DRAFT

SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

FOR THE

RANCHO MIRAGE HIGH SCHOOL FIELD LIGHTING PROJECT

SCH NO. 2006011095

PREPARED FOR:

Palm Springs Unified School District
Facilities Planning & Development Department
150 District Center Drive
Palm Springs, CA 92264

PREPARED BY:

Westlake Village Office
860 Hampshire Road, Suite P
Westlake Village, CA 91361

MAY 2023

TABLE OF CONTENTS

Appendices

List of Figures

List of Tables

1.0 INTRODUCTION

The Rancho Mirage High School Field Lighting Project (Project) is proposing to install new pole mounted lighting fixtures around the perimeter of the fields within the Rancho Mirage High School (RMHS) campus, located within the City of Rancho Mirage (City).

The proposed Project would allow the use of outdoor instructional and activity areas before and after school hours. Additional exterior lighting would maximize spaces on campus for outdoor instruction and activities at the RMHS campus. New field lighting would be installed at RMHS on the varsity baseball and softball fields, junior varsity (JV) baseball and softball fields, practice fields (north and south), and soccer fields (1 and 2).

On July 12, 2022, direction was given to the PSUSD Facilities Department to review high school field lighting at the high school fields within the District. The PSUSD High School Lighting Project would provide additional exterior lighting (including fields/courts) and safely allow the use of outdoor instructional and activity areas before and after school hours. Additional exterior lighting would maximize spaces on campus for outdoor instruction and activities at the district's high school campuses.

The proposed lighting improvements of the high school fields was prompted by the passage of Senate Bill (SB) 328,[1] which requires high schools to start no earlier than 8:30 A.M. However, with the later start time, schools will also end later, which will affect activities unless the high school fields are lit for evening use. The proposed lights would safely allow use of the high school fields into the evening hours and the design meets the California Interscholastic Federation (CIF) recommended lighting levels for baseball and softball fields. Each high school lighting improvement includes varsity baseball and softball fields, junior varsity baseball and softball fields, tennis courts, soccer, and practice fields.

This section provides information on the background of the Project, as further described in **Section 3.0** and assessed in this Draft Supplemental Environmental Impact Report (Draft SEIR), with the environmental review process being conducted by the Palm Springs Unified School District ("PSUSD" or "District") for this Project, and the organization and content of this Draft EIR. See **Section 9.0** for a definition of terms and acronyms used in this Draft EIR.

AUTHORITY

PSUSD, as Lead Agency pursuant to California Environmental Quality Act (CEQA), is required to undergo an environmental review process for the proposed Project, pursuant to the CEQA and the CEQA Guidelines. The basic purposes of CEQA are as follows: to inform decision-makers and the public about the potentially significant environmental effects of proposed activities, identify ways to eliminate or

[1] Senate Bill (SC) 328 - Local educational agencies: before and after school programs: middle school and high school start time. An act to amend Section 46148 of, and to add Section 8203.4 to, the Education Code, relating to local educational agencies.

reduce such potentially significant environmental impacts through the use of feasible alternatives and mitigation measures, and to disclose why a governmental agency may consider approving a project if significant environmental effects are involved. To help with understanding select issues, references to the statute, CEQA Guidelines, or appropriate case law will be provided in this document.

PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

In 2006, the District prepared an EIR (State Clearinghouse No. 2006011095)[2] for the construction and operation of a comprehensive high school (Approved Project) consisting of an academic campus and athletic fields (including a football stadium), parking lots, driveways, a central plant/maintenance area, drainage facilities, including a retention basin, and an elementary school.

The original EIR completed by PSUSD in 2006 evaluated Aesthetics as part of the analysis. The 2006 EIR considered an 80-acre project site is of adequate size to support the development and operation of a comprehensive high school and an elementary school. The northwest portion of the site is being reserved for the future elementary school. As analyzed, the high school would provide educational facilities for grades 9-12 and would serve up to 3,000 students and employ approximately 135-140 teachers, administrators, and other staff members. The 2006 EIR's Project Description for the high school included 30.6 acres of fields. This included football, baseball, softball, tennis courts, outdoor basketball, soccer, and practice fields.

The District determined that the Project, as approved, would have significant and unavoidable impacts to air quality and biological resources.

On January 9, 2007, the District certified the EIR, adopted a statement of overriding considerations and a mitigation monitoring program, and approved the final EIR.

In 2007, the certified Final Environmental Impact Report was challenged in court by a group of nearby residents referred to as the "Committee of 1000" (Committee) and the City of Rancho Mirage (City). In February 2007, the Committee and Rancho Mirage filed their writ petitions in Riverside County Superior Court.

On January 2, 2008, the trial court issued a written ruling granting the Petition on the grounds that (1) the District failed to properly evaluate alternatives to the proposed project, and (2) the District failed to recirculate the EIR. The lower court denied the Petition with respect to Committee's argument that the project failed to include adequate mitigation measures for certain project impacts, including biological resources. The trial court also granted the Petition for Writ filed by Respondent, City of Rancho Mirage, in a related action. The court granted the City's petition on the basis that the District did not

2 Palm Springs Unified School District, Draft Environmental Impact Report for the Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School (SCH 2006011095), Appendix D: Phase I Cultural Resources Inventory, September 2006.

fully evaluate the effects of the maintenance facility and treated the project in a "piecemeal" fashion. The lower court issued a peremptory writ of mandate on March 3, 2008.

Following entry of judgment and Subsequently, Committee filed a cross-appeal to the judgment. The cross-appeal concerned the lower court's finding that the EIR "contains sufficient mitigation" with respect to three areas: aesthetics, biology, and noise impacts. After briefing of the matter, the Fourth District Court of Appeal Division 2 issued a tentative ruling granting the appeal of the District, reversing the lower court decision and denying the cross-appeal of The Committee. The requested oral argument and the oral argument was held on May 5, 2009. The Court of Appeal issued its decision on May 21, 2009, granting the appeal of the District, reversing the lower court decision and denying the cross-appeal of the Committee.

The grounds for the court's rulings were its findings that, although the final EIR was sufficient, the District did not evaluate reasonable alternatives adequately and it performed a piecemeal environmental review of a proposed 4.4-acre maintenance yard. The District appeals and the Committee cross-appeals cited additional considerations of aesthetics, biology, 'and noise impacts.

Pursuant to California Rules of Court, Rule 8.500, the Committee petitioned for review by the California Supreme Court the decision of the Fourth Appellate District, Division Two, filed on May 21, 2009. The Court of Appeal reversed in full the Riverside County Superior Court's judgment, which was decided in favor of the Committee and denied the Cross Appeal of the Committee. The Appellate Court made the following ruling (Committee of 1000 v. Palms Springs Unified School District, August 12, 2009, Case Number S17 4273):

> *"Petitioner City of Rancho Mirage argues that respondent Palm Springs Unified School District violated [CEQAJ by including an inadequate and internally inconsistent description of the project in the Environmental Impact Report, failing to properly mitigate the impact of the football stadium or to address properly other impacts of the project, and by separating improperly the proposed maintenance yard from the project."*
>
> *"The Court finds that the project description is sufficient and is not internally inconsistent. Further, the Court finds that the EIR adequately analyzes all potentially significant environmental impacts and contains sufficient mitigation measures."*
>
> *"The Committee's objections to the findings concerning aesthetics focus primarily on the mitigation of additional light and glare, especially from the stadium lights of the football stadium. The Committee complains that the planned use of "downward lighting," limiting lighting to scheduled events, and testing and adjusting the lighting after installation may not achieve sufficient mitigation. The Committee also criticizes the planned landscaping as a mitigation measure because the EIR did not specifically describe the size, number, and type of plantings to be used and the height of the buildings.*
>
> *The Court determined, in spite of the Committee's criticisms, however, the administrative record contains substantial evidence about the mitigation-of aesthetic-effects. (Goleta II supra, 52. Cal.3d at pp, 568 & 569). The District obtained two modeling studies of the lighting system design which measured the anticipated increase*

> *in illumination and provided a basis for the planned mitigation efforts. The District also cannot be faulted for planning to calibrate the lighting system after its installation to make sure the mitigation was adequate. (Sacramento Old City Assn. v. City Council (1991) 229 Cal.App.3d I 011, 1025-1026.)"*

Since the adoption of the Final EIR, the Approved Project (sans the elementary campus) has been constructed and is currently serving students.

This Draft SEIR has been prepared by the District to evaluate the effects that relate to the proposed lighting improvements on the Project Site. This Draft SEIR identifies and discusses potential Project-specific and cumulative environmental impacts that may occur should the Project be implemented. CEQA, Section 21166, requires that when an EIR has been prepared for a project, a subsequent or supplemental EIR shall be required by the lead agency or by any responsible agency should one or more of the following events occur:

1) Substantial changes are proposed in the project that will require major revisions of the EIR;

2) Substantial changes occur with respect to the circumstances under which the project is being undertaken will require major revisions to the EIR; and

3) New information, which was not known and could not have been known at the time the EIR was certified as complete, becomes available.

In accordance with the State CEQA Guidelines, public agencies are required to make written findings for each environmental impact of the project identified in the EIR. If the lead agency and responsible agencies decide that the benefits of the proposed project outweigh any identified unmitigated significant environmental effects, they will be required to adopt a statement of overriding considerations supporting their actions. The discretionary actions involved in the implementation of the Project by the District, as well as responsible and trustee agencies, are described in **Section 3.0**.

STANDARDS FOR ADEQUACY

Given the role of the SEIR in this planning and decision-making process, it is important that the information presented in the EIR be factual, adequate, and complete. The standards for adequacy of an EIR, defined in Section 15151 of the State CEQA Guidelines, are as follows:

> *"An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."*

This Draft SEIR has been prepared in accordance with these standards with respect to adequacy under CEQA.

ENVIRONMENTAL REVIEW PROCESS

The CEQA Guidelines define a process for environmental review that includes a series of steps that must be completed prior to the Lead Agency's taking action on a project.

Scoping Process

In compliance with Section 15201 of the State CEQA Guidelines, the District has taken steps to provide opportunities for public participation in the environmental process. A Notice of Preparation (NOP) was distributed on March 27, 2023, to public agencies and interested parties for a 30-day public review period to solicit comments and to inform agencies and the public of the Project. **Table 1.0-1: Comments Received on NOP** includes a list of agencies and individuals who provided comments on the NOP. A copy of the NOP and responses received are included in **Appendix A: Notice of Preparation (NOP), Comment Letters on the NOP, and Distribution List** of this Draft SEIR.

TABLE 1.0-1
COMMENTS ON NOTICE OF PREPARATION

Agencies		
California Department of Fish and Wildlife, Inland Deserts Region	Ms. Kim Freeburn, Environmental Program Manager	April 25, 2023
Department of Toxic Substances Control	Shahir Haddad, P.E., Supervising Engineer Brownfields Restoration and School Evaluation Branch, Site Mitigation and Restoration Program	April 21, 2023
Native American Heritage Commission	Andrew Green Cultural Resources Analyst	March 29, 2023
City of Rancho Mirage	Mr. Ben Torres, Planning Manager	April 28, 2023
Individuals		
Tracy &Terry Totten		April 6, 2023
Sharon Bere		March 31, 2023
Dennis Jory		May 3, 2023
Caren Oliva, Community Association Manager, Compliance Manager	Personalized Property Management	April 6, 2023 and April 7, 2023
Bruce Flamenbaum		April 22, 2023 and April 23, 2023

Source: See **Appendix A: Notice of Preparation (NOP), Comment Letters on the NOP, and Distribution List** of this Draft SEIR for complete comment letters.

