3.8 miles from the city boundary at the southern tip of the Peters Canyon Regional Park. Therefore, the City of Santa Ana is not in or near SRAs or lands classified as very high FHSZs.[67,68]

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The project site is not located in or near an SRA or lands classified as very high fire hazard severity zones. No impact pertaining to wildfire would occur.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. The project site is not in or near an SRA or lands classified as very high fire hazard severity zones. No impact pertaining to wildfire would occur.

[67] Office of the State Fire Marshal (CAL FIRE). Fire Hazard Severity Zones Maps. https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/

[68] Santa Ana, City of. 2020, August. Santa Ana General Plan Update Draft Program Environmental Impact Report, State Clearinghouse # 2020029087.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact The project site is not in or near an SRA or lands classified as very high fire hazard severity zones. The project would not require the installation of new infrastructure that may exacerbate fire risk. No impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The project site is not in or near an SRA or lands classified as very high fire hazard severity zones. The project would not result in runoff, postfire slope instability, or drainage changes. No impact would occur.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact. As discussed under Section 3.4, *Biological Resources*, the proposed project would disturb paved surfaces and athletic fields on a high school, and therefore would not degrade the quality of the environment or substantially reduce the habitat of a fish or wildlife species. The project site does not contain a sensitive plant or animal community. As discussed under Section 3.5, *Cultural Resources*, and Section 3.7, *Geology and Soils*, the project site has been disturbed previously, and the proposed project would not disturb soils beyond the fill materials. Therefore, buried archaeological resources and/or fossils are not anticipated. The project would not eliminate important examples of major periods of California history or prehistory.

b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?

Less Than Significant Impact With Mitigation Incorporated. As discussed through this Initial Study, the proposed project would not have short-term and/or long-term environmental impacts without mitigation except in the area of construction and operational noise. With implementation of mitigation measure, long-term operational impact would also be reduced to a less than significant level. Therefore, the proposed project would not result in failure to achieve short-term or long-term environmental goals. Impacts would be less than significant.

c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable

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

Less Than Significant Impact With Mitigation Incorporated. A cumulative impact could occur if the project would result in an incrementally considerable contribution to a significant cumulative impact in consideration of past, present, and reasonably foreseeable future projects for each resource area. Because the project is a school, the cumulative analysis is generally confined to the immediate vicinity or within about a one-mile radius. The District has several past, present, and planned school projects within its attendance boundaries. In consideration of the preceding analysis, the project's contribution to cumulative impacts would be less than significant with mitigation, and therefore project impacts would not be cumulatively considerable.

d) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact With Mitigation Incorporated. The project would comply with applicable local, state, and federal laws governing general welfare and environmental protection. The implementation of required mitigation measures specified in this Initial Study would reduce impacts to less than significant. Project impacts on human beings, either directly or indirectly, would be less than significant.

4. List of Preparers

LEAD AGENCY: SANTA ANA UNIFIED SCHOOL DISTRICT

Jeremy Cogan, Director of Facilities Planning

Julie Molloy, Senior Facilities Planner

Kathleen Gil, Facilities Planning Technician

CEQA CONSULTANT: PLACEWORKS

Dwayne Mears, AICP, Principal

Elizabeth Kim, Senior Associate

John Vang, JD, Senior Associate, Air Quality / GHG

Kristie Nguyen, Project Planner, Air Quality / GHG

Joshua Carman, INCE-USA, Senior Associate, Noise & Vibration

Isabel Garcia, INCE-USA, Associate Planner, Noise & Vibration

Gina Froelich, Senior Editor

Cary Nakama, Graphic Artist

Laura Muñoz, Word Processing

Traffic Subconsultant

Garland Associates, Richard Garland

LPA

Corrie Lindsay, PLA, LEED Green Associate, ISA, CLIA, QSD, BFQP, Project Manager

Musco Lighting

Vashon Alexander, Lighting Engineer

4. List of Preparers

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