

March 2025 | Initial Study/Mitigated Negative Declaration

COSTA MESA HIGH SCHOOL STADIUM EXPANSION

Newport-Mesa Unified School District

Prepared for:

Newport-Mesa Unified School District

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Abbreviations and Acronyms

AAQS	ambient air quality standards
AB	Assembly Bill
AF	acre-feet
AQMD	air quality management district
AQMP	air quality management plan
BMP	best management practices
CAFE	corporate average fuel economy
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDE	California Department of Education
CEQA	California Environmental Quality Act
CGP	Construction General Permit
CMFD	Costa Mesa Fire Department
CMHS	Costa Mesa High School
CMPD	Costa Mesa Police Department
CMSD	Costa Mesa Sanitary District
CNEL	community noise equivalent level
CO	carbon monoxide
CO ₂ e	carbon dioxide equivalent
dB	decibel
dBA	A-weighted decibel
DPM	diesel particulate matter
DSA	Division of State Architect
FEMA	Federal Emergency Management Agency
FHSZ	fire hazard severity zone
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	greenhouse gases
IPCC	Intergovernmental Panel on Climate Change

Abbreviations and Acronyms

LOS	level of service
LST	localized significance thresholds
mgd	million gallons per day
MND	mitigated negative declaration
MRZ	mineral resource zone
MT	metric ton
NAHC	Native American Heritage Commission
NMUSD	Newport-Mesa Unified School District
NO _x	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
O ₃	ozone
PM	particulate matter
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PRD	Permit Registration Document
RCNM	Roadway Construction Noise Model
RPS	renewable portfolio standard
SB	Senate Bill
SCAG	Southern California Association of Governments
SCE	Southern California Edison
SoCAB	South Coast Air Basin
SO _x	sulfur oxides
SQMP	stormwater quality management plan
SRA	source receptor area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USFWS	United States Fish and Wildlife Service
UWMP	urban water management plan
VMT	vehicle miles traveled
VOC	volatile organic compound

1. Introduction

1.1 OVERVIEW

The Newport-Mesa Unified School District (NMUSD or District) proposes to expand the existing Costa Mesa High School Sports Complex at Costa Mesa High School (CMHS)(proposed project). The proposed project would include the installation of additional bleacher capacity for both home and visitor sides, construction of new classrooms and restrooms, installation of new stadium and track improvements, and renovation of the existing tennis courts.

In compliance with the California Environmental Quality Act (CEQA), NMUSD, as lead agency, is preparing the environmental documentation for the proposed project to determine if approval of the requested discretionary actions and subsequent development would have a significant impact on the environment. As defined by Section 15063 of the CEQA Guidelines, an initial study is prepared primarily to provide the lead agency with information to use as the basis for determining whether an environmental impact report, negative declaration (ND), or mitigated negative declaration (MND) would provide the necessary environmental documentation and clearance for the proposed project. This initial study has been prepared to support the adoption of an MND.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT

The environmental compliance process is governed by the CEQA and the CEQA Guidelines (Public Resources Code [PRC], section 21000 et seq.; California Code of Regulations [CCR], Title 14, sections 15000 et seq.). 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). The District is the lead agency under CEQA and is therefore required to conduct an environmental review to analyze the potential environmental effects associated with the proposed project.

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, the District 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.

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. Introduction

- (a) 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 and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code sections 65100 to 65700.
- (b) 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.
- (c) 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. (14 CCR section 15378[a])

The proposed discretionary actions by the project applicant 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.

1.3 INITIAL STUDY

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 a project is covered under a previously prepared EIR. When an Initial Study identifies the potential for immitigable significant environmental impacts, the lead agency must prepare an EIR (14 CCR section 15064); 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 MND that incorporates mitigation measures into the project (14 CCR section 15070).

1.4 MITIGATED NEGATIVE DECLARATION

The MND includes information necessary for agencies to meet statutory responsibilities related to the proposed project. State and local agencies will use the MND when considering any permit or other approvals necessary to implement the project. A list of the environmental topics that have been identified for study in the MND is provided in the Initial Study Checklist (Chapter 4).

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 possible opportunity afforded by the District. The environmental review process provides several opportunities for the public to participate through public notice and public review of CEQA documents and at public meetings.

1. Introduction

1.5 IMPACT TERMINOLOGY

The following terminology is used to describe the level of significance of impacts.

- A finding of **no impact** is appropriate if the analysis concludes that the project would not affect the particular topic area in any way.
- An impact is considered **less than significant** if the analysis concludes that it would cause no substantial adverse change to the environment and requires no mitigation.
- An impact is considered **less than significant with mitigation incorporated** if the analysis concludes that it would cause no substantial adverse change to the environment with the inclusion of environmental commitments or other enforceable mitigation measures.
- **Mitigation Measures.** If, after incorporation and implementation of federal, state, and local regulations, there are still significant environmental impacts, then feasible and project-specific mitigation measures are required to reduce impacts to less than significant levels. Mitigation measures must further reduce significant environmental impacts above and beyond compliance with federal, state, and local laws and regulations. Mitigation under CEQA Guidelines Section 15370 includes:
 - Avoiding the impact altogether by not taking a certain action or parts of an action.
 - Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
 - Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
 - Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
 - Compensating for the impact by replacing or providing substitute resources or environments.

An impact is considered **potentially significant** if the analysis concludes that it could have a substantial adverse effect on the environment. If any impact is identified as potentially significant, an EIR is required.

1.6 PROJECT LOCATION

The Costa Mesa High School campus (CMHS or campus) is at 2650 Fairview Road in the City of Costa Mesa, in Orange County, California. Regional access to the high school is provided by State Route (SR) 55, approximately 0.5 mile to the south; SR-73, about 0.7 mile to the northeast, and Interstate (I) 405, about 0.9 mile to the north of the high school (see Figure 1, *Regional Location*).

The CMHS Sports Complex encompasses approximately 6.5 acres on the southeastern corner of the campus, and the tennis courts encompass approximately 1.5 acres on the northern portion of the campus (project site). The CMHS campus is bounded by Fairview Road to the west, Arlington Drive to the south, David Magnet

1. Introduction

School to the east, and the Jack R. Hammett Sports Complex to the north (see Figure 2, *Local Vicinity*, and Figure 3, *Aerial Photograph*).

1.7 EXISTING CONDITIONS

The project site is developed with a stadium with bleacher seating for 950 spectators. The stadium has synthetic field and rubber track, a press box, concession/restroom building, storage building, sports lighting, and a public announcement (PA) system mounted on the lighting poles. Additionally, the project site consists of an existing tennis court area and parking lots to the west and northwest of the stadium.

1.7.1 Surrounding Land Use

The Orange County Fairgrounds are south of the campus across Arlington Drive; Davis Magnet School borders the project site to the east; Orange Coast College is across Fairview Road to the west of the school grounds; and the Jack R. Hammett Sports Complex is adjacent to the north side of the school. The nearest residential uses are approximately 500 feet north of the campus. Residences in this area front Lorenzo Avenue and Presidio Drive (see Figure 3).

1.7.2 General Plan and Existing Zoning

The project site is designated Public/Institutional in the City of Costa Mesa General Plan and is zoned Institutional and Recreational (I&R). The Public/Institutional designation applies to publicly and privately owned properties that provide recreation, open space, health, and educational opportunities, as well as uses that provide a service to the public. Additionally, the I&R zoning district is intended to allow public and private educational facilities on either public or private property.

Figure 1 - Regional Location

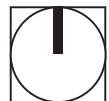


--- County Boundary

Note: Unincorporated county areas are shown in white.

Source: Generated using ArcMap 2022.

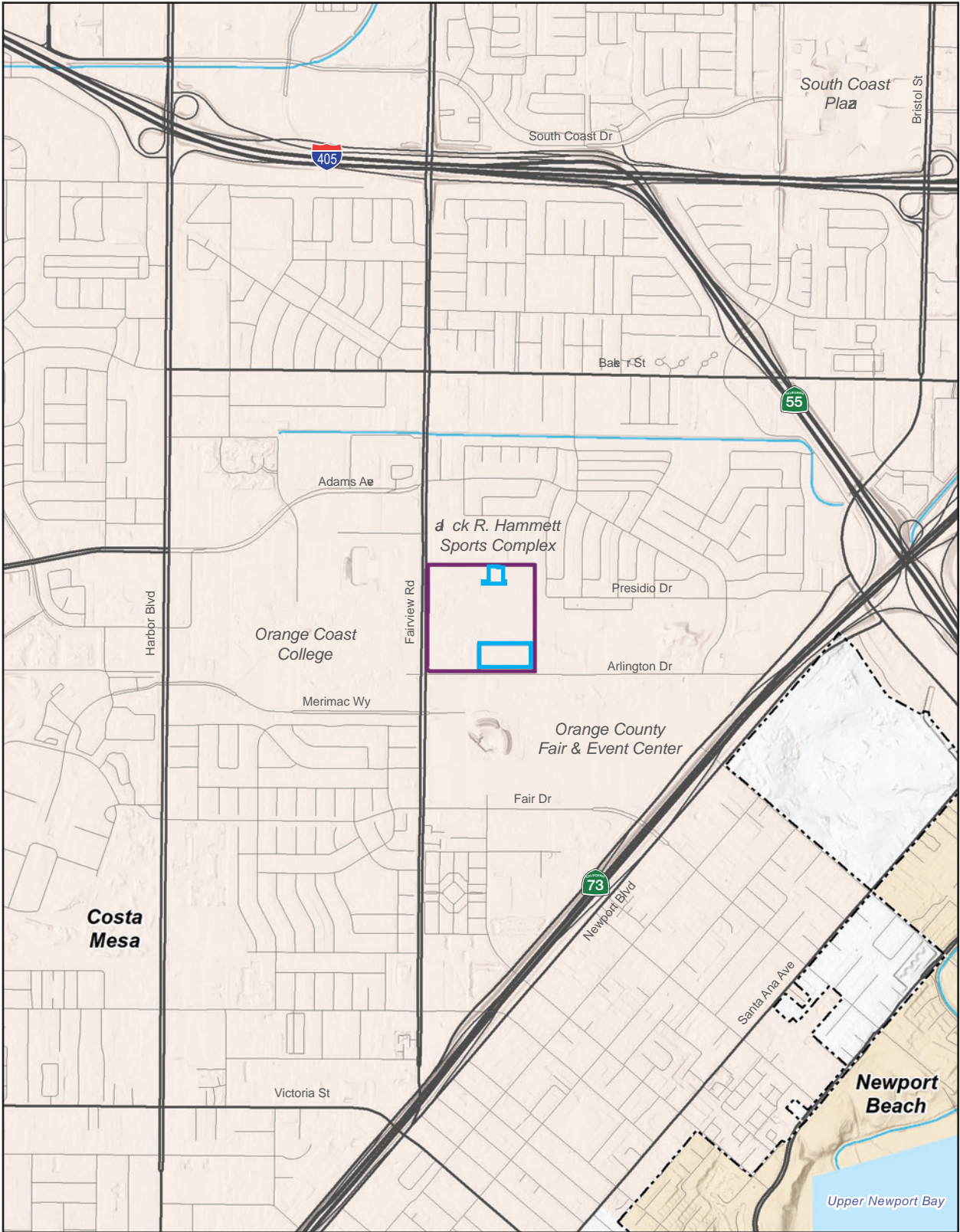
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1. Introduction

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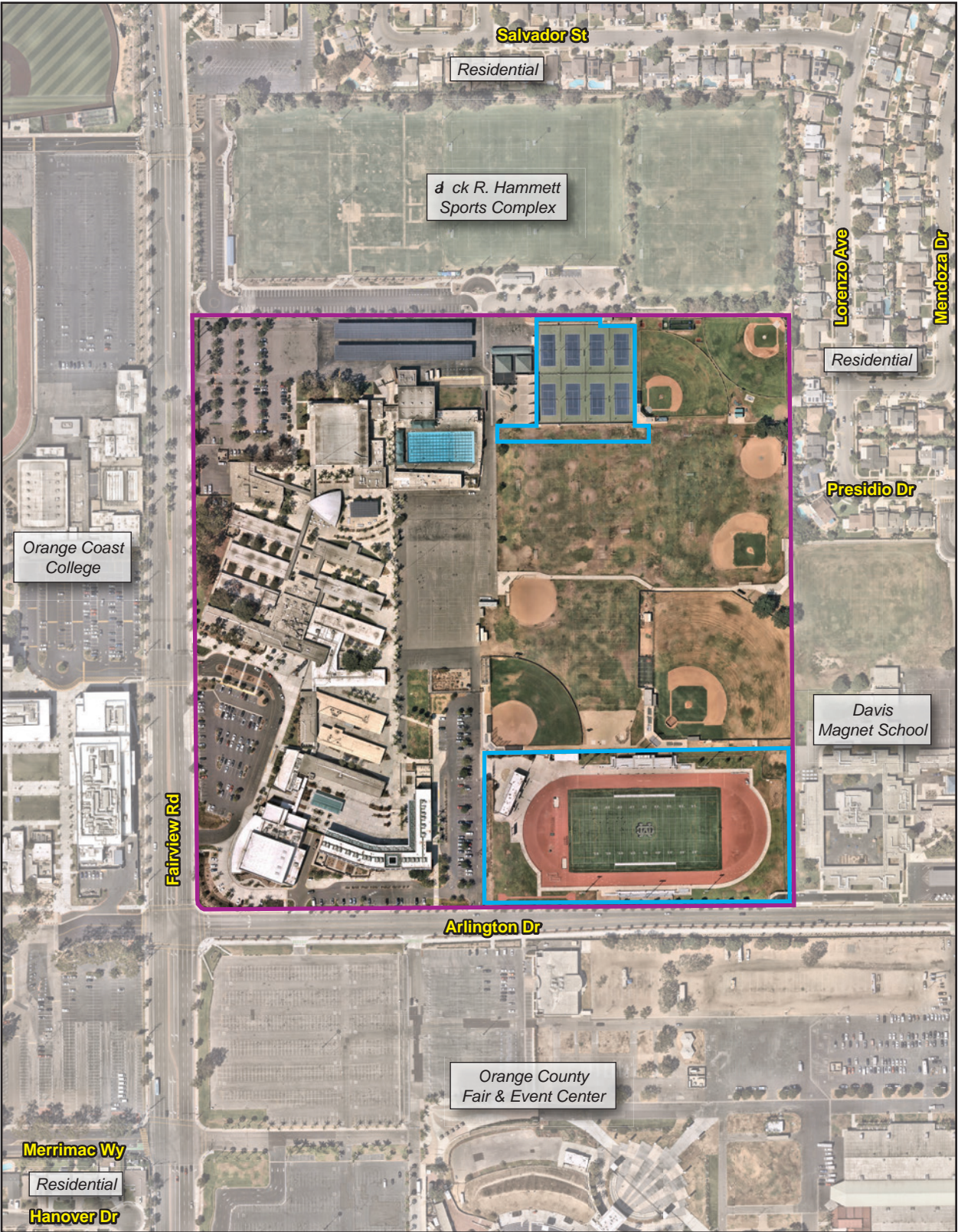
Figure 2 - Local Vicinity



1. Introduction

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Figure 3 - Aerial Photograph



Costa Mesa High School Boundary
Project Boundary

Source: Nearmap 2022.

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Scale (Feet)



1. Introduction

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2. Project Description

2.1 PROPOSED PROJECT DEVELOPMENT

2.1.1 Proposed Project

The proposed project would be implemented on a District-owned property on approximately 8 acres of the 49.45-acre CMHS campus in the City of Costa Mesa. The proposed project would include construction of a new building, expanding two existing buildings, installing new permanent home and away bleachers, track improvements, various improvements to the existing tennis courts on campus, a new fire lane, and landscaping (see Figure 4, *Proposed Project Site Plan*). The proposed project would not include changes to existing walkways or lighting.

The proposed project would allow for more seating for spectators for sports games and other school events; enhance the usability of the tennis courts for athletes and spectators; add new athletic and school facilities for the staff and students; and enhance safety by constructing a fire access lane.

Building 100 A

Building 100 A is an existing building located adjacent to the existing stadium. Currently, the building consists of two women's and men's restroom facilities, an individual restroom, a storage room, electrical room, a concessions stand, and a ticket booth. The proposed project would add a 992-square-foot classroom and two individual restrooms to the southern end of the existing building. Two gates and fencing would be installed between the classroom addition and the new building (Building 100 B) south of Building 100 A.

Building 100 B

Building 100 B would be a new building south of Building 100 A. The new building would consist of similar components to Building 100 A. The proposed project would add a 992-square-foot classroom, individual restrooms, a 90-square-foot referee lounge, a women's and men's restroom facility, a 241-square-foot concessions stand, a 127-square-foot custodian room, a 138-square-foot electrical room, and a 1,653-square-foot storage room.

Building 200

Building 200 is an existing building located adjacent to the northwestern side of the existing stadium. Currently, the building includes a 999-square-foot indoor weight room and a 200-square-foot electrical room. The proposed project would include constructing an outdoor weight room just south of the existing indoor weight room and a 409-square-foot training room adjacent to the proposed outdoor weight room.

2. Project Description

Bleachers

The project site is currently developed with a stadium with bleacher seating capacity of 950 seats, 675 on the home side and 275 on the visitor side. The proposed project would expand the total bleacher seating capacity by 1,060 seats to a total of 2,010 seats. The proposed project would add 390 seats to each end of the existing 675-seat home side bleachers, and 140 seats to each end of the 275-seat visitor side bleachers; therefore, the stadium would have 1,455 seats on the home side and 555 seats on the visitor side.

Track Improvements

As part of the proposed project, portions of the existing track would be renovated and an area adjacent to the existing track would be developed. Currently, the pole vault area, which is located in the southwestern portion of the stadium, includes rubberized track. The proposed project would remove the existing rubberized track and install rubberized surface on paving. Similarly, the proposed project would install a discus throw ring in the northeast portion of the track. The existing rubberized track would be demolished, and concrete pavement and discus throw equipment would be installed. Additionally, the existing grass area southeastern portion of the stadium would be removed, and decomposed granite and shot put equipment would be installed to create to shot put areas (see Figures 5a and 5b).