Additionally, the District held a community meeting and public scoping meeting on April 26th, 2023, beginning 5:30 PM at the Rancho Mirage High School in the City of Rancho Mirage. Notices on the scoping meeting were to all residents within a 500-foot radius of the campus, as well as local agencies (see *Distribution List* in **Appendix A**).

Topics evaluated in this Draft SEIR have been identified based on the responses to the NOP and the review of the project by the District. The District determined that impacts related to the following environmental topics are potentially significant and require an assessment in this Draft SEIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Noise
- Traffic and Transportation
- Tribal Resources

Other environmental topics were eliminated or scoped out from detailed review in this Draft SEIR during the NOP process because the impacts were determined to have no impact, less than significant impacts, or significant impacts that could be mitigated to a less than significant level. These environmental issues are not discussed in detail within this Draft SEIR.

Review and Comment on the Draft Environmental Impact Report

CEQA requires that the Lead Agency provide the public and agencies the opportunity to review and comment on the Draft EIR. The District is providing a 45-day period for review and comment on this Draft EIR, starting May 31, 2023 and ending July 17, 2023.

Copies of this Draft SEIR have been sent to the State Clearinghouse, responsible agencies, other agencies that have commented on the NOP, as well as to all interested parties that have requested notice and copies of the Draft SEIR.

The Draft SEIR is also available for review at the following locations:

- Rancho Mirage High School, 31001 Rattler Road, Rancho Mirage, CA 92270

In addition, the Draft EIR is available at the District's website at:

- https://www.psusd.us/ (Facilities Planning & Development Page)

Interested individuals, organizations, responsible agencies, and other agencies can provide written comments about the Draft EIR addressed to:

Ms. Julie Arthur, Executive Director
Palm Springs Unified School District, Facilities Planning & Development Department
(760) 325-8728
facilities_planning@psusd.us

When submitting comments, please note "**Rancho Mirage Field Lighting SEIR**" in the subject line and include the name of the contact person within the commenting agency (if applicable).

After completion of the 45-day review period, a Final SEIR will be prepared that includes responses to comments submitted on the Draft SEIR and any necessary corrections or additions to the Draft SEIR.

The Final SEIR will be made available to agencies and the public prior to the District's determination on the Project. Once the Final SEIR is complete, the District may certify the Final SEIR, prepare Findings, adopt a mitigation monitoring and reporting program, and issue a Notice of Determination, which is the final step in the CEQA process.

ORGANIZATION OF THE DRAFT EIR

As stated, a principal objective of CEQA is to ensure that the environmental review process be a public one. In meeting this objective, an EIR informs members of the public, reviewing agencies, and decision makers of the physical impacts associated with a project. To this end, specific features have been incorporated into this Draft SEIR to make it more understandable for non-technically oriented reviewers while providing the technical information necessary for the District to proceed with processing the Project. Sections of the Draft SEIR are organized as follows:

Section 1.0: Introduction, provides information on the background of the Project, the environmental review process, and organization of the Draft EIR.

Section 2.0: Summary, presents a concise summary of the environmental information, analysis and conclusions in this EIR.

Section 3.0: Project Description, presents a description of the Project which addresses the location of the Project Site, the objectives of the Project, the characteristics of the Section 31 Specific Plan, and identification of all discretionary actions requiring approval to allow the implementation of the Project.

Section 4.0: Environmental Setting, describes the existing physical setting of the Project Site and the surrounding area.

Section 5.0: Environmental Impact Analysis, contains information and analysis of the potential for the Project to result in significant environmental effects for each of the topics evaluated in this Draft EIR.

Section 6.0: Other Environmental Impacts

- **Section 6.1: Effects Not Found to Be Significant** discusses the potential impacts of the Project that were determined not to be significant and were therefore not discussed in detail in this Draft EIR.
- **Section 6.2: Significant Irreversible Environmental Changes**, discusses the significant irreversible and irretrievable commitment of resources associated with the implementation of the Project.

Section 7.0: Terms, Definitions, and Acronyms, provides a list of specially defined terms and acronyms used throughout this Draft EIR.

Section 8.0: Organizations and Persons Consulted, lists persons involved in the preparation of this Draft EIR or who contributed information incorporated into this Draft EIR.

Section 9.0: References, lists the principal documents, reports, maps, and other information sources referenced in this Draft EIR.

Appendices to this EIR include technical information and other materials used in the preparation of this Draft EIR.

2.0 SUMMARY

The proposed Rancho Mirage field Lighting Project ("Project") would expand the timing and use of the existing stadium facilities for several sports teams and would safely allow the use of outdoor instructional activity areas before and after school hours.

PURPOSE OF THIS ENVIRONMENTAL IMPACT REVIEW

The environmental review process for this Project is being conducted by Palm Springs Unified School District (PSUSD). The California Environmental Quality Act (CEQA) was adopted to inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities, identify the ways that environmental damage can be avoided or significantly reduced and prevent significant, avoidable damage to the environment by requiring changes in project through the use of feasible alternatives or mitigation measures. When it is determined through preliminary review that a proposed project may result in significant impacts to the quality of the natural environment, preparation of an EIR in accordance with the process defined in CEQA is required.

The PSUSD, acting as the Lead Agency for the planning and environmental review of this Project, has prepared this EIR in compliance with CEQA, including the CEQA Guidelines (California Code of Regulations Title 14 Section 15000 et seq.).

PROJECT LOCATION

Rancho Mirage High School (Project Site) is located in the Coachella Valley in the City of Rancho Mirage (City) within Riverside County, California. The Project Site lies within what is described as Section 14 of Township 4 South, Range 5 East in the County of Riverside.

The Project Site includes approximately 60-acres located in the northwest portion of the City. The Project Site includes Assessor's Parcel Numbers (APNs) 670220019 and 670230018. The Project Site is bounded by 30th Avenue to the north, Rattler Road to the east, and Ramon Road to the south.

OVERVIEW OF PROPOSED PROJECT

Project Characteristics

The Rancho Mirage field Lighting Project is intended to expand the timing and use of the existing stadium facilities for several sports teams including the following: soccer (boys and girls), baseball (boys), and softball (girls). The Rancho Mirage High School Field Lighting Project will provide additional exterior lighting (including athletic fields) and safely allow the use of outdoor instructional and activity areas before and after school hours. The exterior lighting is reasonable and necessary to prepare for and respond to the Covid-19 pandemic by allowing the use of all school areas before and after school, increasing social distancing space while reducing opportunities for the transmission of Covid-19 and subsequent variants.

Proposed Improvements

The Project proposes to install new pole mounted lighting fixtures around the perimeter of the sport fields within the Rancho Mirage High School (RMHS) campus in order to provide illumination for evening use of the fields to support sports practices and league games.

New field lighting would be installed at RMHS on the varsity baseball and softball fields, junior varsity (JV) baseball and softball fields, practice fields (north and south), and soccer fields (1 and 2).

The proposed lighting would consist of a total of 38 light fixtures/poles for all fields around the perimeter of each field. Five of the lighting poles would be located around the perimeter of the Practice Field South on the west side of the campus and would extend 50 feet high. Twenty-seven of the lighting poles would be located around the perimeter of the JV baseball, varsity baseball, JV softball, and varsity softball fields on the northwest side of the campus and would be 60 feet to 100 feet high. The remaining seven lighting poles would be located around the practice field North, soccer field 1, and soccer field 2 in the northeast corner of the campus, adjacent to Rattler Road to the east and would be 70 feet high. Each pole would be on a pre – cast concrete base approximately 10 feet below ground.

Each lighting pole would feature between three to twenty-one separate luminaires. Mounting heights for the luminaires are 50 feet (practice field south); 15.5 feet, 60 feet, 80 feet, 100 feet (JV baseball, varsity baseball, JV softball, and varsity softball fields); and 70 feet (practice field north, soccer field 1, and soccer field 2). The new lighting poles would result in a total of 251 luminaires with an average kilowatt (kW) of 38.4 (55.8 maximum).

Schedule of Uses

The proposed Project is intended to expand the timing and use of the existing facilities for several sports teams including baseball, softball, and soccer teams as well as other school programs. By allowing evening-hour use, the high schools would provide enhanced opportunities for students to participate in school-sponsored sports while accommodating the state-mandated late-start law beginning in 2022. The timing of all other school-affiliated sporting activities that do not utilize the fields for practices or games would remain the same.

Further, the District recognizes that District facilities and grounds are a community resource and can authorize their use by community groups for purposes provided for in the Civic Center Act, only when such use does not interfere with school activities.[1] Pursuant to District policies, facilities maybe available for use as follows:

1. Subject to district policies and regulations (BP/AR1330), school facilities and grounds are available to citizens and community groups as a civic center as specified in Education Code 32282, 38131.

1 Palm Springs Unified School District (PSUSD) Policies. Section 1330. Available at: http://www.gamutonline.net/district/palmsprings/displayPolicy/436513/. Accessed March 2023.

2. All school-related activities shall be given priority in the use of facilities and grounds under the Civic Center Act and take precedence over a non-school group. The District reserves the right to revoke a use of facilities permit at any time.

Evening athletic games and evening athletic practices would be limited to only school-sanctioned sports teams. Use of lighting during and following athletic practices would generally end by 8:00 P.M. Most athletic games would end by 7:00 P.M., but no later than 9:30 P.M., with lighting potentially remaining on after to facilitate safe crowd exiting and for clean-up and other similar activities after game completion.

Intended Uses of this EIR

Section 15124 (d) of the State CEQA Guidelines requires that an EIR project description include a list of permits and other approvals required to implement a proposed project, the agencies expected to use the EIR in their decision making, and related environmental review and consultation requirements. This Draft EIR assesses the potential environmental effects of the proposed Desert Retreat Specific Plan. This Draft EIR has been prepared to inform the City of Rancho Mirage, any responsible and trustee agencies, and interested parties of the potential for significant environmental impacts and identify measures to mitigate any significant effects if feasible.

The CEQA Guidelines require an EIR to include a statement briefly describing the intended uses of the EIR, including a list of agencies expected to use the EIR in their decision making and the list of the permits and other approvals required to implement the project. The following are anticipated responsible agencies which may rely on this Draft EIR for their discretionary approvals required to implement the Project:

PSUSD Board of Education

- Certification of SEIR

California Department of Education

- Review School Design

California Department of General Services, Division of the State Architect

- Review Building and Construction Plans.

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

A summary of the potential environmental impacts of the Project and the measures identified to mitigate these impacts is provided below for each topic addressed in this Draft EIR. **Table 2.0-1: Summary of Project Impacts**, summarizes the significance of the impacts of the Project based on the information and analysis in **Section 5.0: Environmental Impact Analysis** of this Draft EIR.

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
Aesthetics			
Have a substantial adverse effect on a scenic vista?	Potentially Significant.	**MM AES-1:** The District shall coordinate with all residence along the western border of the RMHS who have yards that abut the campus to address the placement of light poles. Light poles adjacent to residences, along the west side of the fields, would be located in conjunction with discussion with the owners of the impacted properties so as to align the poles to avoid visual impacts. This will include, to the degree feasible in maintain lighting standards for field safety, the potential for locating poles in between each residential property line and away from any back yard viewing locations, Poles would be located, to the degree feasible, to align out of direct view of the residences.	Less than Significant with Mitigation.
Substantially damage scenic resources, including, but not limited to, trees, rock, outcroppings, and historic buildings within a state scenic highway?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Substantially degrade the existing visual character or quality of the site and its surroundings?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Create substantial light or glare which would adversely affect day or nighttime views in the area?	Potentially Significant.	**MM AES-2:** Luminaires shall be directed aways for residential and offsite uses such that the light level at the property line between the residential use and campus does not exceed 0.5-foot candles. If necessary, the District may need to increase/or decrease the number of light poles, their height, and luminaires at any specific location. **A-1:** Light fixtures shall be selected to provide downward lighting with minimal horizontal travel and minimum levels to provide sufficient safety at night. Use of stadium and sports field lighting shall be limited to scheduled events.	Less than Significant with Mitigation.

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		A-2: Site development shall include the planting of trees and shrubs to reduce glare and provide screening to soften the visual impact of buildings and parking lots.	
Air Quality			
Conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Expose sensitive receptors to substantial pollutant concentrations?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the School?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Biological Resources			
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	Potentially Significant to nesting birds.	**MM BIO-1: Pre-Construction Surveys for Migratory Birds** (including avoidance if found) If ground disturbance is proposed between February 1st and August 31st, a qualified biologist shall conduct a nesting bird survey within 7 to 10 days of initiation of grading on site, focusing on covered species. If active nests are reported, species-specific measures shall then	Less than Significant with mitigation.

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		be prepared. At a minimum, grading in the vicinity of a nest shall be postponed until the young birds have fledged. For construction between September 1st and January 31st, no pre-removal nesting bird survey is required. Additionally, pre-construction surveys for burrowing owls should be undertaken between 14 and 30 days prior to any kind of ground disturbance related to modifications to facilities and properties. In the event active nests are found, exclusionary fencing shall be placed 200 feet around the nest until such time as nestlings have fledged. Nests of raptors and burrowing owls shall be provided with a 500-foot buffer. Ground disturbance between September 1 and January 31 shall be exempt from this requirement.	
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
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?	Potentially Significant to migratory birds.	**MM BIO-1**: **Pre-Construction Surveys for Migratory Birds** (including avoidance if found) If ground disturbance is proposed between February 1st and August 31st, a qualified biologist shall conduct a nesting bird survey within 7 to 10 days of initiation of grading on site, focusing on covered species. If active	Less than Significant with mitigation.

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		nests are reported, species-specific measures shall then be prepared. At a minimum, grading in the vicinity of a nest shall be postponed until the young birds have fledged. For construction between September 1st and January 31st, no pre-removal nesting bird survey is required. Additionally, pre-construction surveys for burrowing owls should be undertaken between 14 and 30 days prior to any kind of ground disturbance related to modifications to facilities and properties. In the event active nests are found, exclusionary fencing shall be placed 200 feet around the nest until such time as nestlings have fledged. Nests of raptors and burrowing owls shall be provided with a 500-foot buffer. Ground disturbance between September 1 and January 31 shall be exempt from this requirement.	
Conflict with any local polices or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other adopted local, regional, or state habitat conservation plan?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Cultural Resources			
Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	Potentially Significant.	**MM CUL-1: WEAP Training.** All construction personnel and monitors who are not trained archaeologists shall be briefed regarding inadvertent discoveries prior to the start of construction activities. A basic presentation and handout or pamphlet shall be prepared, by a qualified archaeologist meeting the Secretary of Interior's Standards, in order to ensure proper identification and treatment of inadvertent discoveries. The purpose of the Workers Environmental Awareness Program (WEAP) training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor. Plan Requirements and Timing: Prior to commencement of project construction, PSUSD shall contract with a qualified archaeologist to prepare materials and deliver WEAP training to construction workers engaged in trenching and light pole foundation excavation; the requirement for WEAP training shall be included on grading or civil improvement plan sheets. The WEAP training shall be completed before ground disturbing activities begin. Monitoring: The construction contractor or PSUSD facilities management staff will verify workers receive the WEAP training prior to construction start.	Less than Significant with Mitigation.

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		MM CUL-2: Inadvertent Discoveries/Spot Monitoring. A qualified archaeologist, meeting the Secretary of Interior's Standards, shall be retained and on-call to conduct spot monitoring and respond to and address any inadvertent discoveries identified during ground disturbing activities whether within disturbed, imported or native soils. A qualified archaeological principal investigator, meeting the Secretary of the Interior's Professional Qualification Standards, shall oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs for those days monitoring occurs. In the event that potential prehistoric or historic-era archaeological resources (sites, features, or artifacts) are exposed during construction activities for the project, all construction work occurring within 50 feet of the find shall immediately stop and a qualified archaeologist must be notified immediately to assess the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work (e.g., preparation of an archaeological treatment plan, testing, or data recovery) may be warranted. If Native American resources are discovered or are suspected, each of the consulting tribes for the Project will be notified and as dictated by California Health and	

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		Safety Code Section 7050.5, PRC Section 5097.98, and the California Code of Regulations (CCR) Section 15064.5(e).	
Disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant.	**MM CUL-3: Human Remains.** In the unlikely event that earth-disturbing activities conducted by the District and/or its construction contractors identify undiscovered human remains, the District will comply with Government Code Sections 27460 et seq.86, Section 27491, and Public Resources Code (PRC) Section 5097.9887. These regulations would require earthmoving activities to halt until the Riverside County Coroner can determine whether the remains are subject to the provisions of Section 27491 or any other related provisions of law. The required recommendations concerning the treatment and disposition of the human remains would be subject to the person responsible for the excavation, or to his or her authorized representative. Additionally, pursuant to California Health and Safety Code Section 7050.588, the coroner shall make a determination within two working days of notification of the discovery of the human remains. If the coroner determines that the remains are not subject to his or her authority and recognizes, or has reason to believe, that they are those of a Native American, he or she shall contact the Native American Heritage Commission by telephone within 24 hours. The District will comply with existing regulations and potential impact related to the accidental discovery of human remains.	Less than Significant with mitigation.
Greenhouse Gas Emissions			
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Noise			
Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant.	**MM NOI-1**: The District shall direct construction activities that result in noise above 60 dBA to correspond with the school's schedules to minimize noise and vibration impacts when classes are in session, and to avoid critical (testing) periods. Intensive construction activities such as demolition and grading shall be scheduled to occur after 2:30 PM Monday through Friday. **MM NOI-2:** The District's construction contractor shall ensure that construction equipment is properly muffled according to industry standards and is in good working condition. **MM NOI-3:** The District's construction contractor shall utilize diesel generators and compressors that are listed as "quiet units" by the manufacturer. **MM NOI-4:** For all noise- and vibration-generating construction activity on the Project Site, the District's construction contractor shall employ additional noise and vibration attenuation techniques to reduce noise and vibration levels. Such techniques may include, but are not limited to, the use of sound blankets on noise-generating equipment and the construction of temporary sound barriers between construction sites and nearby sensitive receptors. **MM NOI-5:** The District's construction contractor shall turn off all idling equipment when not in use for more than 5 minutes **MM NOI-6:** The District's construction contractor shall disconnect backup alarms on vehicles that require them.	Less than Significant with Mitigation.

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		MM NOI-7: The District's construction contractor shall utilize temporary noise deflector walls during construction, where feasible **MM NOI-8:** The District's construction contractor shall place noise- and vibration-generating construction equipment, as well as locating construction staging areas, away from sensitive uses, including operating classrooms, where feasible. **MM NOI-9**: The District's construction contractor shall coordinate the reduction of construction activities with nearby classrooms during exam periods to minimize noise and vibration. The District's construction contractor shall provide construction activity schedules to try to minimize noisy activities when construction is taking place to the fullest extent practicable.	
Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the educational program?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Generation of excessive groundborne vibration or groundborne noise levels?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Less than significant.	No mitigation measures are necessary.	Less than Significant

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
Transportation			
Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Result in inadequate emergency access?	Less than Significant.	No mitigation measures are necessary.	Less than Significant.
Tribal			
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 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)?	Less than Significant.	No mitigation measures are necessary.	Less than significant.
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred	Potentially Significant.	**MM TCR-1:** The District will notify the tribes two weeks prior to the stary of construction activities when ground disturbing work will begin. The District allows access for tribal monitors (at no cost to the District) during any ground disturbing activities (including archaeological testing and surveys). Should	Less than Significant with mitigation.

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		buried cultural deposits be encountered, the tribal monitor may request that construction activities in the immediate area of the discovery be halted, and the monitor shall investigate to assess if the discovery includes tribal cultural resources, or human remains that nay be of tribal decent. If the tribal monitor determines that the discovery does include tribal cultural resources or human remains that may be of tribal decent, then the monitor shall notify the District and plan for recovery of the remains be prepared. If Native American resources are discovered or are suspected, each of the consulting tribes for the Project will be notified and as dictated by California Health and Safety Code Section 7050.5, PRC Section 5097.98, and the California Code of Regulations (CCR) Section 15064.5(e). If human remains are discovered, the District shall also notify the Riverside County coroner's office to remove the remains. No further work in the immediate area may resume until the tribal cultural resources or human remains are removed. **MM CUL-1:** WEAP Training: All construction personnel and monitors who are not trained archaeologists shall be briefed regarding inadvertent discoveries prior to the start of construction activities. A basic presentation and handout or pamphlet shall be prepared, by a qualified archaeologist meeting the Secretary of Interior's Standards, in order to ensure proper identification and treatment of inadvertent discoveries. The purpose of the Workers Environmental Awareness Program (WEAP) training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the project and explain the importance of and legal basis for the protection of significant	

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		archaeological resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor. Plan Requirements and Timing: Prior to commencement of project construction, PSUSD shall contract with a qualified archaeologist to prepare materials and deliver WEAP training to construction workers engaged in trenching and light pole foundation excavation; the requirement for WEAP training shall be included on grading or civil improvement plan sheets. The WEAP training shall be completed before ground disturbing activities begin. Monitoring: The construction contractor or PSUSD facilities management staff will verify workers receive the WEAP training prior to construction start.	
		MM CUL-2: Inadvertent Discoveries/Spot Monitoring: A qualified archaeologist, meeting the Secretary of Interior's Standards, shall be retained and on-call to conduct spot monitoring and respond to and address any inadvertent discoveries identified during ground disturbing activities whether within disturbed, imported or native soils. A qualified archaeological principal investigator, meeting the Secretary of the Interior's Professional Qualification Standards, shall oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs for those days monitoring occurs. In the event that potential prehistoric or historic-era archaeological resources (sites, features, or artifacts) are	