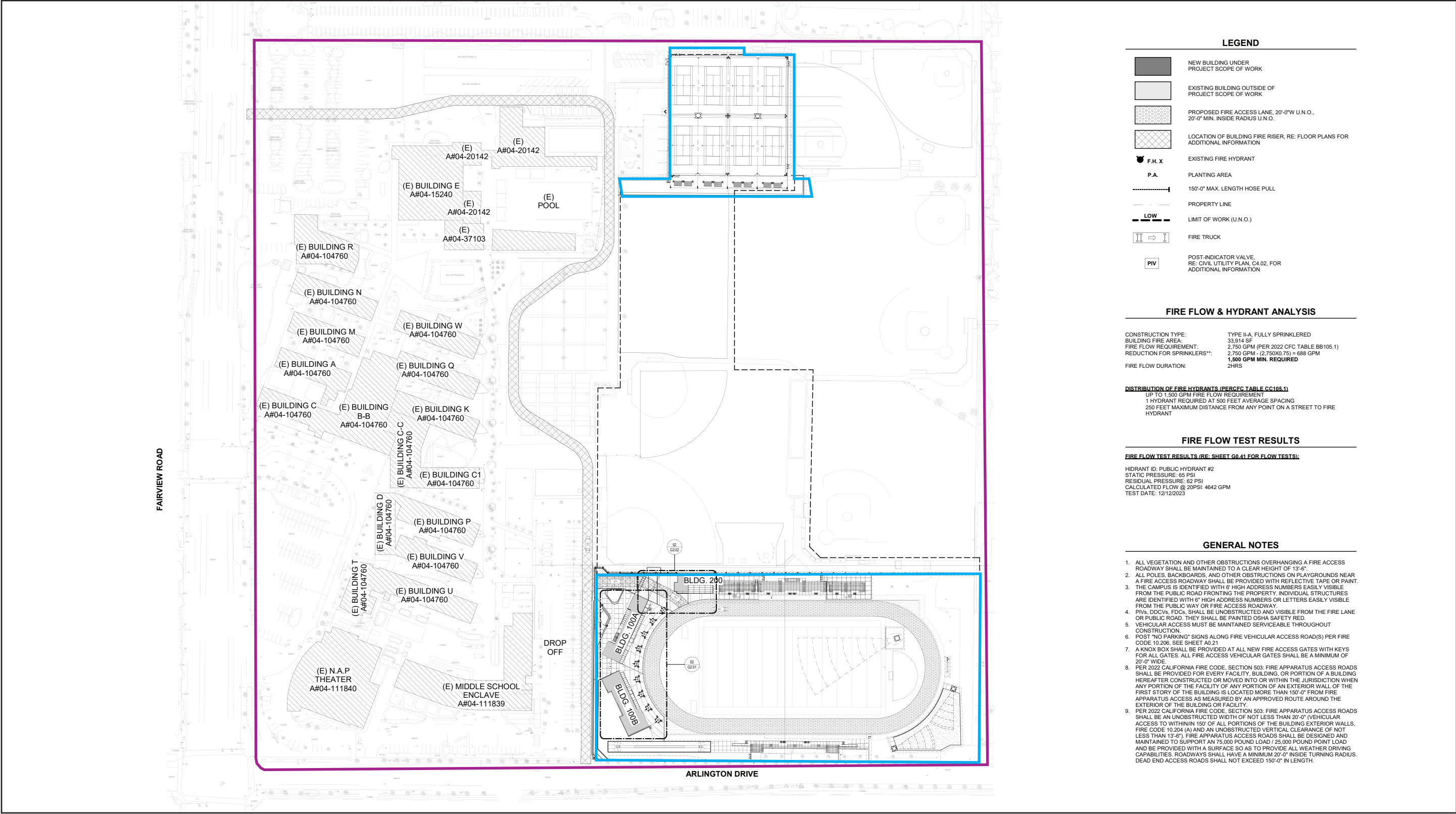
Tennis Court Improvements

The proposed project would consist of renovating the existing tennis courts and the adjacent areas. The existing hardscape on the tennis courts would be demolished and new concrete would be installed along with new tennis court accessories such as net posts for the tennis court nets. The tennis court renovations would also include installing bleachers on the south side of the tennis courts. The bleachers would include seating for a maximum of 200 spectators. New chain-link fencing would be installed along the perimeter of the tennis court area along chain-link gates to provide access to the tennis courts. Landscaping would be installed along the northern portion of the tennis courts and would include trees, shrubs, and grass (see Figure 6).

Landscaping

The project site includes existing landscaping and fencing. However, the proposed project would include the installation of additional landscaping, including trees, shrubs, grass, and groundcover. Landscaping would be installed near the existing and proposed buildings, bleachers, and stadium, and would be installed just north and south of the existing tennis courts.

Figure 4 - Proposed Project Site Plan



Costa Mesa High School Boundary

Project Boundary

Source: LPA 2024.

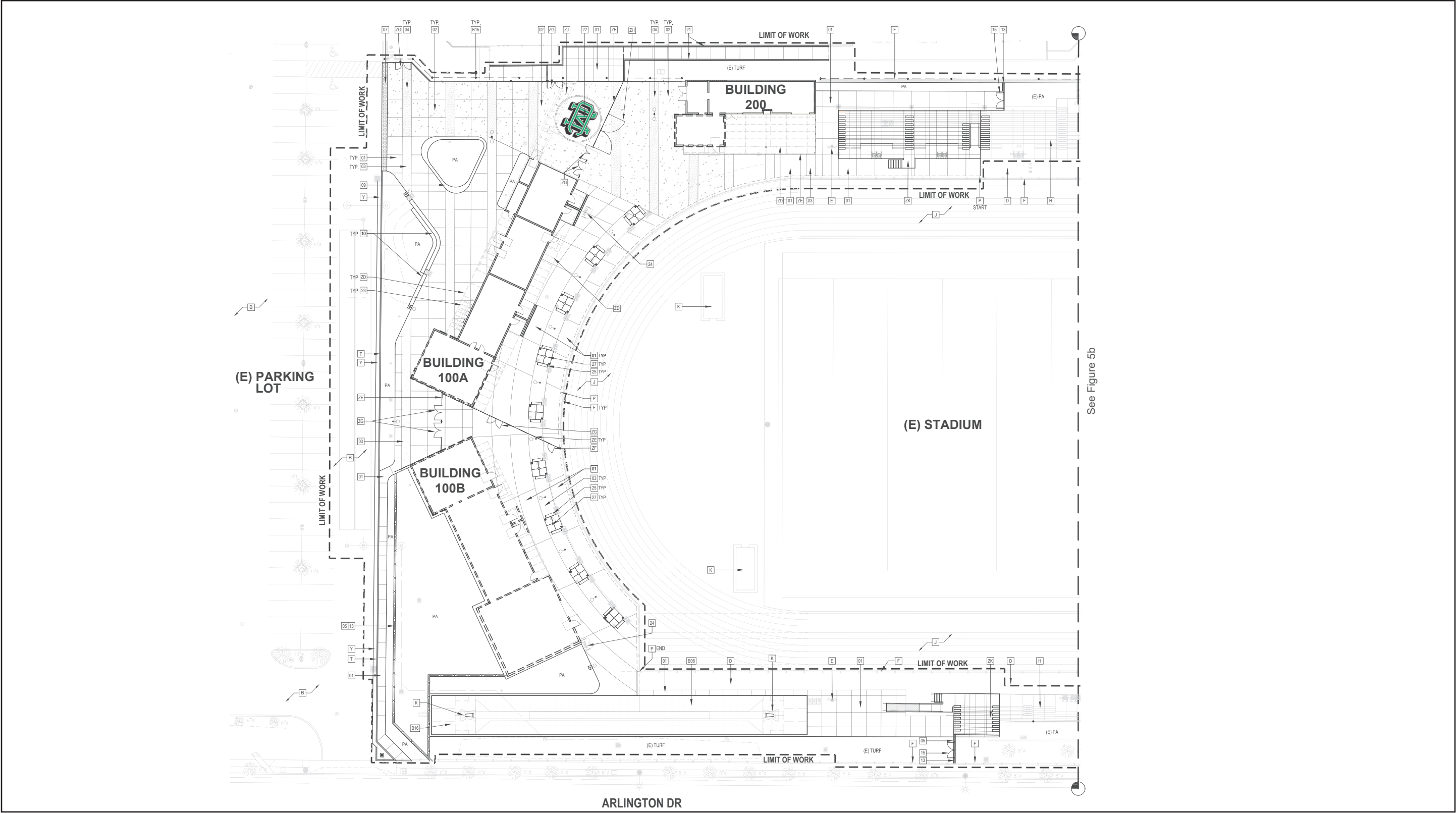
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2. Project Description

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Figure 5a - Football Stadium Site Plan



— Existing Structure
- - - - - Proposed Structure

Source: LPA 2024.

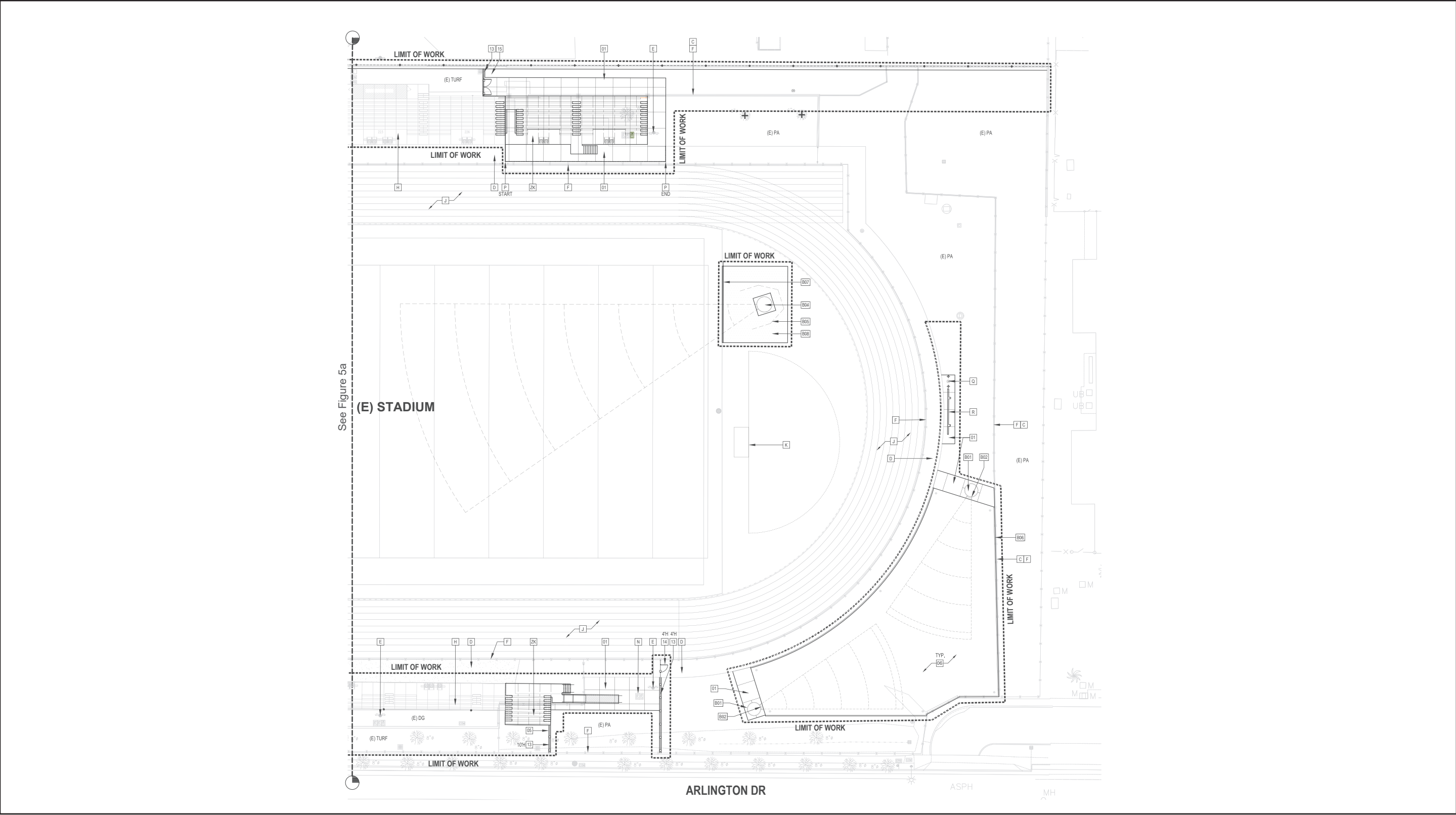
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2. Project Description

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Figure 5b - Football Stadium Site Plan



— Existing Structure
- - - - - Proposed Structure

Source: LPA 2024.

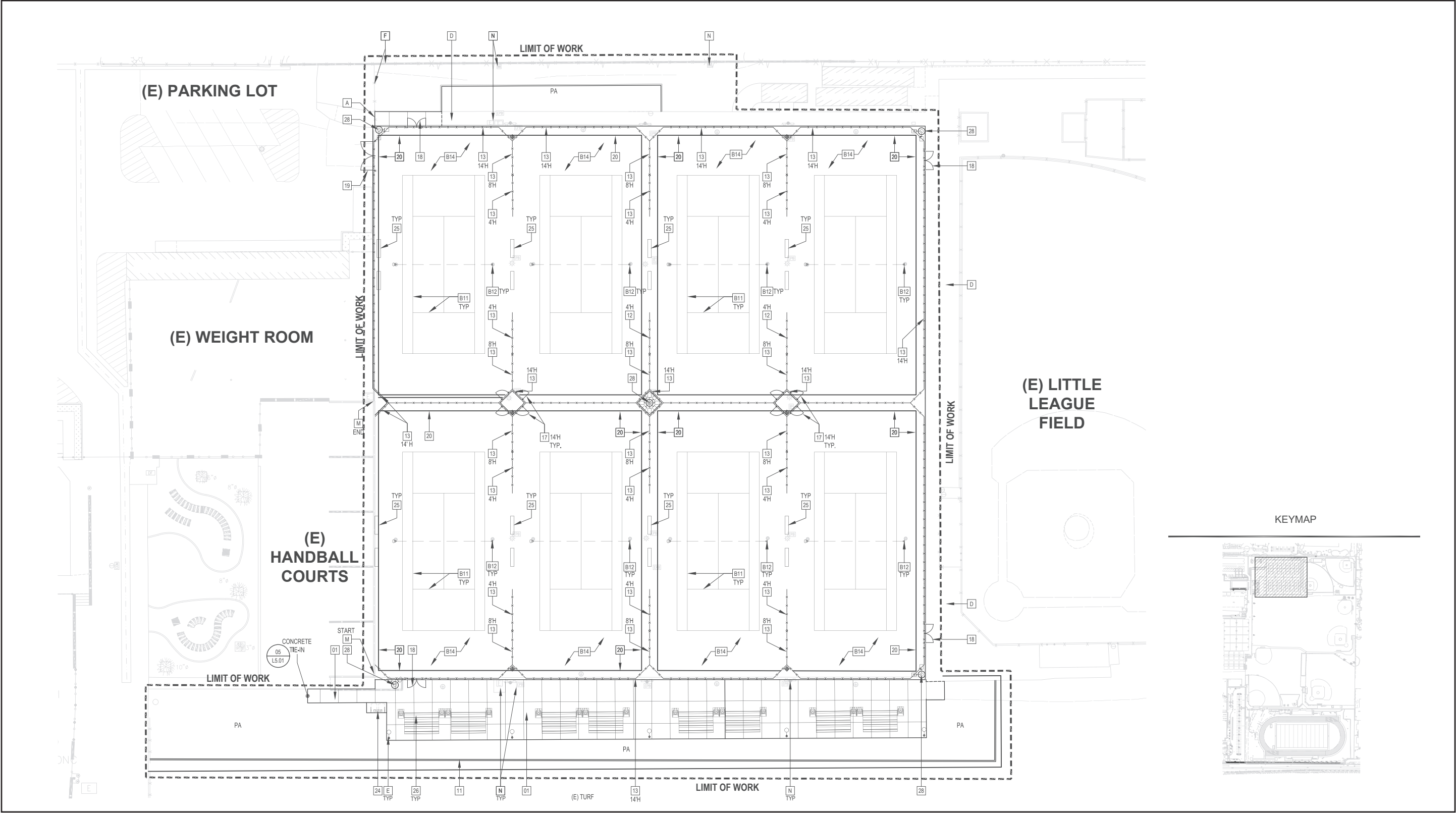
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2. Project Description

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Figure 6 - Tennis Court Site Plan



Source: LPA 2024.



2. Project Description

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2. Project Description

2.1.2 Site Access and Circulation

The proposed project would not include the construction, demolition, or removal of any driveways or parking spaces. Project site access would continue to have access from Arlington Drive and Fairview Road. Additionally, the proposed project would not change the existing pedestrian access, which would continue via sidewalks along Arlington Drive and Fairview Road.

Emergency Access

The proposed project would include the installation of a 20-foot-wide fire access lane expansion to allow direct access to the stadium track and field. The existing fire lane connects the driveway on Fairview Road, northwest of the existing stadium, and the driveway on Arlington Drive, adjacent to the existing stadium. The driveway on Arlington Drive is ingress only and the driveway on Fairview Road is ingress and egress. The proposed fire access lane expansion would connect the existing fire access lane on the west side of the stadium to the stadium's track and field. Installation of the fire lane would not require the demolition of buildings or structures or the removal of any existing parking spaces.

2.1.3 Project Construction

Project construction would occur over approximately 12 months, beginning summer 2025 and ending in summer 2026. Construction would include the following activities: grading and excavation, trenching for site utilities and irrigation, building construction, architectural coatings, driveway and walkway construction, and landscaping improvements. No pile driving, rock blasting, or crushing would occur during the construction phase. Typical equipment to be used during construction of the project would include a backhoe, a crane, aerial lifts, a generator, a diesel pump, dumpers, rollers, and a paver.

During construction, vehicles, equipment, and materials would be staged and stored on the project site when practical. No long-term staging of equipment would occur around the perimeter of the site. No construction staging would occur in the public right-of-way. The construction site and staging areas would be clearly marked, and construction fencing would be installed to prevent disturbance and safety hazards. A combination of on- and off-site parking facilities for construction workers would be identified during construction.