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		exposed during construction activities for the project, all construction work occurring within 50 feet of the find shall immediately stop and a qualified archaeologist must be notified immediately to assess the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work (e.g., preparation of an archaeological treatment plan, testing, or data recovery) may be warranted. If Native American resources are discovered or are suspected, each of the consulting tribes for the Project will be notified and as dictated by California Health and Safety Code Section 7050.5, PRC Section 5097.98, and the California Code of Regulations (CCR) Section 15064.5(e). **MM CUL-3:** In the unlikely event that earth-disturbing activities conducted by the District and/or its construction contractors identify undiscovered human remains, the District will comply with Government Code Sections 27460 et seq.86, Section 27491, and Public Resources Code (PRC) Section 5097.9887. These regulations would require earthmoving activities to halt until the Riverside County Coroner can determine whether the remains are subject to the provisions of Section 27491 or any other related provisions of law. The required recommendations concerning the treatment and disposition of the human remains would be subject to the person responsible for the excavation, or to his or her authorized representative. Additionally, pursuant to California Health and Safety Code Section 7050.588, the coroner shall make a determination within two working days of notification of	

TABLE 2.0-1
SUMMARY OF PROJECT IMPACTS

Project Impacts	Impact without Mitigation	Mitigation Measures	Impact with Mitigation
		the discovery of the human remains. If the coroner determines that the remains are not subject to his or her authority and recognizes, or has reason to believe, that they are those of a Native American, he or she shall contact the Native American Heritage Commission by telephone within 24 hours. The District will comply with existing regulations and potential impact related to the accidental discovery of human remains.	

3.0 PROJECT DESCRIPTION

INTRODUCTION

This section of the Draft Supplemental Environmental Impact Report (Draft SEIR) describes the location, objectives, and characteristics of the proposed Rancho Mirage High School Field Lighting Project (Project) in the City of Rancho Mirage, California, as required by the California Environmental Quality Act (CEQA) Guidelines.[1] A general description of the Project's technical, economic, and environmental characteristics is provided in this section.

On July 12, 2022, direction was given to the PSUSD Facilities Department to review high school field lighting at the high school fields within the District. The PSUSD High School Lighting Project would provide additional exterior lighting (including fields/courts) and safely allow the use of outdoor instructional and activity areas into before and after school hours. Additional exterior lighting would maximize spaces on campus for outdoor instruction and activities at the District's high school campuses.

The proposed lighting improvements of the high school fields was prompted by the passage of Senate Bill (SB) 328,[2] which requires high schools to start no earlier than 8:30 A.M. However, with the later start time, schools will also end later, which will affect activities unless the high school fields are lit for evening use. The proposed lights would safely allow use of the high school fields into the evening hours and the design meets the California Interscholastic Federation recommended lighting levels for baseball and softball fields. Rancho Mirage high school lighting improvement includes varsity baseball and softball fields, junior varsity baseball and softball fields, tennis courts, soccer, and practice fields.

The proposed Project is intended to expand the timing and use of the existing high school facilities for several sports teams including baseball, softball, soccer, and tennis. By allowing evening-hour use, the high school would provide enhanced opportunities for students to participate in school-sponsored sports while accommodating the state-mandated late-start law.

PROJECT LOCATION

The Project Site is located in the northern portion of the Coachella Valley in the City of Rancho Mirage (City) within Riverside County, California, as shown in **Figure 3.0-1: Project Boundary Map**. The Project Site includes approximately 60-acres located in the northwest portion of the City. Rancho Mirage High School is located in Section 14, Township 4 South, and Range 5 East in the County of Riverside. The Project Site includes Assessor's Parcel Numbers (APNs) 670220019 and 670230018. As illustrated on **Figure**

1 California Code of Regulation. Title 14, Section 15000 et seq.

2 Senate Bill (SC) 328 - Local educational agencies: before and after school programs: middle school and high school start time. An act to amend Section 46148 of, and to add Section 8203.4 to, the Education Code, relating to local educational agencies.

3.0-2: Project Location Map, the Project Site is bounded by 30th Avenue to the north, Rattler Road to the east, and Ramon Road to the south.

RMHS currently provides educational facilities for grades 9 through 12 and can serve up to 3,000 students. The school facilities include academic buildings, cafeteria, administrative building, media center, gymnasium, auditorium, football stadium, baseball fields, soccer fields, tennis courts, and parking lots. Access to the School is provided via Ramon Road and through Rattler Road.

PROJECT OBJECTIVES

The CEQA Guidelines require an EIR to include a statement of the objectives of the Project that address the underlying purpose.

The addition of the field lighting is primarily intended to allow for nighttime games and practices at Rancho Mirage High School in anticipation of the State's "late start law," which went into effect starting in the Fall of 2022 and will affect the ability of various sports teams from practicing later in the day without lights. The District plans to install the athletic field lighting by the start of the 2023 – 2024 school year. In addition, the new field lighting will:

- Provide additional exterior lighting (including athletic fields) and safely allow the use of outdoor instructional activity areas into before and after school hours;
- Maximize spaces on campus for outdoor instruction and activities at the Rancho Mirage High School campus;
- Improve school connectedness and student mental health through extracurricular activities in these spaces;
- Provide additional lighted outdoor spaces for material distribution should school closures occur in the future.

PROJECT CHARACTERISTICS

The proposed Project is intended to expand the timing and use of the existing stadium facilities for several sports teams including the following: soccer (boys and girls), baseball (boys), and softball (girls). The Rancho Mirage High School Field Lighting Project will provide additional exterior lighting (including athletic fields) and safely allow the use of outdoor instructional and activity areas before and after school hours. The exterior lighting is reasonable and necessary to prepare for and respond to the Covid-19 pandemic by allowing the use of all school areas before and after school, increasing social distancing space while reducing opportunities for the transmission of Covid-19 and subsequent variants.

Proposed Improvements

The Project proposes to install new pole mounted lighting fixtures around the perimeter of the sport fields within the Rancho Mirage High School (RMHS) campus in order to provide illumination for evening use of the fields to support sports practices and league games.

New field lighting would be installed at RMHS on the varsity baseball and softball fields, junior varsity (JV) baseball and softball fields, practice fields (north and south), and soccer fields (1 and 2) as shown in **Figure 3.0-2.**

The proposed lighting would consist of a total of 38 light fixtures/poles for all fields around the perimeter of each field. Five of the lighting poles would be located around the perimeter of the Practice Field South on the west side of the campus and would extend 50 feet high. Twenty-seven of the lighting poles would be located around the perimeter of the JV baseball, varsity baseball, JV softball, and varsity softball fields on the northwest side of the campus and would be 60 feet to 100 feet high. The remaining seven lighting poles would be located around the practice field North, soccer field 1, and soccer field 2 in the northeast corner of the campus, adjacent to Rattler Road to the east and would be 70 feet high. Each pole would be on a pre – cast concrete base approximately 10 feet below ground. **Figure 3.0-3: Conceptual Lighting Design** illustrates the proposed lighting configuration on each field.

Outdoor sports lighting is a type of site light fixture that is commonly used to illuminate large areas for sporting events or other large outdoor events and activities, such as concerts. Sports light fixtures are typically mounted on poles 40 to 100 feet tall, with between 1-12 fixtures mounted on each pole.

Each lighting pole would feature between three to twenty-one separate luminaires. See **Figure 3.0-4: Light Structure System**. Mounting heights for the luminaires are 50 feet (practice field south); 15.5 feet, 60 feet, 80 feet, 100 feet (JV baseball, varsity baseball, JV softball, and varsity softball fields); and 70 feet (practice field north, soccer field 1, and soccer field 2). The new lighting poles would result in a total of 251 luminaires with an average kilowatt (kW) of 38.4 (55.8 maximum).

All luminaires would utilize LED technology and would be fixed to cast light downward to reduce spill onto adjacent properties. LED sports field lighting provides benefits for large areas or sites requiring illumination because of how they generate light and how they distribute light. Light emitting diodes generate light via a semi-conductor, as opposed to the consumption of a “fuel source” like in HID lamps. In regards to “distributing” light, LED sport light fixtures commonly utilize “multi-point” sources, meaning the fixtures have multiple diodes with individual optics. When you compare this to the way most HID fixtures distribute light (with a single bulb and reflectors within the fixture), the result is light that is more evenly “distributed’ across a given area.

Moving on to the way LED fixtures distribute light: as a result of the multi-point design, LED sports field fixtures provide a very evenly distributed light pattern. What this means is that light levels across a given surface will vary less as the distance from the pole or fixture changes. Compared to high intensity discharge (HID) fixtures, which often produce a “bright spot” directly underneath the fixture with light levels decreasing drastically as the distance from the pole increases. The result, in regards to LED vs HID, is a more even foot candle distribution from the LED conversion. In addition to the even distribution of light, LEDs are available in a range of color temperatures, and as a result provide a range of options to increase the visual perception of “brightness."

Schedule of Uses

The proposed Project is intended to expand the timing and use of the existing facilities for several sports teams including baseball, softball, and soccer teams as well as other school programs. By allowing evening-hour use, the high schools would provide enhanced opportunities for students to participate in school-sponsored sports while accommodating the state-mandated late-start law beginning in 2022. The timing of all other school-affiliated sporting activities that do not utilize the fields for practices or games would remain the same.

Further, the District recognizes that District facilities and grounds are a community resource and can authorize their use by community groups for purposes provided for in the Civic Center Act, only when such use does not interfere with school activities.[3] Pursuant to District policies, facilities maybe available for use as follows:

1. Subject to district policies and regulations (BP/AR1330), school facilities and grounds are available to citizens and community groups as a civic center as specified in Education Code 32282, 38131.
2. All school-related activities shall be given priority in the use of facilities and grounds under the Civic Center Act and take precedence over a non-school group. The District reserves the right to revoke a use of facilities permit at any time.

Evening athletic games and evening athletic practices would be limited to only school-sanctioned sports teams. Use of lighting during and following athletic practices would generally end by 8:00 P.M. Most athletic games would end by 7:00 P.M., but no later than 9:30 P.M., with lighting potentially remaining on after to facilitate safe crowd exiting and for clean-up and other similar activities after game completion.

Construction Schedule and Details

The Proposed Project includes trenching to install wiring between the poles and electrical control panels and installation of the light fixtures. Construction staging would occur on each sports field over the course of approximately 6 to 9 months. The staging area would change for each field and would place the area away from active school areas. A variety of construction equipment would be used including but not limited to tractors, loaders, backhoes, trenchers, cement and mortar mixers, cranes, and excavators. No street closure is anticipated during construction.

Construction activities would occur during normal weekday working hours, between 7:00 AM and 5:30 PM; Saturday construction hours would be limited to between 8:00 AM to 5:00 PM, and no construction would occur on Sundays. All construction workers would be required to wear identification badges, PPE,

3 Palm Springs Unified School District (PSUSD) Policies. Section 1330. Available at: http://www.gamutonline.net/district/palmsprings/displayPolicy/436513/. Accessed March 2023.

and enter through a designated construction entrance. Construction areas would be separated from the rest of the campus by temporary fencing and secured by locks.

When school is not in session, the overall construction area would be secured by temporary fencing and locked gates surrounding the active construction area(s). Additional security and safety measures may be implemented to further secure the campus during and outside of operational school hours.

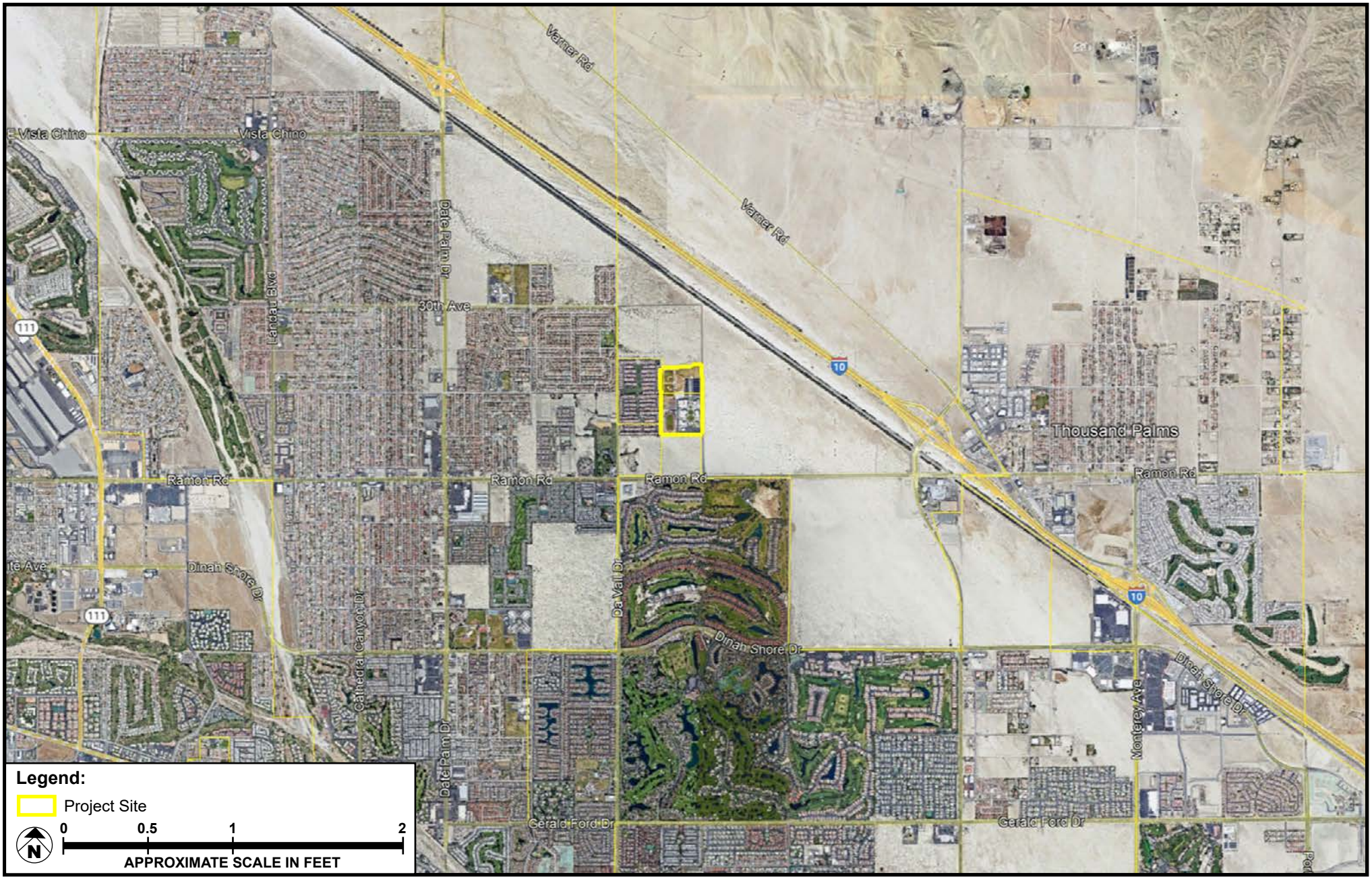
Project Schedule

It is anticipated that the construction activities would begin in December of 2023 and end in fall of 2024. Construction activities would take 6 to 9 months at each school and would be staggered among the various high school fields to accommodate ongoing practice and field needs at each campus. The entire project would be complete by the end of 2024.

PROJECT DISCRETIONARY ACTIONS

It is the intent of this Initial Study to evaluate the potential environmental impacts of the proposed Project, thereby enabling PSUSD, responsible and reviewing agencies, and interested parties to make informed decisions. The anticipated approvals for this proposed Project are:

Lead Agency	Action
PSUSD Board of Education	MND/IS Adoption and Project Approval
Reviewing Agencies	**Action**
California Department of Education	Review School Design and Program
Division of the State Architect	Review Building and Construction Plans