2.2 DISCRETIONARY APPROVALS

2.2.1 Lead Agency

The District is the lead agency under CEQA and is carrying out the proposed project. The NMUSD Board of Education (Board) must approve the proposed project and adopt the IS/MND and Mitigation Monitoring and Reporting Program (MMRP). The Board will consider the information in the IS/MND when making its decision to approve or deny the proposed project, or in directing modifications to the proposed project in response to the IS/MND's findings and mitigation measures. The IS/MND is intended to disclose to the public the proposed project's details, analyses of the proposed project's potential environment impacts, and identification of feasible mitigation that would lessen or reduce significant impacts to less-than-significant levels.

2. Project Description

2.2.2 Other Agency Action Requested

The District is the lead agency under CEQA and has approval authority over the proposed project. The proposed project would require approval and/or coordination from the following responsible agencies.

Lead Agency	Action
Newport-Mesa Unified School District	<ul style="list-style-type: none">▪ Approve the proposed project▪ Adopt the Initial Study/Mitigated Negative Declaration▪ Adopt the Mitigation Monitoring and Reporting Program
Responsible Agencies	Action
Department of General Services, Division of State Architect	<ul style="list-style-type: none">▪ Approval of construction drawings

3. Environmental Checklist

3.1 PROJECT INFORMATION

1. **Project Title:** Costa Mesa High School Stadium Expansion Project

2. **Lead Agency Name and Address:**
Newport-Mesa Unified School District
2985 Bear Street
Costa Mesa, CA 92626

3. **Contact Person and Phone Number:**
Erica DiCioccio, Facilities Planning Coordinator
(714) 424-8993

4. **Project Location:** The Costa Mesa High School campus is located at 2650 Fairview Road in the City of Costa Mesa, in Orange County, California. The CMHS Sports Complex encompasses approximately 6.5 acres on the southeastern corner of the campus, and the tennis courts encompass approximately 1.5 acres on the northern portion of the campus (project site).

5. **Project Sponsor's Name and Address:**
Newport-Mesa Unified School District
2985 Bear Street
Costa Mesa, CA 92626

6. **General Plan Designation:** Public/Institutional

7. **Zoning:** Institutional and Recreational (I&R)

8. **Description of Project:** The proposed project would include construction of a new building, expanding two existing buildings, installing new permanent home and visitor bleachers, track improvements, various improvements to the existing tennis courts on campus, a new fire lane, and landscaping. The proposed project would not include changes to existing walkways or lighting.

The proposed project would allow for more seating for spectators for sports games and other school events; enhance the usability of the tennis courts for athletes and spectators; add new athletic and school facilities for the staff and students; and enhance safety by constructing a fire access lane.

9. **Surrounding Land Uses and Setting:** The CMHS campus is bounded by Fairview Road to the west, Arlington Drive to the south, David Magnet School to the east, and the Jack R. Hammett Sports Complex to the north.

3. Environmental Checklist

10. 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.

The District invited California Native American tribes that are traditionally and culturally affiliated with the project area to consult on the proposed project via email. Five tribes were contacted consistent with Assembly Bill (AB) 52. The five tribes contacted were Gabrielino-Tongva Tribe, Juaneño Band of Mission Indians, Acjachemen Nation, Pala Band of Mission Indians, Santa Rosa Band of Cahuilla Indians, and Soboba Band of Luiseno Indians. The letters were sent on February 1, 2023.

On February 7, 2023, Christina Conley from Gabrielino-Tongva Indians of California responded by indicating that the project area is on culturally sensitive land for her tribe and wants the tribe to be a part of Native American Monitoring for ground disturbances. On February 9, 2023, Joyce Perry from the Juaneño Band of Mission Indians, Acjachemen Nation, responded by requesting additional information and in subsequent correspondences requested to be a part of monitoring during ground disturbances.

3. Environmental Checklist

3.2 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.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture / Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

3.3 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

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.

Ara Bugnor De la Sol
box SIGN 4Q5ZVJ84-13QY9J66

Signature

Mar 19, 2025

Date

3. Environmental Checklist

3.4 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) **Impacts 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.

3. Environmental Checklist

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.

3. Environmental Checklist

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4. Environmental Analysis

This section provides checklists for environmental impacts, an evaluation of the impact questions in the checklists, and mitigation measures to reduce impacts if necessary.

4.1 AESTHETICS

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	

Would the project:

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

No Impact. A scenic vista is a viewpoint that provides expansive views of a highly valued landscape for the benefit of the public. The Community Design Element of the City's General Plan identifies scenic vistas as "edges," which are defined as linear elements that serve as a visual or physical boundary, barrier, or transition between districts and that define the boundaries of a place. Natural edges, as referenced in the Community Design Element, include natural views of the coast and wetlands, natural areas of Talbert Regional Park, and Fairview Park, which are specifically mentioned in Policies CD-5.2, CD-5.4, and CD-5.5 (Costa Mesa 2016b).

The proposed project would occur within the existing CMHS campus in a highly urbanized area. The project site is located inland and not near the coast or wetlands within the city. Additionally, the project site is not near Talbert Regional Park or Fairview Park. The proposed project would be limited to the Costa Mesa HS campus and no off-site improvements would occur. Additionally, the proposed project would be consistent with the existing development on the project site. As such, no scenic vistas would be impacted by the proposed project and no impact would occur.

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

No Impact. The nearest eligible scenic highway, SR-1 (Pacific Coast Highway), is more than 3.5 miles to the south, and the project site is not visible from this roadway. The nearest officially designated state scenic highway is CA-91, north of the City of Orange and approximately 13 miles northwest of the project site (Caltrans 2023). The project site is not near a state scenic highway, and no substantial damage to any scenic resource would occur as a result of project development. Additionally, due to the distance, topography, and intervening development, the proposed project would not be visible from SR-1 or CA-91. As such, no impact is anticipated.

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?

No Impact. The City of Costa Mesa is an urbanized city, and the project site is within the existing Costa Mesa High School. The project site is zoned Institutional and Recreational (I&R), and the proposed project would not change the existing use of the project site. Additionally, there are no regulations governing the scenic quality in the city. As mentioned in Impact 5.1(a), the City's Community Design Element identified policies for scenic areas, but the proposed project would not impact any of the identified scenic areas. Therefore, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality, and existing visual character and views of the site would not occur. No impact would occur.

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 proposed project would not change the existing sports lighting at the stadium; and thus, would not result in substantial nighttime or daytime light or glare impact. Although there could be additional building and/or walkway lighting for safety purposes, such lighting would not adversely affect day or nighttime views in the area. Furthermore, the nearest residential units are over 500 feet from the stadium. Therefore, the proposed project would not result in adverse lighting impacts to these sensitive receptors. Impacts would be less than significant.

4. Environmental Analysis

4.2 AGRICULTURE AND FORESTRY RESOURCES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				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

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 project site is currently developed as a stadium and is identified as Urban and Built-Up Land by the California Important Farmland Finder (DOC 2024a). No special status farmland would be converted to nonagricultural use by the proposed project. Therefore, no impact would occur.

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

No Impact. 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. The project site is zoned I&R (Institutional and Recreational), which allows public and private educational facilities on public or private property. No conflict with an agricultural zoning or Williamson Act would result from project implementation. Therefore, no impact would occur.

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- 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. The proposed project's development would not conflict with existing zoning for forest land, timberland, or timberland production. Forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits" (PRC section 12220(g)). 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" (PRC section 4526). The project site is zoned I&R. The proposed project would not involve any change in zoning, and no forest land or timberland would be affected. Therefore, no impact would occur.

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

No Impact. The project site is developed with a stadium and tennis courts in an existing high school, and no forest land exists onsite or in the near vicinity. No loss of forest land would result from the proposed project. Therefore, 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. The project site is located within an existing high school campus and no changes to farmland or forest land would result from the proposed project. Therefore, no impact would occur.

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4.3 AIR QUALITY

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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	
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	

The analysis in this section is based in part on the following study, which is in Appendix A of this Initial Study.

- *Air Quality and Greenhouse Gas Emissions Data*, PlaceWorks, December 2024

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 A.

The primary air pollutants of concern for which ambient air quality standards (AAQS) have been established are ozone (O₃), carbon monoxide (CO), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), 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 O₃, and PM_{2.5} under the California and National AAQS, nonattainment for PM₁₀ under the California AAQS, and nonattainment for lead (Los Angeles County only) under the National AAQS (CARB 2024).

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, PM₁₀, 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.

4. Environmental Analysis

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 2022 Air Quality Management Plan (AQMP) on December 2, 2022. 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 included 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.

Changes in population, housing, or employment growth projections have the potential to affect SCAG's demographic projections and therefore the assumptions in South Coast AQMD's AQMP. As mentioned in Section 1.3.1, *Proposed Land Use*, the proposed project consists of expanding the bleacher seating capacity, construction of a new team room building, and various site improvements at the existing Costa Mesa High School stadium. The proposed project would continue to serve the existing student population in the area and no increase in student or staff capacity would occur upon implementation of the stadium improvements. Based on its scope and nature, the proposed project would not substantially affect housing, employment, or population projections within the region.

Additionally, as demonstrated below in Section 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. Thus, the proposed project would not affect the regional emissions inventory or conflict with strategies in the 2022 AQMP. Therefore, impacts would be less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

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 (VOCs) from paints.

Construction activities for the proposed project is anticipated to disturb 10.98 acres on the project site. The proposed project would involve building and asphalt demolition, site preparation, grading, building construction, paving, and architectural coating. Overall construction is anticipated to start in June 2025 and finish in June 2026. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1, and are based on the preliminary construction duration provided by the District.

4. Environmental Analysis

Table 1, *Maximum Daily Regional Construction Emissions*, shows that maximum daily emissions for VOC, NO_x, CO, SO₂, PM₁₀, and PM_{2.5} from construction-related activities would be less than their respective South Coast AQMD regional significance threshold values. Therefore, air quality impacts from project-related construction activities would be less than significant.

Table 1 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lb./day) ^{1, 2}					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Year 2025						
Building and Asphalt Demolition	2	24	21	<1	2	1
Site Preparation	3	32	32	<1	11	5
Grading	3	31	30	<1	7	3
Building Construction	1	11	14	<1	1	<1
Year 2026						
Building Construction	1	10	14	<1	1	<1
Building Construction, Paving, and Architectural Coating	6	18	26	<1	1	1
Maximum Daily Construction Emissions						
Maximum Daily Emissions	6	32	32	<1	11	5
South Coast AQMD Regional Construction Threshold	75	100	550	150	150	55
Significant?	No	No	No	No	No	No

Source: CalEEMod Version 2022.1. South Coast AQMD 2023.

¹ 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.

² 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 25 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 expand the bleacher seating capacity, construct a new team room building, and provide various site improvements at the existing CMHS stadium. As described in the traffic impact study, sports team practices and activities that take place on the track and field are already generating vehicle trips to the site. Therefore, operation of the proposed project would not generate new trips but would redistribute trips from Jim Scott Stadium at Estancia High School to the CMHS stadium. Lastly, the new team room building would, at minimum, be designed and built to meet the latest Building Energy Efficiency Standards and California Green Building Standards Code (CALGreen).

As shown in Table 2, *Maximum Daily Regional Operation Emissions*, 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 proposed project would be less than significant.

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Table 2 Maximum Daily Regional Operation Emissions

Source	Maximum Daily Emissions (lbs./Day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Max Daily Emissions						
Mobile	<1	<1	<1	<1	<1	<1
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Total	<1	<1	<1	<1	<1	<1
South Coast AQMD Regional Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2022.1.

Notes: lbs.: Pounds. Highest winter or summer emissions are reported.

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 (LSTs) 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 Presidio Drive to the northeast and Davis Magnet Elementary School to the east of the project site.

Air pollutant emissions generated by construction activities would cause temporary increases in air pollutant concentrations. Table 3, *Localized Construction Emissions*, shows the maximum daily construction emissions (pounds per day) generated during on-site construction activities compared with the South Coast AQMD's screening-level LSTs for sensitive receptors within 82 feet (25 meters) for NO_x and CO and 520 feet (158 meters) for PM₁₀ and PM_{2.5}.¹ As shown in Table 3, construction of the proposed project would not generate construction-related on-site emissions that would exceed the screening-level LSTs. Thus, project-related construction activities would not have the potential to expose sensitive receptors to substantial pollutant concentrations. Therefore, localized air quality impacts from construction activities would be less than significant.

¹ Distances are based on closest receptor at 82 feet who would not be exposed to daily emissions 24 hours a day and 520 feet for residences who are assumed to be exposed to daily emissions 24 hours a day.

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Table 3 Localized Construction Emissions

Construction Activity	Pollutants(lbs./day) ¹			
	NO _x	CO	PM ₁₀ ²	PM _{2.5} ²
South Coast AQMD ≤1.00 Acre LST	92	647	42.79	16.60
Building and Asphalt Demolition	22	20	1.92	0.97
Exceeds LST?	No	No	No	No
South Coast AQMD 1.31-Acre LST	104	745	45.29	17.72
Building Construction 2025	10	13	0.43	0.40
Building Construction 2026	10	13	0.38	0.35
Building Construction, Paving, and Architectural Coating	18	24	0.72	0.66
Exceeds LST?	No	No	No	No
South Coast AQMD 3.50 Acre LST	164	1,336	62.09	24.07
Site Preparation	32	30	10.11	5.31
Exceeds LST?	No	No	No	No
South Coast AQMD 4.00 Acre LST	175	1,461	65.85	25.36
Grading	30	28	6.04	2.68
Exceeds LST?	No	No	No	No

Source: CalEEMod Version 2022.1. South Coast AQMD 2008, 2011, and 2023.

Notes: In accordance with South Coast AQMD methodology, only onsite stationary sources and mobile equipment are included in the analysis. Screening level LSTs are based on receptors within 82 feet (25 meters) for NO_x and CO who would not be exposed 24 hours/day and residences located 520 feet (158 meters) from project site for PM₁₀ and PM_{2.5} who are assumed to be exposed 24 hours/day in SRA 18.¹ 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.² 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 25 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 non-cancer chronic reference exposure level for DPM over a 30-year time frame (OEHHA 2015). Currently, South Coast AQMD does not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project. The proposed project is anticipated to be completed in approximately 12 months, which would limit the exposure to on-site and off-site receptors. Furthermore, construction activities would not generate on-site exhaust emissions that would exceed the screening-level construction LSTs. Therefore, construction emissions would not pose a health 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.

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While operation of the new team room building would use standard on-site mechanical equipment such as heating, ventilation, and air conditioning, air pollutant emissions would be nominal. Therefore, 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 to more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact (BAAQMD 2023). Based on the traffic impact analysis, the intersection with the greatest traffic volumes would yield 5,420 vehicles per hour during buildout year, which would not exceed BAAQMD's recommended hourly screening criteria (Appendix C). Therefore, the proposed project would not introduce new vehicle trips which may result in a CO hotspot when combined with existing traffic volumes 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.

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 new team room building and site improvements at the existing CMHS campus and would not fall within the objectionable odors land uses. Emissions from construction equipment, 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. Therefore, odor impacts would be less than significant.

4. Environmental Analysis

4.4 BIOLOGICAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				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

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?**

Less Than Significant Impact. The project site is developed with an existing stadium, is heavily disturbed, and is in an urbanized area of the city. According to the Conservation Element of the City's General Plan, the project site is not located in any biologically important areas of the city. These include areas of coastal wildlife habitat, areas where biological resources such as wetlands and riparian habitat and vernal pools are located, and critical habitat for San Diego fairy shrimp and coast California gnatcatcher (Costa Mesa 2016b). As such, the proposed project would not result in disturbance of any sensitive biological resources or habitat modifications. Therefore, no impacts would occur.

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- 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. The project site is developed with an existing stadium, is heavily disturbed, and is in an urbanized area of the city. According to the United States Fish and Wildlife National (USFWS) Wetlands Inventory, there is no riparian habitat on or near the vicinity of the project site (USFWS 2024). Project development would have no impact on riparian habitat or other sensitive natural communities identified in local, regional, or national plans, regulations, or policies. Therefore, 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. The project site is developed with an existing stadium, is heavily disturbed, and is in an urbanized area of the city. According to the USFWS Wetlands Inventory, there is no wetlands on the project site or in the project area (USFWS 2024). As such, no state or federally protected wetlands would be impacted by the proposed project. Therefore, no impact 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. The project site is developed with an existing stadium, is heavily disturbed, and is in an urbanized area of the city. Additionally, the surrounding area is also developed with various urbanized uses. According to the USFWS Wetlands Inventory, there is no aquatic habitat on the project site or in the project area that would support migratory fish (USFWS 2022).

According to the California Department of Fish and Wildlife Biogeographic Information and Observation System mapper, the project site and project area have a limited connectivity opportunity that does not allow for a substantial amount of connectivity and movement for species. The project site is also not identified as an Essential Connectivity Area and is not a part of a natural landscape block (CDFW 2023). In addition, the Conservation Element of the City's General Plan identifies the Santa Ana River Parks (Fairview Park) and Riparian Areas as being areas containing migration corridors (Costa Mesa 2016b). The project site is located approximately 2.38 miles east of the Santa Ana River Parks (Fairview Park) and Riparian Areas and would not substantially interfere with any wildlife or migration corridors. As such, implementation of the proposed project would not substantially interfere with the movement of any native wildlife species or corridors. Therefore, no impact would occur.

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

No Impact. The City of Costa Mesa does not protect ornamental trees or landscaping on a school property. The proposed project would occur within the boundaries of the existing high school campus and would not include any off-site improvements. Therefore, 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 as high school athletic facilities and is surrounded by urban uses. No adopted Habitat Conservation Plans, Natural Community Conservation Plans or other approved local, regional or state habitat conservation plans apply to the project site. Therefore, no impact would occur.

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4.5 CULTURAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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	

The analysis in this section is based in part on the following study, which is in Appendix B of this Initial Study.

- *Archeological Records Research*, McKenna et al., July 2010

Would the project:

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

Less Than Significant 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:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values;
- Has yielded, or may be likely to yield, information important in prehistory or history.

The area to be disturbed by the proposed project is within the existing Costa Mesa High School, and no historic built environment has been identified within the existing campus (see Appendix B). The existing stadium was constructed in 2016 and the proposed project would not require demolition of historic resources. Therefore, impacts would less than significant.

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

Less Than Significant Impact With Mitigation Incorporated. The project site has been previously disturbed and is developed as a stadium. The project site is also not included in the Historical and Cultural Resources Element or the City's General Plan archaeological resources inventory (Costa Mesa 2016b). However, the records search conducted by SCCIC indicated that the project area has a general assessment of low to moderate sensitivity for prehistoric archaeological resources and a low level of sensitivity for historic archaeological resources (see Appendix B). Therefore, if any buried resources are unearthed during any of the ground-disturbing activities, a customary caution and a halt-work would be required to ensure that adverse impacts to archaeological resources do not occur. Mitigation Measure CUL-1 requires that if any evidence of cultural resources is discovered, all work within the vicinity of the find will stop until a qualified archaeological consultant can assess the find and make recommendations. Therefore, impacts to archaeological resources would be reduced to a less than significant impact with mitigation.

Mitigation Measures

CUL-1 If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall cease, and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find(s), and an on-site archaeologist monitor shall oversee the remaining earthmoving activities. If the discovery proves to be significant under California Environmental Quality Act, additional work such as data recovery excavation may be warranted and will be reported to the Newport-Mesa Unified School District.

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

Less Than Significant Impact. There are no cemeteries or known human remains at the campus, which has been previously disturbed during construction of the existing school; however, ground disturbance activities (i.e., grading, utility trenching and drill holes) would have the potential to result in discovery of human remains. In the unlikely event human remains are discovered, the District would be responsible for compliance with Health and Safety Code section 7050.5 and CEQA Guidelines section 15064.5. California Health and Safety Code section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to their treatment and disposition has been made. If the Orange County coroner determines the remains to be Native American, the Native American Heritage Commission (NAHC) shall be contacted within 24 hours. Subsequently, the NAHC shall identify the most likely descendant. The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains, as provided in Public Resources Code section 5097.98. Adherence to existing legal requirements associated with human remains would reduce impacts associated with the disturbance of human remains. Impacts would be less than significant.

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4.6 ENERGY

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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	

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 following discusses the potential energy demands from short-term construction and long-term operational energy consumption associated with the stadium improvements at the CMHS campus.

Short-Term Construction Impacts

Electrical Energy

Electricity use during construction of the proposed project would vary during different phases of construction. Construction of the proposed project would not require electricity to power most construction equipment. Later construction phases could result in the use of electricity-powered equipment for interior construction and architectural coatings. 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.

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 would come from the transport and use of construction equipment, delivery vehicles and 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.

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The use of energy resources by vehicles and equipment would fluctuate according to the phase of construction and would be temporary. In addition, all construction equipment would cease operating upon completion of proposed project construction. Thus, impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure.

Moreover, to limit wasteful and unnecessary energy consumption, the construction contractors are anticipated to minimize nonessential idling of construction equipment during construction, in accordance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9. Construction trips would also not result in unnecessary use of energy since the proposed project site is centrally located in the greater Orange County area and is served by numerous regional freeway systems (e.g., State Route 55, State Route 73, and Interstate 405) that provide the most direct routes from various areas of the region. 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 the proposed building; water heating; operation of electrical systems, and use of on-site equipment and appliances.

Electrical Energy

As shown in Table 4, *Electricity Consumption*, implementation of the proposed project would result in 18,763 kilowatt hours of electricity use per year.

Table 4 Electricity Consumption

Land Use	Electricity (kWh/year)
Proposed Project Conditions	
School Building	18,763
Source: CalEEMod Version 2022.1. (see Appendix A)	

Electrical service to the project site would be provided by Southern California Edison (SCE) through connections to existing on-site electrical lines as needed. While the proposed project would result in a higher electricity demand than existing conditions onsite, the new team room building would be consistent with the requirements of the Building Energy Efficiency Standards and CALGreen. New buildings in compliance with these standards would generally have greater energy-efficiency performance than existing buildings.

In addition, SCE is required to meet the renewable energy production goals of the California Renewable Portfolio Strategy (RPS). The RPS is a phased requirement for load serving entities, like SCE, to increase the proportion of in-state sales of electricity being procured from eligible renewable and carbon-free sources until 2045 when the goal is to achieve 100 percent of in-state sales be procured from carbon-free sources. These features would support the goals outlined in Appendix F of the CEQA Guidelines of promoting the use of renewable energy and decreasing reliance on fossil fuels. Because the proposed project and SCE would comply

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with these regulations, it would not result in wasteful, inefficient, or unnecessary electricity demands. Therefore, operation of the proposed project would result in a less than significant impact related to electricity.

Natural Gas Energy

As shown in Table 5, *Natural Gas Consumption*, the new natural gas demand for the proposed team room building would total 62,940 kilo-British thermal units per year following buildout of the proposed project. Development associated with the proposed project would be built to meet the Building Energy Efficiency Standards, which would ensure energy efficiency as it pertains to natural gas use. Thus, compliance with the Building Energy Efficiency Standards would be consistent with the goals outlined in Appendix F of the CEQA Guidelines, as the proposed project would decrease reliance on fossil fuels to meet the natural gas demands of the CMHS campus. Therefore, the proposed project would not result in wasteful, inefficient, or unnecessary natural gas demands. Operation of the proposed project would result in less than significant impacts with respect to natural gas usage.

Table 5 Natural Gas Consumption

Land Use	Natural Gas (kBTU/year)
Proposed Project Conditions	
School Building	62,940

Source: CalEEMod Version 2022.1
Note: kBTU = kilo British thermal units.

Transportation Energy

A typical new stadium development would consume transportation energy during operations from the use of motor vehicles associated with students, staff, and visitors to the CMHS campus as shown in Table 6, *Project Annual Operation-Related Fuel Usage*.

Table 6 Project Annual Operation-Related Fuel Usage

Use Type	Annual Energy Consumption ¹	Unit ²
Transportation – Electricity	21,164	kWh
Transportation – Natural Gas	21	Gallons
Transportation – Diesel	489	Gallons
Transportation – Gasoline	27,877	Gallons

Source: CalEEMod Version 2022.1., EMFAC2021 Version 1.0.2, refer to Appendix A

Notes:

¹ Annual VMT based on traffic generated from maximum capacity event at the stadium as conservative estimate of 498 average daily trips.

² Diesel, compressed natural gas (CNG), and gasoline fuels are expressed in gallons. Electric vehicles are expressed in kilowatt-hours (kWh).

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 its associated transportation energy use. As mentioned in the traffic study, high school stadiums typically do not generate a significant

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number of vehicle trips during the peak hours of adjacent street traffic and daily trip generation is highly variable (Appendix D). Sports team practices and activities that take place on the track and field are already generating vehicle trips to the site. With the improved stadium at CMHS, the people that currently travel to Jim Scott Stadium to watch a game would travel to CMHS instead. Trips that originate within the CMHS attendance area will travel a shorter distance, resulting in a net reduction in VMT and transportation-related fuel usage. Therefore, operational transportation energy usage shown in Table 6 are conservative estimates.

Moreover, fuel efficiency of vehicles after buildout would on average improve compared to vehicle fuel efficiencies experienced under existing conditions, resulting in a lower per capita fuel consumption assuming travel distances, travel modes, and trip rates remain the same. The improvement in fuel efficiency would be attributable to the statewide fuel reduction strategies and regulatory compliances (e.g., corporate average fuel economy [CAFE] standards), resulting in new cars that are more fuel efficient and the attrition of older, less fuel-efficient vehicles. The CAFE standards are not directly applicable to land use development projects, but to car manufacturers. Thus, the spectators, school students, and employees do not have direct control in determining the fuel efficiency of vehicles that are manufactured and available. However, compliance with the CAFE standards by car manufacturers would ensure that vehicles produced in future years have greater fuel efficiency and would generally result in an overall benefit of reducing fuel usage by providing more fuel-efficient vehicle options. Therefore, impacts would be less than significant with respect to operation-related fuel usage.

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

Less Than Significant 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. The RPS goals have been updated since adoption of SB 1078 in 2002. In general, California has RPS requirements of 33 percent renewable energy by 2020 (SB X1-2), 44 percent by 2024, 50 percent by 2026, 52 percent by 2027, 60 percent by 2030, 90 percent by 2035, 95 percent by 2040, and 100 percent by 2045.

The statewide RPS requirements do not directly apply to individual development projects, but to utilities and energy providers such as SCE, whose compliance with RPS requirements would contribute to the state objective of transitioning to renewable energy. The land uses accommodated by the proposed project would not change (school use), and the new proposed 3,000-square-foot team room building would comply with the current or future iterations of the Building Energy Efficiency Standards and CALGreen. In addition, because the proposed project would be required to comply with the applicable Building Energy Efficiency Standards and CALGreen requirements, the new buildings would be energy efficient. Therefore, implementation of the proposed project would not conflict with or obstruct implementation of California's RPS Program, and this impact would be less than significant.

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4.7 GEOLOGY AND SOILS

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			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		

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. Costa Mesa is in the vicinity of several known active and potentially active earthquake faults, most notably the Newport-Inglewood Fault Zone and the San Joaquin Hills Fault Zone (Costa Mesa 2016b). According to the City's Safety Element, Figure S-4, Local Seismic Hazards, the project site does not lie within or immediately adjacent to a fault-rupture hazard zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act. The nearest Alquist-Priolo Earthquake Fault Zone is approximately

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4.1 miles southwest of the high school on the Newport-Inglewood Fault. Therefore, impacts would be less than significant.

ii) Strong seismic ground shaking?

Less Than Significant Impact. There are five major active faults in the general vicinity of Costa Mesa (Costa Mesa 2015). While there is the potential for strong seismic ground shaking at the site, the effects of an earthquake at the project site would be no greater than at other areas in the school's general vicinity. Due to the seismic history of southern California, the proposed structural improvements would be designed in accordance with seismic requirements of the California Building Code (CBC), CCR Title 24, and because the project would be considered a school structure, all structural improvements would be required to meet the standards for seismic safety of the Division of the State Architect (DSA) and Department of Education. Compliance with established standards would reduce the risk of structural collapse to a less than significant level. Therefore, impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

No 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 on onsite soil composition and groundwater depth. Structures subjected to the effects of liquefaction may undergo total and differential settlements and may float, sink, or tilt when subjected to intense shaking such as during an earthquake event.

According to the California Geological Survey, the project site is not in an identified liquefaction zone (CGS 2023). Additionally, the City of Costa Mesa General Plan identifies the project site as being in an area of low liquefaction potential (Costa Mesa 2016b). Standard geologic engineering practices would be incorporated into the project's development to ensure its safety with respect to soil conditions, and the project would be subject to review by DSA. Therefore, no impact would occur.

iv) Landslides?

No Impact. Landsliding is a type of erosion in which masses of earth and rock move downslope as a single unit. The susceptibility of slopes to landslides and other forms of slope failure depends on several factors. These are usually present in combination and include, but are not limited to, steep slopes, condition of rock and soil materials, presence of water, formational contacts, geologic shear zones, and seismic activity. The project site is flat developed as a stadium and the surrounding areas are also flat with baseball fields to the north, parking lot to the west, for the high school. Additionally, the Department of Conservation Landslide Inventory Map does not identify any known instances of landslides (DOC 2024). Therefore, the proposed project would not cause potentially substantial adverse effects related to slope and stability or seismically induced landslides. No impact would occur.

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

Less Than Significant Impact. 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

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location. Precipitation, running water, waves, and wind are all agents of erosion. Ordinarily, erosion proceeds so slowly as to be imperceptible, but when the natural equilibrium of the environment is changed, the rate of erosion can be greatly accelerated. This can create aesthetic as well as engineering problems. Accelerated erosion in an urban area can cause damage by undermining structures; blocking storm sewers; and depositing silt, sand, or mud in roads and tunnels. Eroded materials are eventually deposited into our coastal and 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 project site is currently contains impervious surfaces such as the turf field and track, and the necessary grading and site preparation would result in the exposure of onsite soils to potential erosion impacts. Grading and the creation of impervious surfaces on the project site would be minimal. However, construction projects resulting in disturbances of more than one acre are subject to National Pollution Discharge Elimination System permit requirements. As part of these requirements, a Storm Water Pollution Prevention Plan and Monitoring Program must be prepared that specifies best management practices (BMP) to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving off-site. Mandatory compliance with those requirements and the implementation of BMPs would ensure that soil erosion impacts are less than significant. Therefore, 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 from liquefaction are addressed in Section 5.7(a)(iii), and landslide hazards are addressed in Section 5.7(a)(iv). As concluded in these sections, impacts would be less than significant. Following is a discussion of the potential impacts resulting from other site geologic and soil conditions of the project site.

Lateral Spreading

Seismically induced lateral spreading involves primarily lateral movement of earth materials due to ground shaking. It differs from slope failure in that complete ground failure involving large movement does not occur due to the relatively smaller gradient of the initial ground surface. Lateral spreading is demonstrated by near-vertical cracks with predominantly horizontal movement of the soil mass involved. The topography of the Costa Mesa campus is relatively flat with no nearby slopes or embankments. As such, the potential for lateral spreading is less than significant.

Ground Subsidence

The major cause of ground subsidence is the excessive withdrawal of groundwater. Soils with high silt or clay content are particularly susceptible to subsidence. The geologic materials encountered during field exploration consist of existing fill and natural alluvial soils. The fill soils consist primarily of silty sands with minor clay fine particles. The alluvial soil deposits below the fill consist of poorly graded silty sand. Soil shrinkage and/or bulking as a result of remedial grading depends on several factors, including the depth of over-excavation, the grading method and equipment utilized, and average relative compaction. According to the United States

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Geological Survey's Areas of Land Subsidence in California map, the project site is in an area of historical land subsidence due to groundwater pumping (USGS 2024). The proposed project would not include earthwork to extreme depths and would not result in excessive withdrawal of groundwater during construction or operation. Additionally, the proposed project would be developed in compliance with applicable laws pertaining to school construction (required by the DSA), including the CBC, and implement recommendations per the final engineering-level geotechnical report. Therefore, impacts associated with subsidence 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. The proposed project would be developed in compliance with applicable laws pertaining to school construction (required by the DSA), including the CBC, and implement recommendations per the final engineering-level geotechnical report. Therefore, impacts associated with collapsible soils 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 soil, with respect to engineering properties, refers to soils that, upon wetting and drying, will alternately expand and contract, causing problems for the foundations of buildings and other structures. According to the Geohazards Report (PlaceWorks 2010), the project is underlain by late to middle Pleistocene marine deposits, and marine soil units could contain some expansive soils. However, due to the seismic history of the southern California region, the proposed structural improvements would be designed in accordance with seismic requirements of the CBC, and all structural improvements would be required to meet the DSA and California Department of Education criteria for seismic safety. Compliance with established engineering practices and standards would reduce the risk of expansive soils to a less than significant level.

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. Costa Mesa HS is served by the City's wastewater system, and no septic tanks or alternative wastewater disposal system is necessary. No impact would occur.

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

Less Than Significant Impact With Mitigation Incorporated. Paleontological resources or fossils are remains of ancient plants and animals that can provide scientifically significant information about the history of life on earth. This sensitivity is determined by rock type, history of the geologic unit in producing significant fossils, and fossil localities that are recorded from that unit.

The project site has been previously disturbed and is developed as a stadium. The City's General Plan does not identify the project site as a potential paleontological resources site (Costa Mesa 2016). However, the proposed project would involve earth-moving activities that could lead to discovery of paleontological resources.

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Though it is unlikely that paleontological resources would be discovered on the project site, implementation of Mitigation Measure GEO-1, which outlines precautionary measures and action measures for an event resulting in the discovery of unknown paleontological resources, would ensure that impacts to unknown paleontological resources are less than significant.

Mitigation Measure

GEO-1 In the event that fossils or fossil locality deposits are discovered during construction, excavation within 100 feet of the fossil locality shall be temporarily halted until removal occurs. The contractor shall notify a qualified paleontologist to investigate its significance. If the fossil locality is determined to be significant by the qualified paleontologist, the paleontologist shall work with the District to follow accepted professional standards, such as further testing for evaluation or data recovery, as necessary. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the project proponent determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project based on the qualities that make the resource important.

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4.8 GREENHOUSE GAS EMISSIONS

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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	

The analysis in this section is based in part on the following study, which is in Appendix A of this Initial Study.

- *Air Quality and Greenhouse Gas Emissions Data*, PlaceWorks, December 2024

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 (CO₂), methane (CH₄), and ozone (O₃)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons.²

Information on manufacturing of cement, steel, and other “life cycle” emissions that would occur as a result of the proposed project are not applicable and are not included in the analysis.³ Black carbon emissions are not included in the GHG analysis because the California Air Resources Board (CARB) does not include this short-lived climate pollutant in the state’s SB 32 inventory but treats it separately.⁴ A background discussion on the GHG regulatory setting and GHG modeling can be found in Appendix A to this Initial Study.

² Water vapor (H₂O) 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.

³ 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 (CNRA 2018). Because the amount of materials consumed during the operation or construction of the 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 (OPR 2008).

⁴ 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 (CARB 2017.).

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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 7, *Project-Related GHG Emissions*. As discussed in the traffic study, stadiums do not generate a significant number of daily vehicle trips and would only generate 212 peak hour trips for a varsity football game or other special event that fills the stadium (Appendix C). Sports team practices and activities on the track and field already generate vehicle trips to the site. With the improved stadium at CMHS and no net increase in spectators, the people that currently travel to Jim Scott Stadium to watch a game would travel to CMHS instead. Trips that originate in the CMHS attendance area will travel a shorter distance, resulting in a net reduction in VMT and mobile source emissions. Additionally, the proposed team room building would result in a slight increase in water demand, wastewater and solid waste generation, area sources (e.g., consumer cleaning products), and energy usage (i.e., natural gas and electricity). Annual average construction emissions were amortized over 30 years and included in the emissions inventory to account for one-time GHG emissions from the construction phase of the proposed project.

Table 7 Project-Related GHG Emissions

Source	GHG (MTCO ₂ e/Year)
Mobile	<1
Area	<1
Energy	6
Water	4
Solid Waste	1
Refrigerants	<1
30-Year Construction Amortization ¹	14
Total	26
South Coast AQMD Bright-Line Threshold	3,000 MTCO ₂ e/Yr
Exceeds Bright-Line Threshold?	No

Source: CalEEMod, Version 2022.1.

Notes: MTons = metric tons; MTCO₂e = metric ton of carbon dioxide equivalent

¹ Total construction emission are amortized over 30 years per South Coast AQMD Working Group methodology.