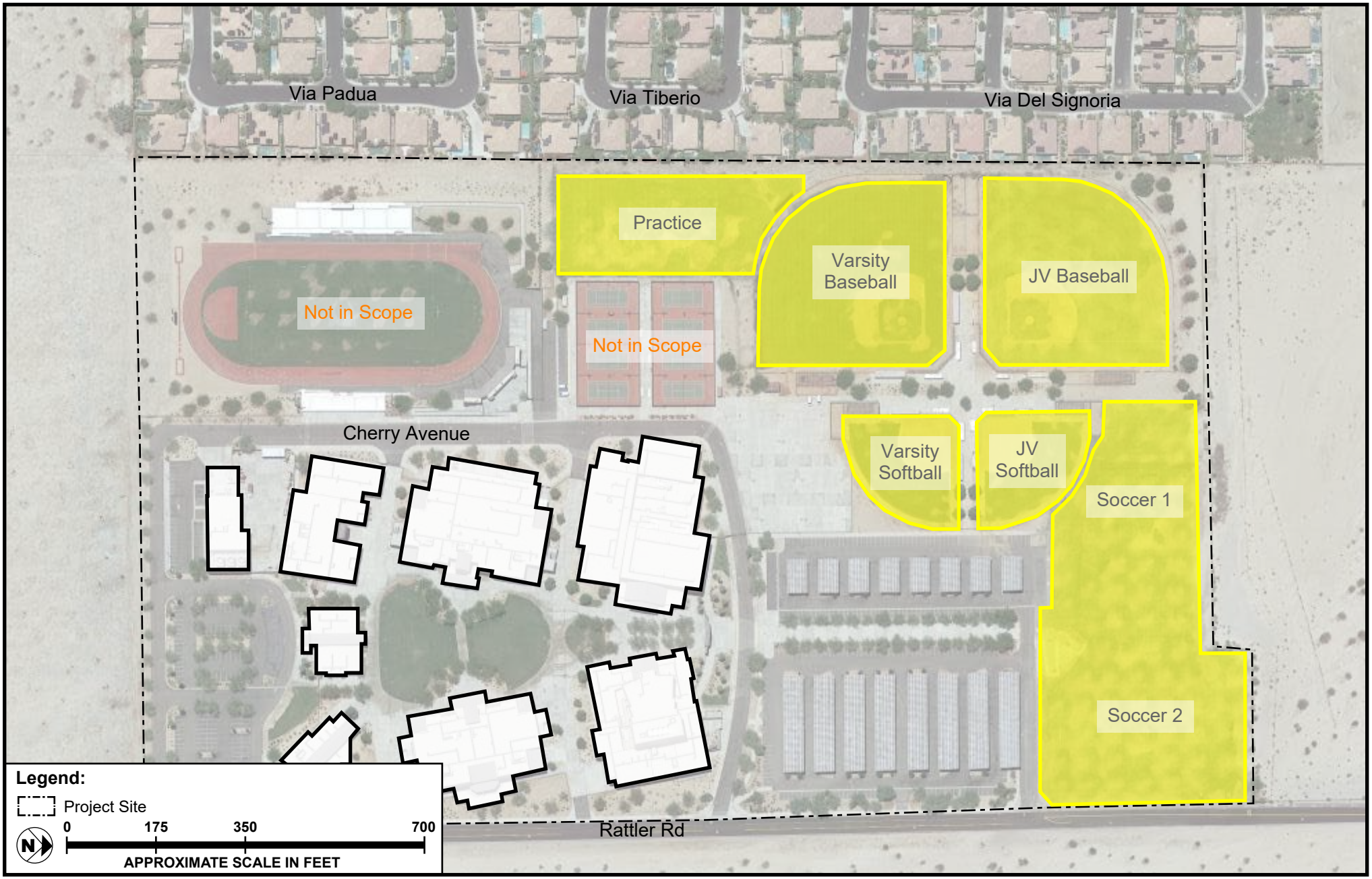
SOURCE: Jensen Design - 2023

FIGURE **3.0-1**

Meridian Consultants

Project Boundary Map

049-018-23



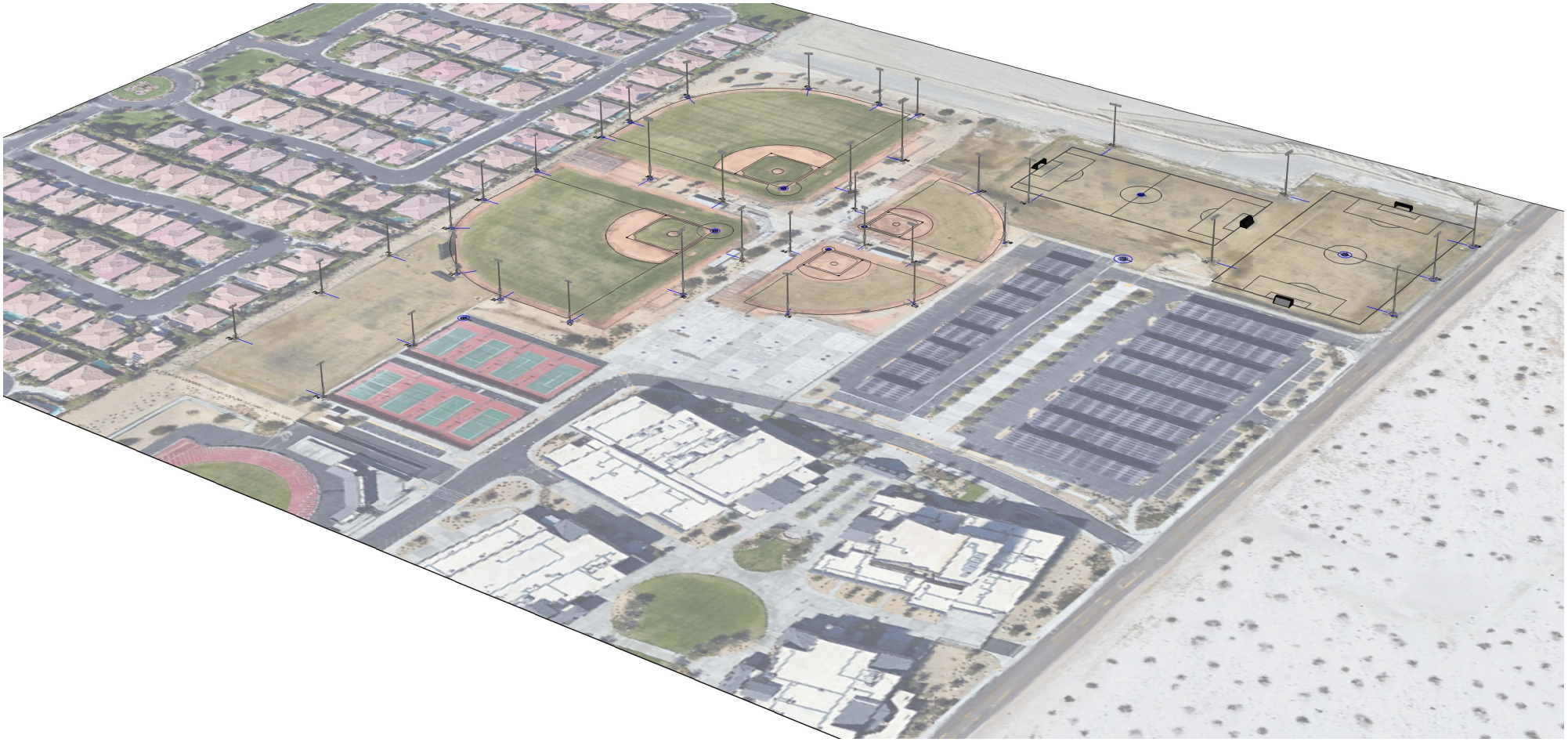
SOURCE: Source: "HMC Architects – 2022

FIGURE **3.0-2**

Meridian Consultants

Project Location Map

049-018-23



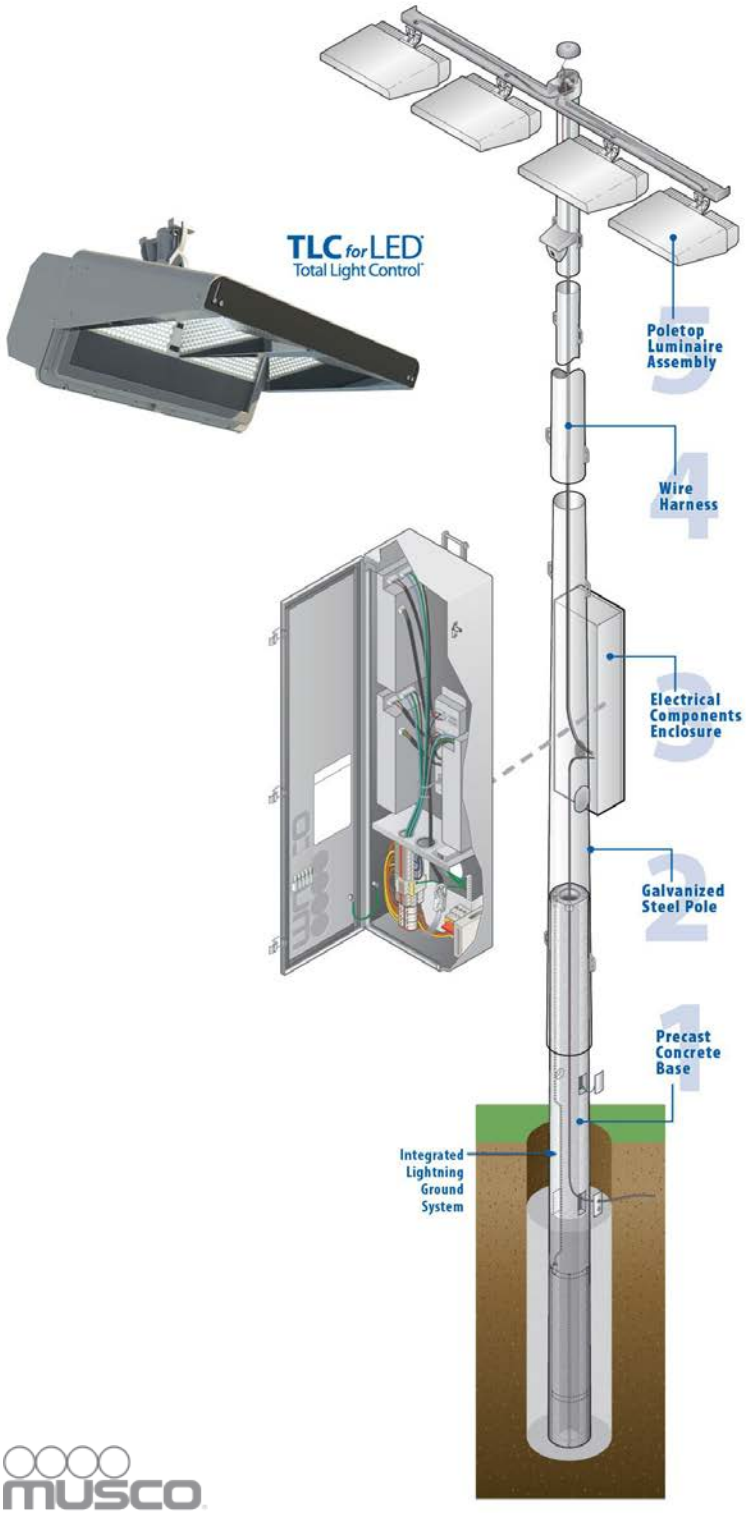
SOURCE: Source: “HMC Architects – 2022

FIGURE **3.0-3**

Meridian Consultants

Conceptual Lighting Design

049-018-23



SOURCE: Google Earth - 2023

FIGURE **3.0-4**

Meridian Consultants

Lighting Structure System

4.0 ENVIRONMENTAL SETTING

This section of the Draft Supplemental Environmental Impact Report (Draft SEIR) provides a general overview of the existing environmental setting of the Project Site including related projects that are considered in evaluating potential cumulative environmental impacts.

The Palm Springs Unified School District (PSUSD), acting as Lead Agency for the proposed Rancho Mirage High School (RMHS) Field Lighting SEIR Project ("Proposed Project" or "Project"), is preparing this Draft SEIR in compliance with the provisions of the California Environmental Quality Act (CEQA).

Section 15125 of the CEQA Guidelines requires the environmental impact analysis of a proposed project to include a description of the physical environmental conditions in the vicinity of a proposed project at the time the Notice of Preparation (NOP) of an EIR is published. Section 15125 further states that this environmental setting will normally constitute the baseline physical conditions used to determine if an impact is significant. The purpose of describing and defining the environmental setting is to define the baseline physical conditions to determine the significance of the environmental impacts resulting from the Project.

REGIONAL ENVIRONMENTAL SETTING

Regional Location

The Project Site is located within an existing high school campus in the central part of the Coachella Valley, a low valley sandwiched between the Little San Bernardino Mountains to the north, the Santa Rosa Mountains to the south, and the San Jacinto Mountains to the west. The valley is part of the Colorado Desert Geomorphic Province, an area that includes both sides of the lower Colorado River and the Coachella and Imperial Valleys of California.

The Project Site consists of land located entirely within the City of Rancho Mirage's sphere of influence. The City is bounded by the city of Palm Springs to the west, Cahuilla Hills to the south, Cathedral City to the west and unincorporated portions of Riverside County to the north, which includes Thousand Palms. The City lies within Riverside County.

LOCAL ENVIRONMENTAL SETTING

Location and Land Use

The Project is proposed to implement the City of Rancho Mirage General Plan for the approximate 60-acre Project Site. The Project Site is located northeast of the intersection of Ramon Road and Da Vall Drive, east of Rattler Road, specifically at 31001 Rattler Road.

The Project Site is an existing high school and consists of approximately 60 acres of land zoned as an Institutional/School-use within the Coachella Valley, located in the broader Colorado Desert Geomorphic Province of California. This province consists of numerous north-south trending mountain ranges, such as

the San Bernardino Mountains to the north, the Santa Rosa Mountains to the south, and the San Jacinto Mountains to the west.

RELATED PROJECTS

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

The CEQA Guidelines (Section 15130 (b)(1)) further state that the information utilized in an analysis of cumulative impacts should come from one of two sources, either:

A. A list of past, present, and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency; or
B. A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

The cumulative impact analyses contained in the various topical sections of Section 5.0: Environmental Impact Analysis, considers related projects in the City of Rancho Mirage. In addition, the projections in the City's General Plan are used in the assessment of potential cumulative impacts, where appropriate.

The following list of projects includes pending and approved development projects in a 2-mile radius of the Project Site:

- Rancho Mirage Auto Plaza (5 miles south)
- Highway 111 Specific Plan (3.15 miles southwest)
- Section 24 Specific Plan (0.56 miles southeast)
- Rancho Monterey Specific Plan Area (2.5 miles southeast)
- Vista Del Sol Subdivision (4.3 miles southeast)

Rancho Mirage Auto Plaza

The Rancho Mirage Auto Plaza project proposed the development of an approximately 26 -acre parcel south of Highway 111 and west of the West Magnesia Storm Channel. This project includes approximately 16-acres to be developed with auto dealerships, service centers, and parking lots, while the other about 10-acre portion of the project site would remain undeveloped and preserved.

Construction would take place over a two-year period and buildout was completed in 2022.

Highway 111 Specific Plan

The Highway 11 Specific Plan project replaces the previous Highway 111 East and West Specific Plans and expands the entire 4.5 miles of the highway's passage through Rancho Mirage. The plan revises the land use plan and sets forth development guidelines consistent with the goals and policies of the general plan. This includes coordinating aspects of sustainability, infrastructure planning, infill development, and lot consolidation.

Section 24 Specific Plan

The Section 24 Specific Plan includes approximately 577 acres and would provide land uses of commercial, retail, office, restaurant, hotel, and entertainment uses as well as up to 2,406 residential units across 3,138,600 square feet. The plan includes eight Planning Areas, including seven planning areas across 217 acres that would be Tribal Planning Area, while 313 acres would be an Active Adult Community,

Rancho Monterey Specific Plan Area

The Rancho Monterey Specific Plan Area includes 35 acres of vacant and undeveloped land within the Monterey Specific Plan. The project proposes to construct a mixed-use community in this area. This includes up to 400 residential units and a maximum of 150,000 square feet of commercial retail space, open space, parks, and retention area.

Vista Del Sol Subdivision

The Vista Del Sol Subdivision includes a Tentative Tract Map to divide two existing vacant and development parcels. The 10.12-acre area would consist of eight residential lots and three lettered lots accessed via a private street.

Construction would take place beginning in early 2023 and conclude by early 2024.

5.1 AESTHETICS

This section of the Draft Supplemental Environmental Impact Report (SEIR) evaluates the existing landform and aesthetic character of the Rancho Mirage High School (RMHS) fields (Project Site) and surrounding area. The potential aesthetic and visual impacts resulting from implementation of the Project are addressed in this section. The information presented in this section is based on documents, photographs, and other desktop reviews of the Project Site and the surrounding land uses within the City of Rancho Mirage (City). Impacts found to be less than significant are further discussed in **Section 6.1: Effects Not Found to be Significant** of this Draft EIR.

The original EIR completed by PSUSD in 2006 evaluated Aesthetics as part of the analysis. The 2006 EIR considered an 80-acre project site is of adequate size to support the development and operation of a comprehensive high school and an elementary school.[1] The northwest portion of the site is being reserved for the future elementary school. As analyzed, the high school would provide educational facilities for grades 9-12 and would serve up to 3,000 students and employ approximately 135-140 teachers, administrators, and other staff members. The 2006 EIR's Project Description for the high school included 30.6 acres of fields. This included football, baseball, softball, tennis courts, outdoor basketball, soccer, and practice fields.

The 2006 EIR's aesthetic analysis noted that stadium lights would also be visible from the adjacent residential neighborhood.[2] It was determined that the proposed Project (the 80-acre high school and elementary school campus) would introduce new sources of light to the area. These sources would include parking lot lighting, exterior building lights, security lighting throughout the campus, and lighting associated with the football stadium and baseball/softball diamonds. Lighting associated with the stadium and ball diamonds would be of short duration in early nighttime hours and seasonal when in use. A well-designed lighting plan and management policies directed at reducing the impact of night events would decrease the impact of lighting of the proposed project on the neighborhood and the Mt. Palomar observatory to less than significant.

The 2006 EIR also determined that the proposed Project (the 80-acre high school and elementary school campus) may also create glare from building windows and automobile windows in the parking lots during the day. Because of the distance of the project site from Ramon Road, the existence of a block wall separating the existing residences from the project, and the location of most of the parking spaces and

1 Palm Springs Unified School District, Draft Environmental Impact Report for the Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School (SCH 2006011095), Appendix D: Phase I Cultural Resources Inventory, September 2006.

2 Palm Springs Unified School District, Draft Environmental Impact Report for the Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School (SCH 2006011095), Appendix D: Phase I Cultural Resources Inventory, September 2006., Section 3.1: Aesthetics.

buildings away from the existing residential neighborhood, impacts from glare are considered to be less than significant.

On January 9, 2007, the District certified the EIR, adopted a statement of overriding considerations and a mitigation monitoring program, and approved the final EIR.

In 2007, the certified Final Environmental Impact Report was challenged in court by a group of nearby residents referred to as the “Committee of 1000” (Committee) and the City of Rancho Mirage (City). In February 2007, the Committee and Rancho Mirage filed their writ petitions in Riverside County Superior Court.

On January 2, 2008, the trial court issued a written ruling granting the Petition on the grounds that (1) the District failed to properly evaluate alternatives to the proposed project, and (2) the District failed to recirculate the EIR. The lower court denied the Petition with respect to Committee's argument that the project failed to include adequate mitigation measures for certain project impacts, including biological resources. The trial court also granted the Petition for Writ filed by Respondent, City of Rancho Mirage, in a related action. The court granted the City's petition on the basis that the District did not fully evaluate the effects of the maintenance facility and treated the project in a "piecemeal" fashion. The lower court issued a peremptory writ of mandate on March 3, 2008.

Following entry of judgment and Subsequently, Committee filed a cross-appeal to the judgment. The cross-appeal concerned the lower court's finding that the EIR "contains sufficient mitigation" with respect to three areas: aesthetics, biology, and noise impacts. After briefing of the matter, the Fourth District Court of Appeal Division 2 issued a tentative ruling granting the appeal of the District, reversing the lower court decision and denying the cross-appeal of The Committee. The requested oral argument and the oral argument was held on May 5, 2009. The Court of Appeal issued its decision on May 21, 2009, granting the appeal of the District, reversing the lower court decision and denying the cross-appeal of the Committee.

The grounds for the court's rulings were its findings that, although the final EIR was sufficient, the District did not evaluate reasonable alternatives adequately and it performed a piecemeal environmental review of a proposed 4.4-acre maintenance yard. The District appeals and the Committee cross-appeals citing additional considerations of aesthetics, biology, 'and noise impacts.

Pursuant to California Rules of Court, Rule 8.500, the Committee petitioned for review by the California Supreme Court the decision of the Fourth Appellate District, Division Two, filed on May 21, 2009. The Court of Appeal reversed in full the Riverside County Superior Court's judgment, which was decided in favor of the Committee and denied the Cross Appeal of the Committee. The Appellate Court made the following ruling (Committee of 1000 v. Palms Springs Unified School District, August 12, 2009, Case Number S17 4273):

"Petitioner City of Rancho Mirage argues that respondent Palm Springs Unified School District violated [CEQAJ by including an inadequate and internally inconsistent description of the project in the Environmental Impact Report, failing to properly mitigate the impact of the football stadium or to address properly other impacts of the project, and by separating improperly the proposed maintenance yard from the project."

"The Court finds that the project description is sufficient and is not internally inconsistent. Further, the Court finds that the EIR adequately analyzes all potentially significant environmental impacts and contains sufficient mitigation measures."

"The Committee's objections to the findings concerning aesthetics focus primarily on the mitigation of additional light and glare, especially from the stadium lights of the football stadium. The Committee complains that the planned use of "downward lighting," limiting lighting to scheduled events, and testing and adjusting the lighting after installation may not achieve sufficient mitigation. The Committee also criticizes the planned landscaping as a mitigation measure because the EIR did not specifically describe the size, number, and type of plantings to be used and the height of the buildings.

The Court determined, in spite of the Committee's criticisms, however, the administrative record contains substantial evidence about the mitigation-of aesthetic-effects. (Goleta II supra, 52. Cal.3d at pp, 568 & 569). The District obtained two modeling studies of the lighting system design which measured the anticipated increase in illumination and provided a basis for the planned mitigation efforts. The District also cannot be faulted for planning to calibrate the lighting system after its installation to make sure the mitigation was adequate. (Sacramento Old City Assn. v. City Council (1991) 229 Cal.App.3d I 011, 1025-1026.)"

Existing Conditions

Surrounding Area

The Project Site is located in the City of Rancho Mirage, which is a predominantly desert and mountainous region with a variety of contrasting and dramatic geographic features. In addition, the Project Site is located near the center of Coachella Valley, which contains a series of low-lying desert flatlands, sloping dunes and rolling foothills that are surrounded by the rugged San Jacinto, Santa Rosa, and Little San Bernardino Mountains.

The rugged and dramatic topography of the San Jacinto Mountains to the southwest and Santa Rosa Mountains to the south are the predominant natural and visual resource in Coachella Valley. These mountains provide a natural scenic backdrop to the City as well as the rest of the Coachella Valley. The Little San Bernardino Mountains to the northwest are also prominent landforms in the general region with elevations reaching over 5,000 feet. Preserving views of these visual resources continues to be important in creating and maintaining a sense of community and identity.

Surrounding Land Uses

Surrounding uses to the existing high school to the immediate north, east, and south are currently undeveloped. To the west, adjacent to the football field, is an existing gated residential neighborhood separated by a block masonry wall. Additionally, a second gated residential development is located to the northwest of the Project Site.

South of the Project Site and across Ramon Road is the Westin Mission Hills Country Club. The Westin Mission Hill Country Club is surrounded by a wall that blocks the view from the street. Approximately 0.3 miles southwest of the Project Site and across Ramon Road is a gated residential community. Additionally, the 36-acre Agua Caliente Casino Resort Spa facility is located approximately 1.4 miles to the southeast of the Project Site.

Surrounding light sources include the residential neighborhoods to the west and the nighttime traffic along Ramon Road to the south. The Westin Mission Hills residential and golf course complex to the south of Ramon Road also produces limited light and glare. Tall marquees associated with the commercial development at the Ramon Road/I-10 interchange in Thousand Palms, as well as the Agua Caliente Casino at Bob Hope Drive and Ramon Road, can be seen from the project area.

Sources of daytime glare within the Project vicinity may include reflected light from windows of campus buildings and vehicles in the adjacent parking lots to the north and south of the campus. Sources of nighttime glare may include vehicle headlights traveling north and south on Rattler Road, as well as existing campus lighting.

Project Site

The elevation of the Project Site ranges from approximately 312 feet above mean sea level (AMSL) east of the Project Site to 300 feet AMSL at the Project Site and 330 feet AMSL west of the Project Site.

Figure 5.1-1, RMHS Campus Satellite Photograph, shows an aerial view of the Project Site and of the existing fields. The fields are located on the northern portion of the high school campus. The Project Site is approximately 30 feet below grade of the four streets that border the Project Site; 30th Avenue to the north, Ramon Road to the south, Rattler Road to the East, and Da Vall Drive to the west.

Light sources within the Project site include the stadium lights affixed to four approximately 80-foot-tall light poles located on both sides of the football stadium. Two light poles are placed on the western portion of the field and two light poles are placed on the eastern portion of the stadium. Lighting fixtures include shields that provide downward lighting with minimal horizontal light spillage. The use of stadium lights are limited to scheduled events, per PSUSD policy AR-3511: Energy and Water Management (see Appendix B).

SOURCE: Google Earth - 2023

FIGURE **5.1-1**

Meridian Consultants

RMHS Campus Satellite Photo

049-021-23

Other sources of nighttime light in the area includes vehicular traffic along Ramon Road to the south and Rattler Road to the east. Elevated marquees associated with the commercial development at Ramon Road/I-10 interchange in Thousand Palms as well as the Agua Caliente Casino Resort Spa at Bob Hope Drive and Ramon Road can be seen from the Project area.

REGULATORY SETTING

State

The California Environmental Quality Act (CEQA) establishes that it is the policy of the State to take all action necessary to provide the people of the State "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities."[3]

Caltrans

The California Scenic Highway Program was created to preserve and protect scenic highway corridors from change, which would diminish the aesthetic value of lands adjacent to highways. The State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260-284.[4]

California Interscholastic Federation

The California Interscholastic Federation (CIF) serves as an organization through which member high schools may mutually adopt rules relating to interscholastic athletics (grades 9-12) and establish agreed upon minimum standards for certain aspects of the interscholastic athletic program; to guide schools and school districts in the discharge of their responsibilities for, among other considerations, the health, safety, general welfare and educational opportunities of the students taking part in interscholastic athletics.

CIF does not provide specific standards for athletic field light but relies on industry standards. For high school baseball and softball fields, these include:[5]

- The minimum lighting level for high school baseball fields is typically set at 500 lux or about 45 foot-candles.[6]
- Baseball infield vs outfield lighting standards. The lux level is typically higher in the infield (around the bases and home plate) than in the outfield, as the infield requires more precise lighting for players to make plays and see the ball. General guidelines for minimum lux levels on a baseball/and softball fields are:

3 California Public Resources Code, sec. 21001(b).

4 California Streets and Highways Code, sec. 260–284.

5 StandiumPro, https://stadiumlightspro.com/baseball-field-lighting-standards-and-regulations/ Accessed: May 2, 2023.

6 1 lux equal 0.029 foot-candles.