Overall, construction and operation of the proposed project would not generate annual emissions that exceed the South Coast AQMD bright-line threshold of 3,000 metric tons of carbon dioxide equivalent (MTCO₂e)

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per year (South Coast AQMD 2010). Therefore, the proposed project's cumulative contribution to GHG emissions would be less than significant.

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

Less Than Significant Impact. Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan and the Southern California Association of Governments' Regional Transportation Plan/Sustainable Communities Strategy. A consistency analysis with these plans is presented below.

CARB Scoping Plan

CARB's latest Climate Change Scoping Plan (2022) outlines the State's strategies to reduce GHG emissions in accordance with the targets established under AB 32, SB 32, and AB 1279 (CARB 2022). The Scoping Plan is applicable to State agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Statewide strategies to reduce GHG emissions in the 2022 Climate Change Scoping Plan include: implementing SB 100, which expands the RPS to 60 percent by 2030; expanding the Low Carbon Fuel Standards to 18 percent by 2030; implementing the Mobile Source Strategy to deploy zero-electric vehicle buses and trucks; implementing the Sustainable Freight Action Plan; implementing the Short-Lived Climate Pollutant Reduction Strategy, which reduces methane and hydrofluorocarbons to 40 percent below 2013 levels by 2030 and black carbon emissions to 50 percent below 2013 levels by 2030; continuing to implement SB 375; creating a post-2020 Cap-and-Trade Program; and developing an Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Statewide strategies to reduce GHG emissions include the low carbon fuel standards, California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the CAFE standards, and other early action measures as necessary to ensure the State is on target to achieve the GHG emissions reduction goals of AB 32, SB 32, and AB 1279. In addition, new developments are required to comply with the current Building Energy Efficiency Standards and CALGreen. The proposed project would comply with these GHG emissions reduction measures since they are statewide strategies. The proposed project GHG emissions would be further reduced from compliance with statewide measures that have been adopted since AB 32, SB 32, and AB 1279 were adopted. Therefore, the proposed project would not obstruct implementation of the 2022 Scoping Plan, and impacts would be less than significant.

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SCAG adopted the 2024-2050 RTP/SCS, Connect SoCal, in April 2024. Connect SoCal is a long-term plan for the Southern California region that details the development, integrated management, and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area (SCAG 2024). This plan outlines a forecast development pattern that demonstrates

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how the region can sustainably accommodate needed housing and job centers with multimodal mobility options. The overarching vision is to expand alternatives to driving, advance the transition to clean-transportation technologies, promote integrated and safe transit networks, and foster transit-oriented development in compact and mixed-use developments (SCAG 2024). In addition, Connect SoCal is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG-emission-reduction goals and federal Clean Air Act requirements. 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. As mentioned previously, the stadium improvements at CMHS campus would continue to serve the local population and would contribute to reducing VMT by providing people a closer option compared to traveling to Jim Scott Stadium to watch a game. 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.

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4.9 HAZARDS AND HAZARDOUS MATERIALS

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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
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

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 proposed project would include construction of a new building, expanding two existing buildings, installing new permanent home and away bleachers, track improvements, improvements to the existing tennis courts on campus, a new fire lane, and landscaping. The proposed project would not require extensive use of hazardous materials or substances. The proposed project would not include activities associated with routine transport, use, or disposal of hazardous materials. Materials such as oil and lubricants and architectural coatings, including paints, could be transported, used, and disposed of as hazardous materials during construction. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. Also, these activities would be short term and would cease upon completion of the construction phase. Project construction workers would be trained in safe handling and hazardous materials use.

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Operation of the proposed project would not involve the use of hazardous materials that could impact surrounding land uses. Project operation would involve the use of small amounts of hazardous materials, such as cleansers, paints, degreasers, adhesive, sealers, fertilizers, and pesticides for cleaning and maintenance purposes. However, these chemicals used for maintenance are already being used by the custodial staff for the existing stadium and concession building operation. Compliance with applicable federal and state laws and regulations governing the use, storage, transport, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. Therefore, substantial hazards to the public or the environment arising from the routine use, storage, transport, and disposal of hazardous materials during the construction and operation of the proposed project 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. As discussed in Section 4.9(a), hazards to the public or the environment arising from the routine use of hazardous materials during operation and construction phases would be less than significant. There are no known hazardous materials on the project site other than typical custodial and landscaping related materials, and no known previous site uses that would indicate the presence of hazardous materials. It is not anticipated that construction and operation of the proposed project would create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment. Compliance with existing regulations governing the use, storage, transport, and disposal of hazardous materials would ensure that construction workers and the general public are not exposed to any unusual or excessive risks related to hazardous materials. Therefore, impacts 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. The project site is within one-quarter mile of three other schools: Davis Magnet School, Orange Coast College, and Costa Mesa Middle School. As discussed in Section 4.9(a), construction and operation of the proposed project would handle small amounts of hazardous materials typical of construction activities and used in the operation of school facilities. The use, transportation, and storage of hazardous materials would be required to comply with all applicable state and federal regulations, which would ensure the proper handling of such materials. No significant hazards from hazardous materials is expected at other nearby schools. Therefore, 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?

No Impact. The project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, which specifies lists of the following types of hazardous materials sites: hazardous waste facilities; hazardous waste discharges for which the State Water Resources Control Board (SWRCB) has issued certain types of orders; public drinking water wells containing detectable levels of organic

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contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated.

The following databases of hazardous materials sites were searched for listings of hazardous materials on the project site and on surrounding parcels: GeoTracker (SWRCB 2023); EnviroStor (DTSC 2024a); EnviroMapper (USEPA 2023); EJScreen (EPA 2023a); Cortese List (DTSC 2024b), and Solid Waste Information System (SWIS)(CalRecycle 2023). No hazardous materials sites were listed on the project site on any of the six databases searched. Therefore, project implementation would not result in a significant hazard to the public or the environment. No impact 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 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?**

Less Than Significant Impact. The nearest airport, John Wayne International Airport, is approximately 1.5 miles to the east of the project site. Although the project site is within the Airport Environs Land Use Plan's Height Restriction Zone for John Wayne Airport, it is outside of the John Wayne Airport Impact Zones according to the John Wayne International Airport Land Use Plan (ALUC 2008). Federal Aviation Regulation 77.23 generally requires a 200-foot height restriction for development in the Height Restriction Zone. The expanded bleachers and the team room building would not exceed 200 feet and would not result in significant safety hazard for people residing or working in the project area. And as discussed in Section 5.13, *Noise*, the proposed project would not result in excessive noise impacts in the project area. Therefore, impacts would be less than significant.

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

Less Than Significant Impact. The proposed project would occur within the Costa Mesa HS campus. No off-site circulation pattern would be altered as a result of the proposed project. The final site plan would be required to be reviewed and approved by the Costa Mesa Fire Department to ensure that adequate emergency vehicle access is provided. Thus, the proposed project would not impair or interfere with any adopted emergency response plan. Therefore, impacts would be less than significant.

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

No Impact. No wildland fire hazard areas exist in Costa Mesa (Costa Mesa 2016). Therefore, no impact related to wildland fires would occur.

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4.10 HYDROLOGY AND WATER QUALITY

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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

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, and 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.

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Construction

The project would be constructed in the existing stadium area and tennis courts and is surrounded by other various school facilities, urban development, and adjacent paved streets that currently generate nonpoint-source pollutants that are carried by storm and irrigation water into storm drains. During construction, water quality impacts could occur from discharge of soil through erosion, sediments, and other pollutants. To minimize these potential impacts, the proposed project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP; 2022-0057-DWQ). The CGP requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) that incorporates BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. The SWRCB mandates that projects that disturb one or more acres of land obtain coverage under the Statewide CGP. The CGP also requires that prior to the start of construction activities, the project applicant must file Permit Registration Documents (PRD) with the SWRCB, which includes a Notice of Intent, risk assessment, site map, annual fee, signed certification statement, SWPPP, and post-construction water balance calculations. The construction contractor is required to maintain a copy of the SWPPP on-site at all times and implement all construction BMPs identified in the SWPPP during construction activities. Prior to commencement of grading activities, the project applicant is required to provide proof of filing of the PRDs with the SWRCB, which include preparation of SWPPP.

The SWPPP must describe construction BMPs that address pollutant source reduction and provide measures/controls to mitigate potential pollutant sources. A list of potential BMPs are included in Table 8, *Construction BMPs*.

Table 8 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.

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Submittal of the PRDs and implementation of the SWPPP and its associated BMPs throughout the construction phase of the proposed project will address anticipated and expected pollutants of concern due to construction activities. Therefore, project construction impacts would be less than significant.

Operation

Operation of the expanded stadium and other athletic improvements would not add any new uses that could cause a violation of any water quality standards or waste discharge requirements. As discussed in 4.9(b), the proposed project would be required to comply with applicable federal and State law and regulations governing the use, storage, transport, and disposal of hazardous materials, which would ensure impacts would be less than significant. Additionally, the proposed project would implement BMPs to control the amount and quality of the stormwater leaving the project site, and the proposed project would not violate any water quality. Therefore, 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?

No Impact. The project site is built out with hardscape and impervious surfaces associated with the existing stadium and athletic facilities on campus and is not used for intentional groundwater recharge area. The proposed project would result in an increase of approximately 0.25 acres of impervious surfaces. Therefore, any impact on the groundwater recharge would be negligible. Furthermore, the project does not include new groundwater wells that would extract groundwater from the aquifer. The existing stadium already accommodates approximately 2,010 spectators during capacity events at the existing stadium with portable bleachers, and the proposed project would not create new programs or uses that would result in substantial increase in water demand for the existing high school. Construction and operation of the proposed project would not lower the groundwater table or deplete groundwater supplies. Thus, the project would not interfere with groundwater recharge. Therefore, no impact would occur.

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. Erosion is a normal and inevitable geologic process whereby earthen materials are loosened, worn away, decomposed or dissolved, and moved from one place to another. Precipitation, running water, waves, 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 greatly accelerate. This can create aesthetic as well as engineering problems on undeveloped sites. Accelerated erosion in an urban 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.

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There are no streams or rivers on the project site. The proposed project would not involve the alteration of any natural drainage channels or any watercourse. As discussed above, the project site is built out with hardscape and impervious surfaces associated with the existing stadium and athletic facilities on campus. The proposed project would result in a relatively small increase of impervious surfaces on the project site that would result in an increase in runoff or erosion on- or off-site. If not controlled, the transport of these materials to local waterways would temporarily increase suspended sediment concentrations and release pollutants attached to sediment particles into local waterways.

As discussed in Section 5.10(a), the proposed project would be required to submit PRDs and a SWPPP to the SWRCB for approval prior to the commencement of construction activities. The SWPPP would describe the BMPs to reduce the impact of erosion and siltation to less than significant. Specifically, the District-owned parcel would be graded to allow for drainage and BMPs installed for sediment and erosion control. Therefore, the proposed project would not result in a substantial erosion or siltation on- or off-site with compliance with SWRCB policies and implementation BMPs, and impacts would be less than significant.

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. The project site is already built out with hardscape and impervious surfaces associated with the existing stadium and athletic facilities on campus, and implementation of the proposed project would not substantially increase the amount of impervious surfaces on the project site. Furthermore, the proposed project would not involve the alteration of any natural drainage or watercourse. With the implementation of site BMPs, including infiltration chambers, roof drains, grates, and drain inlets, the amount of stormwater runoff reaching the City's storm drain system would not exceed existing conditions. Since the site BMPs would be designed to collect and detain peak runoff flows, the proposed project would not substantially increase the rate or amount of surface runoff in a manner that would cause flooding. Therefore, impacts related to stormwater drainage and flooding 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. The project site is currently developed with a stadium, tennis courts, bleachers, buildings, and other athletic facilities and improvements. The proposed project would not involve the alteration of any natural drainage or watercourse. The proposed project would only result in a relatively small increase of impervious surfaces on the project site, and the majority of the project site would remain in its current state.

The proposed project would generate stormwater similar to existing conditions. Stormwater that does not percolate into the ground would be directed to existing storm drains. As discussed in Threshold 5.10(a), the proposed project would be required to implement BMPs that would control the amount of stormwater leaving the project site. The small quantities of hazardous materials used on-site would be properly handled, stored, and used. The proposed project would not exceed the capacity of existing stormwater drainage

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systems and would not create substantial additional sources of polluted runoff. Therefore, impacts would be less than significant.

iv) Impede or redirect flood flows?

Less Than Significant Impact. The project site is not designated as a 100-year flood hazard area as identified by the Federal Emergency Management Agency's (FEMA) Flood Map or the City's Safety Element (FEMA 2024; Costa Mesa 2015). The proposed project would not impede or redirect any flood flows, and no significant impacts relating to floods are anticipated to occur as a result of project implementation. Therefore, impacts would be less than significant.

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

Less Than Significant Impact. A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. 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. According to the Safety Element of the City's General Plan, portions of the city could be subject to dam inundation if the Santiago Creek Dam and Prado Dam were to fail. However, the project site is not located in the dam inundation area (Costa Mesa 2016b). Additionally, there are no large water tanks or lakes in the area that could create flooding impacts at the project site. No significant impacts from seiche or inundation due to water storage facility, lake, or dam failure would occur.

Tsunamis are large ocean waves generated by major seismic events. The project site is approximately four miles from the Pacific Ocean and is not in a potential tsunami area defined by the City's Safety Element (Costa Mesa 2016b). Additionally, as discussed in 4.10(c)(iv), the project site is not located in a flood zone according to FEMA's Flood Map (FEMA 2024). Thus, since the project site is not in flood hazard, tsunami, or seiche zones, impacts would be less than significant.

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

No Impact. The Santa Ana Regional Water Quality Control Board (Region 8) prepares and maintains the Water Quality Control Plan for Santa Ana River Basin (Basin Plan) and designates beneficial uses for surface water bodies and groundwater within the area. The Basin Plan also contains water quality criteria for groundwater. The proposed project would not conflict or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. Project construction would be subject to the Statewide CGP and implementation of BMPs specified in the SWPPP. This would minimize the potential for erosion or siltation impacts that impact receiving waters. Therefore, the proposed project would comply with the Basin Plan.

The project site is in the Coastal Plain of Orange County Groundwater Basin (Orange County Basin). The Orange County Basin has a total capacity of 38,000,000 acre-feet (AF) and, as of 1998, has a storage of 37,700,00 AF of fresh water (DWR 2004). The Orange County Water District manages the groundwater in the Orange County Basin through the Orange County Water District Groundwater Management Plan (OCWD

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2015). The proposed project would not increase enrollment on campus, and the school already accommodates approximately 2,010 spectators during capacity events at the existing stadium. Since the proposed project would not increase enrollment and already accommodates capacity events, no additional groundwater would be necessary for the proposed project, and the proposed project would not interfere with the implementation of the Orange County Water District Groundwater Management Plan.

Compliance with existing laws and regulations would ensure that the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan and impacts would be less than significant impact.

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4.11 LAND USE AND PLANNING

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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

Would the project:

a) Physically divide an established community?

No Impact. The proposed project would be constructed within the boundaries of the existing Costa Mesa HS campus. The surrounding area is fully developed with urban land uses, including residential, recreational, and institutional land uses. The proposed project would serve the school population, and no established community would be physically divided. Therefore, 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 proposed project would occur within the boundaries of the existing high school stadium to serve the existing athletic programs and Costa Mesa HS students. The project site has a general plan designation of Public/Institutional and is zoned I&R; no changes to the City's land use documents or policies would be necessary. The proposed project would be consistent with the land use and zoning designation. Therefore, no impacts would occur.

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4.12 MINERAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				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

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. In 1975, the state legislature adopted the Surface Mining and Reclamation Act. This designated mineral resources zones (MRZs) that were of statewide or regional importance. The classifications used to define MRZs are:

- **MRZ-1:** Areas where the available geologic information indicates no significant mineral deposits or a minimal likelihood of significant mineral deposits.
- **MRZ-2:** Areas where the available geologic information indicates that there are significant mineral deposits or that there is a likelihood of significant mineral deposits.
- **MRZ-3:** Areas where the available geologic information indicates that mineral deposits are likely to exist, but the significance of the deposit is undetermined.
- **MRZ-4:** Areas where there is not enough information available to determine the presence or absence of mineral deposits.

According to the Department of Conservation's Mineral Land Classification map, the project site is classified MRZ-3 (DOC 2024c). However, the project site is already developed as a high school and the proposed project would be consistent with the existing development. The proposed project would not require the extraction of minerals. Therefore, no impact would occur.

- 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 developed as a high school, and the City of Costa Mesa General Plan does not identify the project site as having a locally important mineral resource. The only active oil wells in the city are south of 17th Street between Pomona and Westminster Avenues and west of Whittier Avenue south of Victoria Street (Costa Mesa 2016). Therefore, no impact would occur.

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4.13 NOISE

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

The analysis in this section is based in part on the following study, which is in Appendix C of this Initial Study.

- *Noise Modeling Data*, PlaceWorks, December 2024

Noise Fundamentals

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal, state, and city governments have established criteria to protect public health and safety and to prevent the disruption of certain human activities, such as classroom instruction, communication, or sleep. The analysis in this section is based on the noise monitoring and modeling prepared by PlaceWorks in October 2022, which is summarized herein and included as Appendix C. Additional information on noise and vibration fundamentals and applicable regulations are contained in Appendix C.

Environmental Setting

The project is on the Costa Mesa HS existing football field in the City of Costa Mesa. The nearest noise-sensitive receptors are residential uses approximately 790 feet to the northeast of the center of the existing football field. Other sensitive receptors nearby include the Davis Magnet School, adjacent to and east of the project site, and the Costa Mesa Middle School that is adjacent to and west of the project site. Noise-generating land uses in the project area include the Pacific Amphitheater approximately 890 feet to the south and the Costa Mesa Speedway approximately 960 feet to the southeast of the project site.

Ambient Noise Measurements

To determine a baseline noise level at different environments around the proposed project areas, ambient noise monitoring was conducted at the Costa Mesa High School's sports field during a live football game. PlaceWorks' staff conducted noise monitoring at both home and away sides of the sports field of the project site on October

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7, 2022. Noise measurements consisted of four short-term (15-minute) sessions during the evening hours of 7:00 pm to 9:00 pm.

The primary noise source at all measurement locations is crowd cheering and the school band playing. Meteorological conditions during the measurement period were favorable for outdoor sound measurements and were noted to be representative of the typical conditions for the season. Generally, conditions included clear skies with temperatures varying between 70 to 72 degrees Fahrenheit (°F) with winds averaging 6 miles per hour (mph) or less. All sound level meters were equipped with a windscreen during measurements.

The short-term sound level meter used (Larson Davis LxT) for noise monitoring satisfy the American National Standards Institute (ANSI) standard for Type 1 instrumentation.⁵ The short-term sound level meter was set to “slow” response and “A” weighting (dBA). The meter was calibrated prior to and after the monitoring period. All measurements were at least 5 feet above the ground and away from reflective surfaces. Short-term measurement locations are described below and shown in Figure 7, *Approximate Noise Monitoring Locations*, and results are summarized in Table 9, *Short-Term Noise Measurements Summary in A-Weighted Sound Levels*.

- **Short-Term Location 1 (ST-1)** was at the northeast “Davis” gate near the closest residence to the sports field. The measurement location was approximately 570 feet northeast of the sports field. A 15-minute noise measurement began at 8:55 pm on Friday, October 7, 2022. The noise environment is characterized primarily by crowd cheering and the school band performing from the sports field. Noise levels generally ranged from 45 dBA to 50 dBA from the sports field.
- **Short-Term Location 2 (ST-2)** was on the home side of the sports field, on the west side of the bleachers. The measurement location was approximately 50 feet west of the nearest sound speaker. A 15-minute noise measurement began at 7:34 pm on Friday, October 7, 2022. The noise environment is characterized primarily by crowd cheering and the school band performing. Noise levels generally ranged from 66 dBA to 75 dBA.
- **Short-Term Location 3 (ST-3)** was on the visitor side of the sports field, on the east side of the bleachers. The measurement location was approximately 50 feet north of the nearest sound speaker. A 15-minute noise measurement began at 8:03 pm on Friday, October 7, 2022. The noise environment is characterized primarily by crowd cheering and the school band performing. Noise levels generally ranged from 65 dBA to 80 dBA.
- **Short-Term Location 4 (ST-4)** was at the farthest east side of the sports field near Davis Elementary. The measurement location was approximately 30 feet east of the sports field. A 15-minute noise measurement began at 8:30 pm on Friday, October 7, 2022. The noise environment is characterized primarily by crowd cheering and the school band performing. Noise levels generally ranged from 60 dBA to 74 dBA.

⁵ Monitoring of ambient noise was performed using Larson-Davis model LxT sound level meters.

4. Environmental Analysis

Table 9 Short-Term Noise Measurements Summary in A-weighted Sound Levels

Monitoring Location	Description	15-minute Noise Level, dBA						
		L _{eq}	L _{max}	L _{min}	L ₅₀	L ₂₅	L ₈	L ₂
ST-1	Northeast "Davis" gate near the closest residence to the sports field 10/7/2022, 8:55 PM	56.0	68.5	44.3	52.6	57.0	60.2	63.6
ST-2	On the 'home' side of the sports field, on the west side of the bleachers 10/7/2022, 7:34 PM	74.7	87.5	66.0	73.4	75.6	77.8	79.7
ST-3	On the 'away' side of the sports field, on the east side of the bleachers. 10/7/2022, 8:03 PM	76.1	89.1	57.6	70.6	75.8	81.0	85.1
ST-4	At the farthest east side of the sports field near Davis Elementary 10/7/2022, 8:30 PM	67.1	78.9	52.9	62.2	67.1	72.9	74.2

Sensitive Receptors

Certain land uses are particularly sensitive to noise and vibration. These uses include residences, schools, hospital facilities, houses of worship, and open space/recreation areas where quiet environments are necessary for the enjoyment, public health, and safety of the community. The nearest sensitive receptors to the project site are the residences to the northwest approximately 510 feet, Davis Magnet School adjacent to the east of the project site, and the Costa Mesa Middle School adjacent to the western project site boundary.

Applicable Standards

Title 5, Section 14040(q) California Department of Education

Under Title 5, the California Department of Education (CDE) regulations require the school district to consider noise in the site selection process. As recommended by CDE guidance, if a school district is considering a potential school site near a freeway or other source of noise, it should hire an acoustical engineer to determine the level of sound that the site is exposed to and to assist in designing the school should that site be chosen.

California Building Code

The State of California's noise insulation standards for non-residential uses are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code. Part 11, CALGreen, noise standards are applied to new or renovation construction projects in California to control interior noise levels resulting from exterior noise sources. Proposed projects may use either the prescriptive method (Section 5.507.4.1) or the performance method (Section 5.507.4.2) to show compliance. Under the prescriptive method, a project must demonstrate transmission loss ratings for the wall and roof-ceiling assemblies and exterior windows when located within a noise environment of 65 dBA CNEL or higher. Under the performance method, a project must demonstrate that interior noise levels do not exceed 50 dBA L_{eq(1hr)}.

Figure 7 - Approximate Noise Monitoring Locations

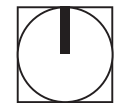


Costa Mesa High School Boundary
Stadium Boundary

ST-X
Short-Term Noise
Measurement Locations (4)

0 200
Scale (Feet)

Source: Nearmap 2022.



PlaceWorks

4. Environmental Analysis

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4. Environmental Analysis

City of Costa Mesa Municipal Code

Construction Noise

Chapter 13-279, “Exceptions for construction,” allows construction, repair, or remodeling during the hours of 7:00 am to 7:00 pm from Mondays through Fridays, 9:00 am to 6:00 pm on Saturdays, and prohibits construction activities on Sundays and select federal holidays.

Stationary Sources of Noise

Stationary sources of noise are governed under Chapter 13, “Noise Control,” including Sections 13-280(a)(b)(c) shown below. The municipal code states that no person shall, within the city, create any sound, radiated for extended periods from any premises which produces a sound pressure level at any point on the property of residences and schools to exceed the exterior noise standards shown in Table 10 below.

Table 10 Section 13-280(a) - Exterior Stationary Noise Standards

Exterior Noise Levels, dBA L ₅₀	Time Period
55	7:00 am to 11:00 pm
50	11:00 pm to 7:00 am

Source: City of Costa Mesa General Plan Noise Element, 2018.

Note: In the event the alleged offensive noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shall be reduced by 5 dB(A).

- (b) It is unlawful for any person at any location within the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level, when measured on any other residential property, either within or outside the city, to exceed:
- 1) The noise standard for a cumulative period of more than 30 minutes in any hour;
 - 2) The noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour;
 - 3) The noise standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour;
 - 4) The noise standard plus 15 dBA for a cumulative period of more than 1 minute in any hour;
 - 5) The noise standard plus 20 dBA for any period of time.
- (c) In the event the ambient noise level exceeds any of the first four noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

4. Environmental Analysis

Federal Transit Administration

The City of Costa Mesa does not have a quantified threshold for temporary construction noise and vibration. Therefore, to determine impact significance, the following Federal Transit Administration (FTA) criteria are adopted.

A vibration or construction noise impact would occur if:

- Vibration levels would exceed 0.20 inches/second (in/sec) peak particle velocity (PPV) at the façade of a non-engineered structure (e.g., wood-frame residential) at the nearby sensitive receptors.
- Project construction activities would generate noise levels greater than 80 dBA L_{eq} at the sensitive receptor property line.

Would the project:

- a) **Generate 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.

Construction Noise

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 phase of construction involves different types of equipment and has distinct noise characteristics. Noise levels from construction activities are typically dominated by the loudest three 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.

The noise produced at each construction phase is determined by combining the L_{eq} contributions from the three loudest pieces 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 what specific activity is 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 disregarding other attenuation effects from air absorption, ground effects, and shielding effects provided by intervening structures or existing solid walls), the average noise levels at noise-sensitive receptors could vary considerably, because mobile construction equipment would move around the site (site of each development phase) with different equipment mixes, loads, and power requirements.

4. Environmental Analysis

The expected construction equipment mix was estimated and categorized by construction activity using the Federal Highway Administration Roadway Construction Noise Model (RCNM). Assuming the nearest sensitive receptor to the center of construction activities, construction-related noise levels would be less than 68 dBA L_{eq} at the closest receptors (Davis Magnet School to the east), which would not exceed the threshold of 80 dBA L_{eq} . Construction noise levels at receptors further away are estimated to be even less. Results are summarized in Table 11, *Project Related Construction Noise Levels*, at the nearest receptors. Construction noise levels would not exceed the FTA threshold of 80 dBA L_{eq} for residential and school uses, and project construction noise would not create a substantial temporary increase in ambient noise levels in the vicinity of the project site. Therefore, construction noise impacts would be less than significant.

Table 11 Project-Related Construction Noise Levels

Construction Activity Phase	Noise Levels in dBA L_{eq}				
	RCNM Reference Noise Level	Residential Receptor to North	School Receptor to East	Commercial Receptor to South	On-Site Receptor to West
<i>Distance in feet</i>	50	780	335	300	315
Demolition	85	61	68	69	69
Site Preparation	85	58	65	66	66
Grading	85	59	66	67	67
<i>Distance in feet</i>	50	590	245	150	180
Building Construction	80	58	65	69	68
Architectural Coating	74	53	60	64	63
<i>Distance in feet</i>	50	640	630	150	200
Paving	80	56	56	68	66
Exceeds FTA's Threshold?		No	No	No	No

Source: FHWA's RCNM software, 2006. See Appendix C for calculations.
Notes: Distance measurements were taken using Google Earth (2024).
dBA L_{eq} = Energy-Average (L_{eq}) Sound Levels.

On-Campus Receptors

Students would remain on-site during site preparation and building construction. Construction activities could occur within 180 feet of existing classroom buildings. As shown in Table 11, construction noise levels would range between 63 and 69 dBA L_{eq} at the nearest on-campus building. Typical exterior-to-interior noise attenuation with windows and doors closed is 25 dBA. This would result in interior noise levels of approximately 38 to 44 dBA L_{eq} . Speech interference is considered intolerable when background noise levels exceed 60 dBA. Average construction noise levels are not expected to exceed 60 dBA L_{eq} within adjacent classrooms based on typical exterior-to-interior noise attenuation. Construction would occur throughout the project site and would be further than 180 feet at times, which would reduce interior noise levels. In addition, to avoid classroom disruption, some work would be done during instructional breaks when students are off campus. Therefore, on-campus construction noise impacts would be less than significant.

4. Environmental Analysis

Operational Noise

Off-Site Traffic Noise

A project will normally have a significant effect on the environment related to traffic noise if it substantially increases the ambient noise levels for adjoining areas. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions, and changes of 1 to 3 dBA under quiet, controlled conditions. Changes of less than 1 dBA are usually indiscernible. A change of 5 dBA is readily discernible to most people in an outdoor environment. Noise levels above 65 dBA CNEL are normally unacceptable at sensitive receptor locations such as residences, and noise environments in these areas would be considered degraded. Based on this, a significant impact would occur if the following traffic noise increases occur relative to the existing noise environment:

- 1.5 dBA in ambient noise environments of 65 dBA CNEL and higher
- 3 dBA in ambient noise environments of 60 to 64 dBA CNEL
- 5 dBA in ambient noise environments of less than 60 dBA CNEL

Based on existing traffic noise modeling, a significant traffic noise impact occurs when the thresholds above are exceeded under cumulative conditions (with project) and the contribution of the project to future traffic is calculated to be greater than 1.5 dBA CNEL for Fairview Road, Baker Street, and Adams Avenue because existing traffic noise levels are above 65 dBA CNEL.

The proposed project would result in an increase in vehicles to the project site. To determine noise level increases at existing noise-sensitive land uses due to project-generated traffic, net project trip traffic volumes from the project traffic study were compared to the existing daily traffic conditions. Table 12, *Project-Related Increases in Traffic Noise, dBA CNEL at 50 Feet*, shows the project-related traffic noise increases accounting for new project trips, where traffic volume data for the new trips associated with the proposed project are provided by the IBI Group (2024). The traffic study showed that the proposed development would generate an additional 212 evening peak hour trips during varsity football games.

Table 12 Project-Related Increases in Traffic Noise, dBA CNEL at 50 Feet

Roadway	Segment		Traffic Noise Increase					
	From	To	Existing No Project	Existing with Proposed Project	Existing Increase	Opening Year 2025 No Project	Opening Year 2025 With Project	Opening Year 2025 Increase
Fairview Rd	the North	Baker St	71	71	<1	72	72	<1
Fairview Rd	Baker St	Adams Ave	72	72	<1	72	72	<1
Fairview Rd	Adams Ave	Monitor Wy	69	70	1	70	70	<1
Fairview Rd	Monitor Wy	Mustang Wy	70	70	<1	70	71	1
Fairview Rd	Mustang Wy	Arlington Dr	70	70	<1	71	71	<1
Fairview Rd	Arlington Dr	Merrimac Wy	70	70	<1	70	71	1
Fairview Rd	Merrimac Wy	the South	70	70	<1	70	71	1

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Table 12 Project-Related Increases in Traffic Noise, dBA CNEL at 50 Feet

Roadway	Segment		Traffic Noise Increase					
	From	To	Existing No Project	Existing with Proposed Project	Existing Increase	Opening Year 2025 No Project	Opening Year 2025 With Project	Opening Year 2025 Increase
Baker St	Fairview Rd	the East	71	71	<1	71	71	<1
Baker St	Fairview Rd	the West	70	70	<1	70	70	<1
Adams Ave	Fairview Rd	the West	70	70	<1	70	70	<1
El Camino Rd	Fairview Rd	the East	57	57	<1	57	58	1
Merrimac Wy	Fairview Rd	the West	59	60	1	60	60	<1

Source: Traffic data provided by IBI Group 2024. See Appendix C.

Vehicle traffic noise levels were estimated using the FHWA Highway Traffic Noise Prediction Model. The FHWA model predicts noise levels through a series of adjustments to a reference sound level. These adjustments account for distances from the roadway, vehicle traffic volumes, vehicle speeds, car/truck mix, number of lanes, and road width. As shown in Table 12, traffic noise increases due to the proposed project would result in an increase of 1 dBA Day-Night Average Sound Level (DNL) or less. Projected traffic noise increases would be below the 1.5 dBA significance threshold. Therefore, traffic-related noise would result in a less-than-significant impact.

Stadium Expansion

For reference, a human with healthy hearing can detect a change of 1 to 3 dBA detectable under quiet, controlled conditions (sound booth). A change in 3 dBA is considered the minimum change in decibels people can detect under normal, quiet conditions. A change of 5 dBA is readily discernible in an exterior environment and a change in 10 dBA is perceived as a doubling in sound level. Based on this and noted that games would result in periodic (not daily) increases in ambient noise levels from the proposed stadium events, a threshold of 10 dBA above the ambient is used. A noise increase above 10 dBA for periodic events (such as stadium events) would be considered significant.

The proposed project would expand bleacher seating at the Costa Mesa High School. The high school stadium currently holds up to 675 spectators on the home bleachers and up to 275 spectators on the visitor bleachers for a total of 950 spectators combined. The proposed project would increase capacity by 780 spectators on the home bleachers and up to 280 spectators on the visitor bleachers. Table 13, *Bleacher Capacity Net Increase*, shows the Existing, Existing Plus Project, and the net increase in spectator capacity.

4. Environmental Analysis

Table 13 Bleacher Capacity Net Increase

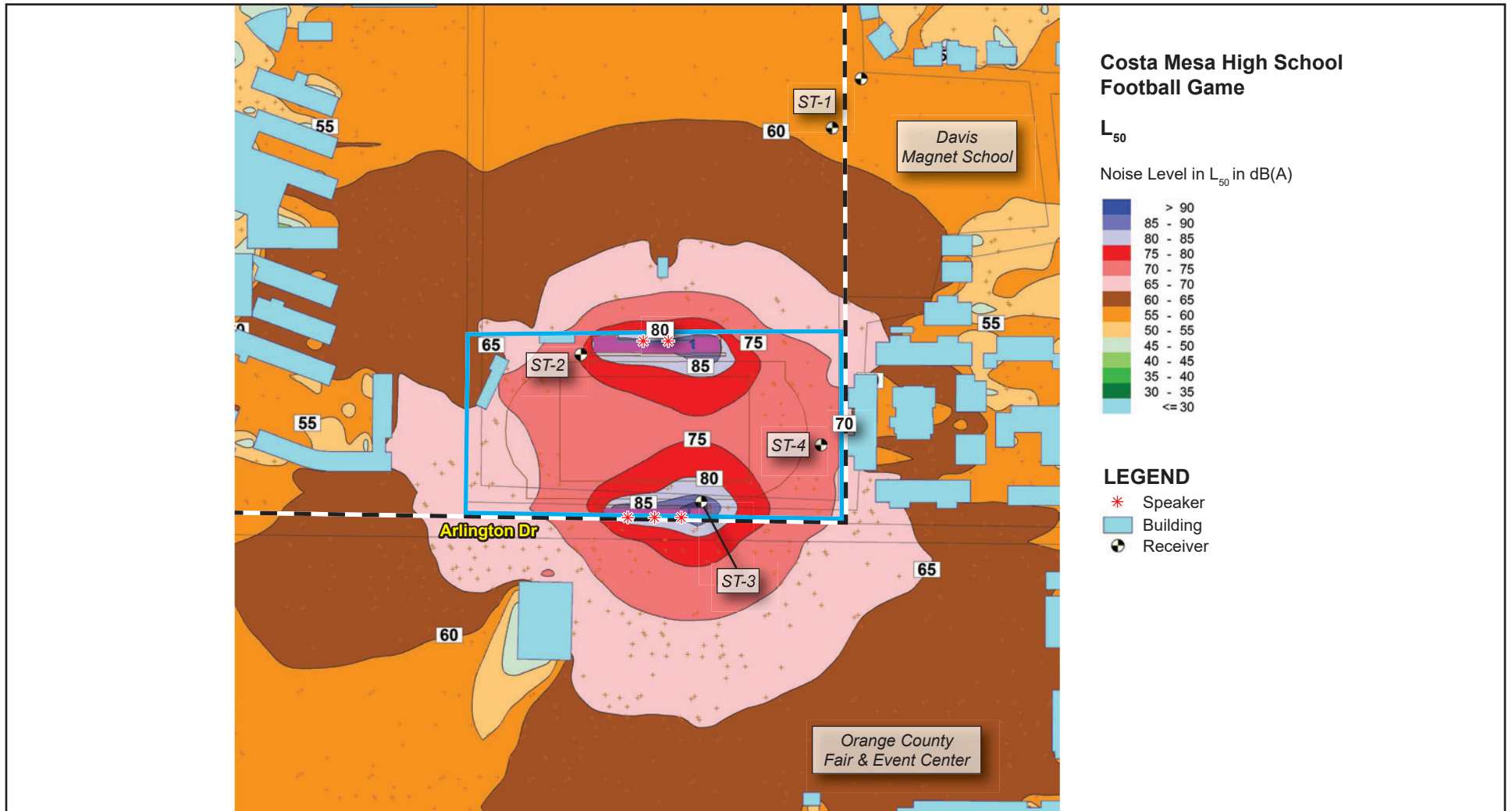
Existing No Project Spectator Capacity		Existing Plus Project Bleacher Capacity		Net Increase	
Home Bleachers	Visitor Bleachers	Home Bleachers	Visitor Bleachers	Home Bleachers	Visitor Bleachers
675	275	1,455	555	780	280
Total = 950		Total = 2,010		Total = 1,060	

The proposed net increase of 1,060 spectators (total) was modeled using SoundPLAN computer software. SoundPLAN uses industry-accepted propagation algorithms based on International Organization for Standardization (ISO) and ÖAL-28 standards for outdoor sound propagation. See Appendix C for modeling results. 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. Additionally, SoundPLAN provides for other correction factors, including level increases due to reflections, source directivity, and source tonality. SoundPLAN noise modeling estimated noise levels at the nearest residential receptor (to the north) to be approximately 50 dBA L₅₀. The model also incorporated other stadium noise assumptions associated with football games. Based on other typical football game observations the following additional modeling inputs were assumed to be reasonable.

- Rowdy crowd cheering (both home and visitors) was assumed for a cumulative 10 minutes per hour, and each cheer interval was assumed to be 10 seconds long.
- Each band (both home and visitor) was assumed to play a cumulative of 10 minutes per hour.
- Approximately 36 individual speaker announcements (from the press box) were assumed to occur per hour, with individual announcement durations of 20 seconds, for a cumulative of 12 minutes per hour.

Figure 8, *SoundPLAN Noise Prediction Contours Map 1*, shows predicted operational noise associated with the proposed project stadium noise contours on the project site and adjacent land uses. Figure 9, *SoundPLAN Noise Prediction Contours Map 2*, shows predicted operational noise associated with the proposed project stadium noise contours on the project site and in the greater community. As shown in Table 9, above, the measured baseline noise level at the residential receptors to the north during a football game was approximately 52.6 dBA L₅₀. Modeled sound levels at the nearest sensitive receptor are estimated to be 58.7 dBA L₅₀ as a result of the additional crowd noise due to proposed bleacher expansion. The residential receptor to the north is represented as “Receiver E” in Appendix C, SoundPLAN model output results. The project is therefore estimated to increase existing stadium baseline noise levels at the nearest sensitive receptor on a periodic basis by up to 6.1 dBA L₅₀. This would not exceed the threshold of 10 dBA. Therefore, periodic crowd noise increases during football games due to expanded bleacher capacity at the nearest receptors would be a less-than-significant impact.

Figure 8 - SoundPLAN Noise Prediction Contours Map 1



--- Costa Mesa High School Boundary

— Stadium Boundary

Source: PlaceWorks 2023; Navcon 2023.

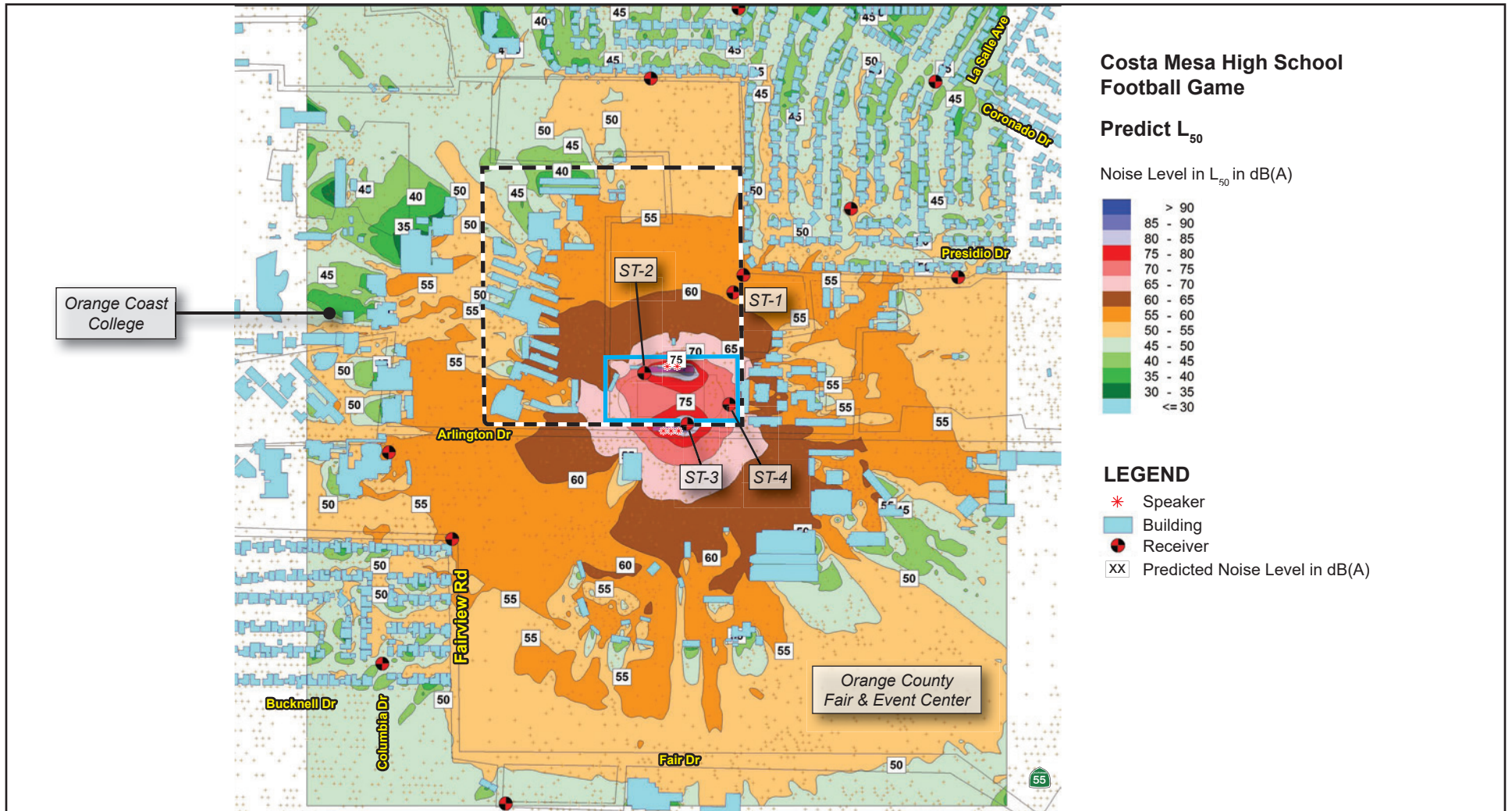
0 300
Scale (Feet)



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Figure 9 - SoundPLAN Noise Prediction Contours Map 2



--- Costa Mesa High School Boundary

— Stadium Boundary

0 900
Scale (Feet)



Source: PlaceWorks 2023; Navcon 2023.

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b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Following is a discussion of the proposed project's temporary and permanent vibration impacts because of the project's construction and operational phases.

Operational Vibration

Project operation would not include any substantial long-term vibration sources. Therefore, no significant vibration impacts would occur.

Construction Vibration

Construction operations can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the construction site varies depending on soil type, ground strata, and receptor-building construction. The effects from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures.

For reference, a vibration level of 0.20 in/sec PPV is used as the limit for non-engineered timber and masonry buildings, which would conservatively apply to the surrounding structures (FTA 2018). To determine potential vibration-induced architectural damage, the distance from the vibration source (construction equipment) to the vibration-sensitive receptors (residences) is measured from the edge of the construction site to the nearest building façade. Vibration-induced architectural damage is assessed in terms of peak velocity (PPV). As shown in Table 14, *Vibration Damage Levels for Typical Construction Equipment*, PPV levels for typical construction equipment would not exceed the 0.20 in/sec PPV standard at the nearest vibration sensitive receptors. Therefore, no mitigation would be required, and impacts from vibration would be less than significant.

Table 14 Vibration Damage Levels for Typical Construction Equipment

Equipment	PPV (in/sec)				
	Reference at 25 feet	Residential Receptor to North at 640 feet	School Receptor to East at 240 feet	Commercial Receptor to South at 115 feet	On-Site Receptor to West at 160 feet
Vibratory Roller	0.21	0.002	0.003	0.021	0.013
Large Bulldozer	0.089	0.001	0.003	0.009	0.005
Loaded Trucks	0.076	0.001	0.003	0.008	0.005
Jackhammer	0.035	0.000	0.001	0.004	0.002
Small Bulldozer	0.003	0.000	0.000	0.000	0.000

Source: FTA 2018.
Notes: NA = Not Applicable.

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- 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 nearest airport to the project site is John Wayne Airport, approximately 1.5 miles to the east. According to the noise contour data provided for John Wayne Airport (ALUC 2019), the western end of the project area is approximately a mile outside of the nearest 60 dBA CNEL contour. While sporadic operations at these aircraft facilities may, at times, be audible in the project area, the distances would reduce noise to negligible amounts in the project area. Therefore, development of the proposed project would not expose people to excessive noise levels from aircraft approaching or departing the nearest airport facilities. No impact would occur.

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4.14 POPULATION AND HOUSING

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

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 proposed 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 proposed project does not include the construction of any new businesses or changes to the existing land uses onsite. Similar to other construction projects in the region, the proposed project's construction workers are expected to be drawn from the large, available regional labor force, who would commute to the campus during the construction phases. As such, the proposed project would not induce construction employees to move to the proposed project's vicinity. The proposed project would serve the existing student population in the area. No direct or indirect 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. The proposed project would occur within the existing high school boundaries. Development of the proposed project would not involve the removal or relocation of any housing and would not displace any people or require the construction of any replacement housing. Therefore, construction of replacement house is not necessary. No impact would occur.

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4.15 PUBLIC SERVICES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES. Would the project:				
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

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 Costa Mesa Fire & Rescue Department (CMFD) provides fire protection and emergency services in Costa Mesa. The CMFD is also responsible for building and business inspections, plan review, and construction inspections. There are six fire stations serving the city, and Fire Station No. 5 at 2450 Vanguard Way is the nearest fire station, less than one driving mile to the south of the project site. Other stations in the vicinity include Station No. 1 at 1570 Adams Avenue and Station No. 2 at 800 Baker Street. The proposed project would not increase the existing student capacity at Costa Mesa HS and would accommodate existing athletic and school-supporting events and programs; therefore, it would not substantially increase the fire protection demands for CMFD at the school. Although the proposed project would expand the permanent bleacher capacity, the school already accommodates events with more than 2,000 visitors with portable bleachers, and these special events would not occur on regular basis. Furthermore, the new team room building would be constructed in compliance with the latest Fire Code and DSA requirements for fire protection, and the site plans would be required to be reviewed and approved by CMFD. Therefore, impacts to fire protection facilities would be less than significant.

b) Police protection?

Less Than Significant Impact. The City of Costa Mesa Police Department (CMPD) provides policing and protective services within the city limits. Police service needs are generally related to the size of the population

4. Environmental Analysis

and geographic area served, the number and types of calls for service, and other community characteristics. The proposed project would serve the existing school population and would not increase the school's enrollment capacity or population in the school's vicinity. The proposed project would also not increase the number of events at the stadium. The existing stadium currently accommodates events with over 2,000 spectators with portable bleachers, such as graduation, Battle of the Bell, and band competitions. The proposed project would provide permanent bleacher seats for these types of events that the school is hosting. Therefore, the proposed project would not substantially increase the demand for police protection services or generate the need for expanded police facilities. These at-capacity large events would not occur frequently and would generally be scheduled during nonpeak hours. Although increased traffic congestion could occur on local streets and in front of the school before and after major events, it is anticipated that the CMPD would have sufficient manpower to serve the project area. The proposed school is not anticipated to create a significant increase in demand for police services on or in the vicinity of the project site. The District would cooperate with the CMPD to address any traffic concerns that may arise as a result of event scheduling. Therefore, impacts would be less than significant.

c) Schools?

No Impact. The proposed project would not increase demand for public schools and would not require building new or expanded schools. The proposed project would support the existing students and programs at CMHS campus and would not induce growth in the project area. Therefore, no impact to schools would occur as a result from the proposed project.

d) Parks?

No Impact. The proposed project would serve the existing district population and programs. Typically, the demand for parks is created by the development of new housing and/or actions that generate additional population. However, the proposed project would serve an existing student population and would not induce growth or influence housing in the area. Therefore, no impact would occur.

e) Other public facilities?

No Impact. Demands for other public facilities such as libraries are determined by the population of the facilities' service areas. The proposed project would serve the existing school programs at CMHS and existing district population. No additional services demand would be created by the proposed project. Therefore, no impact would occur.

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4.16 RECREATION

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				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	

Would the project:

- 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 to result in their substantial physical deterioration. The demand for such parks is generally determined by the population of the parks' service areas. Typically, the demand for parks is created by the development of new housing and/or actions that generate additional population. The proposed project would not result in an increase in students or staff at the school and would not increase population in the surrounding community. The proposed project would include installing additional bleacher capacity for both home and visitor sides, constructing new classrooms and restrooms, installing various stadium and track improvements, and renovating the existing tennis courts. The proposed project would not add park users to existing neighborhood and regional parks or other recreational facilities. Therefore, 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 proposed project involves the installation of additional bleacher capacity for both home and visitor sides, constructing new classrooms and restrooms, installing various stadium and track improvements, and renovating the existing tennis courts. Physical effects of providing these sports facilities are addressed throughout this Initial Study. No other construction or expansion of recreational facilities other than the proposed project would be required as part of the proposed project. Therefore, impacts would be less than significant.

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4.17 TRANSPORTATION

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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	
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	

The analysis in this section is based on the following study, which is in Appendix D of this Initial Study.

- *Costa Mesa High School Stadium Traffic Impact Analysis*, Arcadis, December 2024

Existing Roadway Network

The existing roadway network was analyzed to determine their uses and the uses of each existing road surrounding Costa Mesa HS. Items of note include existing geometry, pedestrian and bicycle facilities, street parking, adjacent land uses, and the Orange County Master Plan of Arterial Highways designation.

Fairview Road is generally a six-lane divided Major Arterial that travels north and south in the study area. Within the study area, Class II bike lanes are striped along the curb on both sides of the street, and on-street parking is not permitted. The posted speed limit is 40 mph. Land uses along Fairview Road include Costa Mesa High School, Orange Coast College (OCC), the OC Fair & Event Center, and residential and commercial developments. Fairview Road borders the project site to the west and provides access to the site via a traffic signal at Mustang Way and two unsignalized driveways. Traffic signals control the study intersections of Fairview Road at Baker Street, Adams Avenue/El Camino Drive, Sports Complex/Monitor Way, Mustang Way/Pirate Way, Arlington Drive, Merrimac Way, and Fair Drive.

Baker Street is generally a four-lane Primary Arterial with a center two-way left-turn lane that travels east and west in the study area. West of Fairview Road, parking is allowed along the south side of street and there are no bike lanes. East of Fairview Road, there are Class II bike lanes striped along both sides of the street and on-street parking is not permitted. The posted speed limit is 40 mph. Land uses along Baker Street are primarily commercial and residential. Baker Street provides access to the SR-73 freeway and many of the residential developments in the CMHS attendance area.

Adams Avenue/El Camino Drive travels east and west through the study area. To the west of Fairview Road, the street is labelled Adams Avenue and is generally a six-lane divided Major Arterial with a posted speed limit of 40 mph. Between Pinecreek Drive and Fairview Road, the westbound segment narrows from three to two

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travel lanes to provide space for on-street parking. Land uses adjacent to Adams Avenue include OCC, multi-family residential, and commercial developments. On the east side of Fairview Road, the street is called El Camino Drive and is a two-lane undivided local street serving single-family residences. Parking is permitted on El Camino Drive, and the posted speed limit is 25 mph. There are no bike lanes on Adams Avenue or El Camino Drive.

Arlington Drive is an undivided Collector Street that runs east and west between Fairview Road and Newport Boulevard. West of Fairview Road, Arlington Drive leads onto the OCC campus. Just east of Fairview Road, Arlington Drive is a four-lane street with a center two-way left turn lane and Class II bike lanes. About 700 feet east of Fairview Road, the road narrows to one lane in each direction. At about 2,400 feet east of Fairview Road, Arlington Drive narrows again to a two-lane undivided roadway with no bike lanes. Adjacent land uses include the OC Fair & Event Center, Davis Magnet School, and TeWinkle Park. The posted speed limit is 35 mph.

Merrimac Way runs east and west through the study area. West of Fairview Road, it is a four-lane divided Primary Arterial with Class II bike lanes and a posted speed limit of 35 mph. This street segment provides access to the OCC campus and single-family residential developments.

Would the project:

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 proposed project would require construction equipment, transportation of equipment to and from the construction site, and worker vehicles. However, construction traffic would be temporary, and all construction activity and staging areas would occur within the existing campus boundary. Therefore, the proposed project would not obstruct traffic lanes or have any long-term effects on the circulation system.

The proposed project would expand the permanent bleacher seating capacity by 1,060 seats, from 950 seats to 2,010 seats. However, it should be noted that the existing stadium with 950 permanent seating capacity currently hosts events such as graduation, Battle of the Bells, and band competitions with over 2,010 spectators with portable bleachers. These events would occur only on special occasions and would not contribute to the typical daily traffic volumes year-round. A typical varsity football game is not expected to fill the stadium at full capacity. A varsity football game on October 7, 2022, had an attendance of approximately 710 spectators.⁶ As such, Costa Mesa HS has been accommodating the capacity events and would not increase attendance beyond the occasional capacity events.

The proposed project would not modify any site access driveways or surface parking lots at the existing high school. According to the Traffic Impact Analysis prepared by IBI Group, the existing Costa Mesa High School generates more vehicle and bus trips during the typical AM peak hour than are expected to be generated for a

⁶ According to an email dated January 23, 2023, from Jeff Gall, Assistant Principal at Costa Mesa High School, a varsity football game on October 7, 2022, had 566 tickets sold, approximately 70 students attended with ASB cards, and 74 band members, totaling 710 bleacher seats filled.

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capacity stadium event. The project site has been designed to handle the AM peak hour traffic and is expected to serve the proposed project with expanded bleacher seating capacity without any modifications to the existing on-site and off-site transit, roadway, bicycle, and pedestrian facilities.

Traffic Management

Based on the forecast traffic volumes and control at the CMHS site access points, stadium events are not expected to require any special traffic management. The existing CMHS generates more vehicle and bus trips during the typical AM peak hour than are expected to be generated for a capacity stadium event. The site has been designed to handle the AM peak hour traffic and is expected to serve the stadium traffic as well.

Site Ingress

Varsity football games typically start at 7 pm, after the end of the PM peak hour of adjacent street traffic. Pre-event trips to the site are expected to occur during the PM peak hour but are not expected to require any special traffic management or control.

Site Egress

The exodus of vehicles from the site tends to occur over a much shorter period than arrivals. However, special traffic management is not expected to be necessary for the following reasons:

- At the end of a typical school day, vehicles leaving the CMHS site will exit the facility at a similar or even greater concentration. The site has been designed to handle this traffic and is expected to serve the stadium traffic as well.
- Stadium events typically end well past the PM peak hour when adjacent street traffic volumes are very low.
- Vehicles exiting from Driveway 1 and Driveway 3 are restricted to right turn movements onto Fairview Road, limiting the conflicting movements and delay experienced at these locations.
- Driveway 2 (Fairview Road & Mustang/Pirate Way) operates under signal control.
- Driveways 4 and 5 are on Arlington Drive, which is a local collector road serving primarily institutional land uses. Between 5:00 pm and 6:00 pm, 192 eastbound and 348 westbound vehicles were observed on Arlington Drive. Left turn movements from Driveways 4 and 5 are not significant and are not expected to cause significant conflicts with through traffic on Arlington Drive, and special traffic management measures are not expected to be required.

It is not anticipated that special traffic management or control would be required for stadium events. If there are significant complaints or incidents related to stadium traffic once the facility is open and operating, the NMUSD may work with the Costa Mesa Police Department to provide manual traffic control on Arlington Drive following capacity events at the stadium.

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Pedestrian Circulation

The existing pedestrian facilities on and surrounding the campus adequately serve the high school facility and adjacent uses. No pedestrian circulation issues are identified at this time, and no mitigation measures are required.

In addition, the proposed project would consist of only internal improvements. The proposed project would widen the internal fire access lane to provide better access for emergency vehicles directly to the stadium's track and field. The proposed project would not consist of any off-site circulation improvements. No modifications to site access driveways or surface parking lots are planned as part of the stadium project. The number of vehicle and bus trips generated by CMHS during the typical weekday AM peak hour exceeds the number of trips expected to be generated by a capacity event at the stadium. The parking and drop-off areas have been designed with sufficient space and turning radii to serve both stadium- and non-stadium-generated traffic. Additionally, based on the conclusion made from the Traffic Impact Analysis, to avoid parking and traffic conflicts, it is recommended that the NMUSD and CMHS staff avoid scheduling other activities on the CMHS campus when capacity events such as varsity football games are being held at the new stadium.

Therefore, the proposed project would not conflict with any programs, plans, ordinances, or policies addressing the circulation system. Impacts would be less than significant.

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

Less Than Significant Impact. Vehicle delays and levels of service (LOS) have historically been used as the basis for determining the significance of traffic impacts as standard practice in California Environmental Quality Act (CEQA) documents. In 2013, SB 743 was signed into law, eliminating auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as the sole basis for determining significant impacts under CEQA. Pursuant to SB 743, the California Natural Resources Agency adopted revisions to the CEQA Guidelines in 2018; CEQA Guidelines Section 15064.3 describes how transportation impacts are to be analyzed after SB 743. Under the Guidelines, metrics related to “vehicle miles traveled” (VMT) are required to evaluate the significance of transportation impacts under CEQA for development projects, land use plans, and transportation infrastructure projects.

The City of Costa Mesa Transportation Impact Analysis Guidelines, October 2020, provides screening thresholds that include project type screening. Project type screening identifies some project types that are presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature. The project type screening includes “local-serving K-12 public schools.” The proposed project is part of Costa Mesa High School's athletic facilities within the existing school boundaries. The existing high school currently serves the local community and would continue to serve the local community. Therefore, the City's project type screening would apply to the proposed project, and the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). Impacts would be less than significant.

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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. The proposed project would occur within the existing high school campus and would not modify the existing on- or off-site circulation systems. The existing parking and drop-off areas have been designed with sufficient space and turning radii to serve both stadium- and non-stadium-generated traffic.

Intersection Analysis

The lane geometry and traffic control for ten study intersections were selected for analysis based on traffic patterns and forecast project trips (see Appendix D).

All study intersections currently operate at an acceptable level of service (LOS D or better) during the PM peak hour and are expected to continue to operate at LOS D or better in the Project Opening Year (2026) with and without the project. There are no impacts related to traffic or operations associated with the project, and no mitigation measures are required. Stadium events are not expected to require any special traffic management.

Additionally, no new land uses would be created that could potentially increase or impact any design features of the existing high school facilities. All construction staging would also occur within the boundaries of the existing campus. No sharp curves or dangerous intersections would be created due to project implementation. Therefore, impacts would be less than significant.

d) Result in inadequate emergency access?

Less Than Significant Impact. The proposed project would occur within the existing high school campus and would not modify the existing on- or off-site circulation systems to cause inadequate emergency access. Access for emergency vehicles would continue to be provided via the existing drop-off aisle on Arlington Drive at the southeast corner of the stadium. Therefore, implementation of the proposed project would not result in inadequate emergency access. Impacts would be less than significant.

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4.18 TRIBAL CULTURAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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		

Would the project:

- a) 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. The project site is developed with a stadium that was developed in 2016. The stadium has synthetic field and rubber track, a press box, concession/restroom building, storage building, sports lighting, and PA system mounted on the lighting poles. The project site is not listed or eligible for listing in the California Register of Historic resources, or in a local register of historic resources as defined in PRC section 5020.1(k) (McKenna et al. 2010). Therefore, no impacts 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

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Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact With Mitigation Incorporated. On February 1, 2023, the District sent eleven notification letters to: Gabrieleño Band of Mission Indians – Kizh Nation, Gabrielino/Tongva San Gabriel Band of Mission Indians, Gabrielino/Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, Gabrielino-Tongva Tribe, Juaneño Band of Mission Indians Acjachemen Nation – Belardes, Juaneño Band of Mission Indians Acjachemen Nation 84A, Pala Band of Mission Indians, Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseno Indians, and Soboba Band of Luiseno Indians because they requested to be notified of projects undertaken by the District pursuant to AB 52. PlaceWorks staff, retained by the District, sent emails on February 1, 2023, to 11 tribes on the Native American Heritage Commission's Tribal Consultation List for Orange County requesting to share any pertinent tribal cultural information and notify the District if they wish to initiate the consultation process.

On February 7, 2023, Christina Conley from Gabrielino Tongva Indians of California responded by indicating that the project area is on culturally sensitive land for her tribe and wants the tribe to be a part of Native American Monitoring for ground disturbances. On February 9, 2023, Joyce Perry from the Juaneño Band of Mission Indians, Acjachemen Nation, responded by requesting additional information and in subsequent correspondences requested to be a part of monitoring during ground disturbances.

Considering the developed nature of the project site, the potential to uncover tribal cultural resources for the site is low. However, ground-disturbing activities may encounter undisturbed native soils, and it is possible that subsurface TCRs could be discovered. Therefore, as stated in Mitigation Measure TCR-1, a tribal cultural resources monitoring would be implemented during ground-disturbing activities as a mitigation measure to reduce potential impacts to a less than significant level.

Mitigation Measures

TCR-1 Tribal Cultural Resources Monitoring. At least 30 days before any brush clearance, grading, excavation and/or ground disturbing activities on the site take place, the District shall contact the Gabrielino Tongva Indians of California and the Juaneño Band of Mission Indians, Acjachemen Nation, to monitor all ground disturbing activities in an effort to identify any unknown tribal cultural resources. The District shall provide the construction detail related to ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling.

The District, in consultation with interested tribes, shall develop a rotating or simultaneous schedule for designated Native American Tribal Monitor(s) from the consulting tribes, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with the District's construction contractor. If the tribes cannot come to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American Heritage Commission shall designate the schedule for the on-site Native American Tribal Monitor for the proposed project.

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In the event of inadvertent tribal cultural resources discoveries that are deemed significant as defined by CEQA Guidelines, a treatment plan shall be prepared by a Secretary of Interior Standards qualified archaeologist in consultation with the consulting tribes. The District shall make all attempts to avoid and/or preserve in place in the form and/or manner the tribe deems appropriate for educational, cultural, and/or historic purposes. In specific circumstances where resources are determined to be unavoidable and/or unable to be preserved in place, treatment may include implementation of tribal cultural resources data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.

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4.19 UTILITIES AND SERVICE SYSTEMS

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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	

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. The Costa Mesa HS Campus is in the service districts for SoCal Edison which provides electrical services, the Mesa Water District which provides water services, and SoCal Gas which provides natural gas services. Additionally, the Costa Mesa Sanitary District provides regular waste disposal, and the Orange County Sanitation District is the wastewater treatment district for the area (Costa Mesa 2021).

The proposed project would include construction of a new building, expanding two existing buildings, installing new permanent home and away bleachers, track improvements, various improvements to the existing tennis courts on campus, a new fire lane, and landscaping. The project does not propose any new light poles or walkways that would require additional connection to existing electric facilities. The new building developed under the proposed project would be designed using applicable green building practices, including those of the most current Building Energy Efficiency Standards (Title 24, California Code of Regulations, Part 6) and CALGreen (Title 24, California Code of Regulations, Part 11). Additionally, developers would contact the water district to submit plans to be reviewed prior to the issuance of permits. Therefore, a less than significant impact would occur and no mitigation is required.

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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. Costa Mesa High School is served by the Mesa Water District. Mesa Water District's main sources of water are groundwater from the Orange County Groundwater Basin, recycled water, and purchased/imported water from the Metropolitan Water District of Southern California (Metropolitan) through the Municipal Water District of Orange County in the event of an emergency (Costa Mesa 2021). According to the Mesa Water District Urban Water Management Plan (UWMP), during fiscal year 2019-2020, the water district relied on 94 percent groundwater (75 percent from clear wells and 19 percent from desalinated groundwater) and 6 percent recycled water; no water was imported from Metropolitan. Mesa Water District forecasts 100 percent reliance on local water supplies by 2045, with a similar water supply portfolio of 95 percent groundwater and 5 percent recycled water (Costa Mesa 2021). The UWMP determined that even in the multiple-dry year scenario, the Mesa Water District would be capable of meeting all customers' demands with significant groundwater reserves. Shortage conditions due to drought would not trigger customer demand reduction measures (Costa Mesa 2021). The Costa Mesa HS campus already occasionally hosts capacity events. The proposed project would not add additional spectators beyond the occasional capacity events and would not increase student capacity. Additionally, the proposed project would include the installation of a minimal amount of landscaping and the new school buildings would be designed to meet the California Building Code. Therefore, 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. Development of the project would not require new or expanded wastewater treatment facilities. The existing high school is already served by the Costa Mesa Sanitary District (CMSD) for wastewater collection and delivery to be treated by the Orange County Sanitation District's (OCSD) treatment plants. CMSD maintains 224.2 miles of gravity sewer mains to collect sewer to be treated. The proposed project would provide restrooms and showers for the new team room building and spectators from the expanded bleacher seating capacity would use the existing restrooms. The proposed project would increase the bleacher seating capacity by 1,060 seats, from 950 seat to 2,010 seats, therefore increasing the wastewater demand by approximately 6,030 gallons of wastewater. During a maximum capacity event (2,010 seats), approximately 6,030 gallons of wastewater is anticipated, assuming wastewater generation of 3 gallons per seat. These would occur less than 10 times a year. The majority of events would have 250 spectators or less, generating approximately 750 gallons.

Current primary treatment capacity for OCSD's Reclamation Plant No. 1 in Fountain Valley is 218 million gallons per day (mgd) of wastewater, with an average daily flow of 120 mgd. Reclamation Plant No. 2 is in Huntington Beach and has 168 mgd of primary treatment capacity, with an average flow of 151 mgd. Therefore, the small increase in wastewater treatment demand resulting from the proposed project would have minimal impact. It should also be noted that the Costa Mesa HS stadium already hosts capacity events. Any increase in wastewater from occasional capacity events has already occurred and has not resulted in the need for expanded

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wastewater facilities. Therefore, no new or expanded treatment facilities would be necessitated by the project implementation and impacts would not 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 generated from the proposed project would be collected by CR&R Waste and Recycling, who is contracted by the City, and hauled to the Olinda Alpha Landfill at 1942 North Valencia Avenue in the city of Brea. The average disposal rate at Olinda Alpha Landfill is approximately 7,000 tons per day, and it is permitted for up to 8,000 tons per day. Under existing conditions, the landfill is projected to have enough capacity until 2030. The California Integrated Waste Management Act of 1989 (AB 939) required city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal by the year 2000 and 70 percent by the year 2020. During the construction phase, waste generated would be on a short-term basis and would be recycled and hauled to the authorized construction disposal facility. During operation, the proposed project would result in a minimal increase in solid waste from the occasional capacity events. It should also be noted that the Costa Mesa HS stadium already hosts capacity events. Any increase in solid waste from occasional capacity events has already occurred and has not resulted in excess solid waste. Given the current capacity and daily disposal rate of the Olinda Alpha Landfill, the proposed project would not generate solid waste in excess of state or local standards or the capacity of local infrastructures. 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 EPA administers the Resource Conservation and Recovery Act of 1976 and the Solid Waste Disposal Act of 1965, which governs solid waste disposal. In the State of California, AB 939 (Integrated Solid Waste Management Act of 1989; PRC 40050 et seq.) required every California city and county to divert 50 percent of its waste from landfills by the year 2000 by such means as recycling, source reduction, and composting. In April 1992, Costa Mesa prepared and adopted a source reduction and recycling element. In addition, AB 939 requires each county to prepare a countywide siting element specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the county that cannot be reduced or recycled for a 15-year period. Education and public awareness in the area of recycling is important to increase the amount of refuse diverted from the waste stream. The City of Costa Mesa and the CMSD are actively involved in educating the public and support of the goals and objectives of the County of Orange as well as the intent of AB 939.

AB 1327, the California Solid Waste Reuse and Recycling Access Act of 1991, requires local agencies to adopt ordinances mandating the use of recyclable materials in development projects. The proposed project would comply with all laws and regulations governing solid waste and the county's strategies for waste reduction. Additionally, to reduce the amount of waste going into local landfills from schools, the state passed the School Diversion and Environmental Education Law, Senate Bill 373, which required CalRecycle to develop school waste reduction tools. In compliance with this law, CalRecycle encourages school districts to establish and maintain a paper recycling program in all classrooms, administrative offices, and other areas owned and leased

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by the school district. Participation in this and other such programs would further reduce solid waste generated from the proposed project and assist in the county's compliance with AB 939. AB 341 also requires commercial enterprises and public entities that generate four cubic yards per week of waste, including school districts, to recycle and compost to meet the statewide 75 percent waste recycling goal. The proposed project would comply with all federal, state, and local statutes and regulations related to solid waste. Therefore, impacts would be less than significant.

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4.20 WILDFIRE

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
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

Wildland fire protection in California is the responsibility of either the local government, state, or the federal government. The City of Costa Mesa, including the project site, is not in or near a state responsibility area (SRA) for wildland fire protection (Cal Fire 2023).

Would the project:**a) Substantially impair an adopted emergency response plan or emergency evacuation plan?**

No Impact. There is no area of very high fire hazard severity zones (FHSZ) in the City of Costa Mesa or its near vicinity. The nearest very high FHSZ from the project site is approximately 3.4 miles to the southeast in the City of Newport Beach. The proposed project would be entirely located on the Costa Mesa HS campus and would not include any off-site improvements. Implementation of the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan related to wildfire. Therefore, no impact 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. There is no area of very high FHSZ in the City of Costa Mesa or its near vicinity. The nearest very high FHSZ from the project site is approximately 3.4 miles to the southeast in the City of Newport Beach. The project site and its surrounding area are highly urbanized and no wildlands exist within the immediate vicinity of the campus. Implementation of the proposed project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Additionally, the project site

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is relatively flat without significant topography, and there are no steep slopes where high winds can exacerbate wildfire risks. Therefore, no impact would occur.

- 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 and its surrounding area are highly urbanized, and the project site is already served by necessary utilities and infrastructure. Implementation of the proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Therefore, 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 and its surrounding area are relatively flat and highly urbanized and there is no slopes in the area with potential wildland fire risks. Additionally, implementation of the proposed project would not alter the existing drainage patterns or substantially increase the amount of runoff. Implementation of the proposed project would not expose people or structures to significant post-fire risks including downslope or downstream flooding or landslides. Therefore, no impact would occur.

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4.21 MANDATORY FINDINGS OF SIGNIFICANCE

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 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		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

- 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 With Mitigation Incorporated. As discussed in this Initial Study, the proposed project would not degrade the quality of the environment with implementation of identified standard permit conditions and mitigation measures. As discussed in Section 4.5, *Cultural Resources*, with implementation of Mitigation Measure CUL-1, the proposed project would result in a less-than-significant impact on archaeological and historic resources.

- b) 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. As discussed previously in this Initial Study, the proposed project would have no impact or a less-than-significant impact to aesthetics, air quality, agriculture and forestry resources, biological resources, energy, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire. As discussed in Sections 4.5, *Cultural Resources*; 4.7, *Geology and Soils*; and 4.18, *Tribal Cultural Resources*, the project would not result in significant

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impacts to those resources with the implementation of identified and mitigation measures. For this reason, the project would not result in significant cumulative impacts to those resources. Therefore, all impacts are individually limited and would not result in any cumulatively significant impact.

c) 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. As discussed in the previous analyses, the proposed project would not result in significant direct or indirect adverse impacts or result in substantial adverse effects on human beings. Impacts would be less than significant with the implementation of the proposed mitigation measures.

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