Area	Illuminance
Infield	500 to 1,000 lux / 45 to 95 foot-candles
Outfield	200 to 500 lux / 20 to 45 foot-candles

These are general guidelines and the actual minimum lux/foot-candle levels may vary depending on the specific governing body or organization. Besides, the minimum lux/foot-candle levels may be higher for night games compared to day games, as the lower light levels at night may require additional lighting to ensure adequate visibility.

- Regulations for lighting uniformity across the athletic field. Lighting uniformity is a crucial factor in ensuring the safety and visibility of players on a baseball field. Regulations for lighting uniformity typically specify the maximum allowable difference in lighting levels between different areas of the field, such as the infield and the outfield. This helps to ensure that players have consistent visibility and are not disadvantaged by uneven lighting.
- Maximum allowable difference in lighting levels between the infield and the outfield. Regulations for lighting uniformity often specify the maximum allowable difference in lighting levels between the infield and the outfield. This helps to ensure that players have consistent visibility and are not disadvantaged by uneven lighting. A common guideline for this difference is 50 percent, meaning that the lighting level in the outfield can be up to 50 percent lower than the lighting level in the infield.
- Maximum allowable difference in lighting levels between the home plate area and the rest of the field. Regulations for lighting uniformity may also specify the maximum allowable difference in lighting levels between the home plate area and the rest of the field. This helps to ensure that players have consistent visibility and are not disadvantaged by uneven lighting. A common guideline for this difference is 25 percent, meaning that the lighting level in the home plate area can be up to 25 percent higher than the lighting level in the rest of the field.

California Senate Bill 328

California Senate Bill 328 (SB-328) is an act to amend Section 46148 of, and add to Section 8203.4 to, the Education Code, relating to local educational agencies.[7] This bill mandates that middle schools and high schools begin no earlier than 8:00 a.m. and 8:30 a.m., starting July 1, 2022.

Civic Center Act

The Civic Center Act is codified in California Education Code 38130, in order to benefit the public.[8] All public-school facilities, under this act, are considered a civic center where citizens, school-community councils, as well as clubs and organizations may meet. School districts may grant the use of school facilities and grounds upon certain terms and conditions deemed appropriate by the governing board of education, and subject to specified limitations, requirements, and restrictions set forth within the law.

7 Local educational agencies: before and after school programs: middle school and high school start time, California Senate Bill 328, 2021.

8 Civic Center Act, California Education Code 38130, 2012.

Local

Rancho Mirage

General Plan

The City's most recent General Plan Update 2017 Update includes provisions for protecting visual and scenic resources within the City. Chapter 2 Land Use Element and Chapter 10 Community Design include guidance to enhance and protect scenic resources.[9] Identifying and preserving significant scenic resources are important to defining the character of Rancho Mirage. The following goals and policies are relevant to the proposed Project:

Goal LU-7: A land use pattern that preserves Rancho Mirage's resort residential atmosphere, including scenic resources such as hillside and mountain vistas, waterways, and native desert communities.

Goal CD-1: Preservation and promotion of the special identity of Rancho Mirage as an "Oasis in the Desert," combining quality development with scenic, natural, and open space amenities.

CD-1.2: Unique views of mountains and other natural open spaces from Rancho Mirage's streets shall be preserved and enhanced.

Methodology

The analysis identifies and objectively examines factors that contribute to the perception of the aesthetic and visual character of the Project Site and the surrounding area. Potential aesthetic impacts are evaluated by considering light and glare impacts associated with the proposed lighting fixtures.

RMHS would have 39 lighting poles along its fields. The light poles would extend between 50 and 90 feet in height and would be planted 10 feet into the ground in a concrete casing. 5 of the poles will be 50 feet tall, 20 poles will be 60 feet tall, 6 will be 70 feet tall, 4 will be 80 feet tall, and the remaining 4 poles will be 90 feet tall. Each pole would have a number of Light Emitting Diode (LED) luminaires (light fixtures) with solid "hoods" referred to as Total Light Control (TLC) that focus the light onto the precise fields. These hoods would help prevent spill-over onto neighboring streets and communities. Even with this addition, the luminaires would still be visible at night and could potentially be a bother to residents nearby as they begin their evening relaxation.

Musco prepared a photometric analysis of the illumination that would be produced within the fields and adjacent areas. The complete analysis including the lighting design sheets and specifications can be

9 City of Rancho Mirage, General Plan 2017 Update, https://ranchomirageca.gov/wp-content/uploads/2019/01/rm-general-plan-17.pdf. Accessed May 2023.

found in **Appendix B**. The threshold of 0.5-foot candle[10] illumination offsite was used to analyze the impact of the proposed action on residents adjacent to the Project Site. As the school borders vacant land to the north, south, and east, the primary concern is whether illumination of no greater than 0.5-foot candles is maintained within the western perimeter of school grounds, where a residential community lies adjacent to the school. Musco determined that the light fixtures along the western perimeter of the Project Site will have some spill-over effects for the residential community, which has a potential to have a significant effect on the aesthetics impact of the proposed Project.

View alterations are considered in the context of the above factors. The aesthetic compatibility of the Project with the surrounding area and potential impacts to visual resources and viewers in the Project Site are examined.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The CEQA Guidelines include thresholds to determine whether a project would have a significant effect on the environment (Appendix G of the CEQA Guidelines). Appendix G provides that a project would have a significant impact to aesthetic resources if it would:

- Threshold 5.1-1: Have a substantial adverse effect on a scenic vista.
- Threshold 5.1-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Project Impacts

Threshold 5.1-1: Have a substantial adverse effect on a scenic vista?

As previously stated, the visual resources surrounding the Project include the San Jacinto and Santa Rosa Mountains to the southwest and west and the Little San Bernardino Mountains to the northwest.

The surrounding scenic vistas are visible to viewers located within the vicinity of the Project Site, specifically the existing residential uses adjacent and west of the high school campus. These residential uses are surrounded by 5- to 8-foot-high walls that limit the view of the Project Site from the back frontages of the residences.

The Project Site is approximately 30 feet below grade, when compared to the residential uses to the west. However, there are residential uses directly adjacent to the fields along the western border of the campus. These residential enjoy views to the west that are currently unobstructed.

10 A foot candle is a measure of luminance. One foot candle is the illumination provided by a standard candle one foot (0.3048 m) away from the candle flame. The "lumen" is a more modern term, equivalent to a one foot-candle illumination level per square foot of area.

The existing lighting fixtures at other facilities on campus (tennis courts and football field) have been noted to not adversely affect the scenic vista, as the Santa Rosa and San Jacinto mountains are visible looking south and west, as they are visually consistent with the visual character of the site and are only partially visible from public vantage points.

The proposed lighting poles would consist of a total of 39 light fixtures/poles for all fields around the perimeter of each field and would vary in height from 50 feet to 90 feet tall. Light poles would be placed along the perimeter of the practice field north and south, the Junior Varsity (JV) and varsity baseball fields, JV and varsity softball fields, as well as soccer fields 1 and 2. Specifics of the light pole placement have yet to be finalized but based on preliminary design would include:

- Five of the lighting poles would be located around the perimeter of the Practice Field South on the west side of the campus and would extend 50 feet high.
- Twenty-seven of the lighting poles would be located around the perimeter of the JV baseball, varsity baseball, JV softball, and varsity softball fields on the northwest side of the campus and would be 60 feet to 90 feet high.
- Seven lighting poles would be located around the practice field North, soccer field 1, and soccer field 2 in the northeast corner of the campus, adjacent to Rattler Road to the east and would be 70 feet high.

Figure 3.0-3: Conceptual Lighting Design illustrates the proposed lighting configuration on each field.

Each lighting pole would feature between three to twenty-one separate luminaires. See **Figure 3.0-4: Light Structure System**. Mounting heights for the luminaires are 50 feet (practice field south); 15.5 feet, 60 feet, 80 feet, 90 feet (JV baseball, varsity baseball, JV softball, and varsity softball fields); and 70 feet (practice field north, soccer field 1, and soccer field 2).

Similar to the existing light fixtures, the proposed lights would be mounted in concrete 10 feet below the surface. Each pole would be on a pre-cast concrete base approximately 10 feet below ground.

The Project would not substantially obstruct views of the San Jacinto and Santa Rosa Mountains to the south and west. However, for certain properties immediately adjacent to the campus and the fields to the west, the placement of poles may impact existing views from back yards.

As the proposed Project is visually consistent with the existing visual character of the site and would not substantially alter the visual character of the project area.

The installation of the 70-foot plus tall lighting poles would alter the existing aerial space above the high school, but the visual quality of the fields would be maintained as the improvements are consistent with the visual character, and the lighting poles would only be minimally/partially visible from publicly

accessible vantage points. Construction on each Project Site would be short-term and would not require large equipment that would obstruct views of the vistas.

The use of the LED lighting would direct light onto the field and minimize light spillover. Spillover lighting would not in itself affect views.

Impacts would be potentially significant.

Threshold 5.1-4: Create substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed Project is intended to expand the timing and use of the existing facilities by allowing evening-hour use for students to participate in school-sponsored sports while accommodating the state-mandated late-start law, SB-328.[11] The District has authority over District facilities and grounds, which are a community resource that can be accessed by community groups for purposes provided for in the Civic Center Act, only when such use does not interfere with school activities.[12,13] Pursuant to District policies, facilities maybe available for use as follows:

- Subject to district policies and regulations (BP/AR1330)[14],school facilities and grounds are available to citizens and community groups as a civic center as specified in Education Code 32282, 38131.[15,16]

All school-related activities shall be given priority in the use of facilities and grounds under the Civic Center Act and take precedence over a non-school group. The District reserves the right to revoke a use of facilities permit at any time. Further, the District most recently revised its policy on Energy and Water Management to include:[17]

> *"Athletic fields, including football stadium lighting, will be turned off at times established by city lighting code, or by 10 PM, unless otherwise approved by the district administration. Lighting should only be on for approved school sports, band, cheer, or other school related or approved events, including graduation-related activities."*

11 Local educational agencies: before and after school programs: middle school and high school start time, California Senate Bill 328, 2021.

12 Civic Center Act, California Education Code 38130, 2012.

13 Palm Springs Unified School District (PSUSD) Policies. Section 1330. Available at: http://www.gamutonline.net/district/palmsprings/displayPolicy/436513/. Accessed March 2023.

14 Use of School Facilities, Education Code 32282/38131, Community Relations, BP/AR 1330.

15 Comprehensive School Safety Plan, California Education Code, Section 32282, 2017.

16 Child Care Programs, California Education Code, Section 38131, 2019.

17 PSUSD. Board Policy Manual. AR 3511: Energy and Water Management. **Appendix B**.

Evening games and practices would be limited to only school-sanctioned sports teams. Use of lighting during and following athletic practices would generally end by 8:00 PM. Most athletic games would end by 7:00 PM, but no later than 9:30 PM., with lighting potentially remaining on after to facilitate safe crowd exiting and for clean-up and other similar activities after game completion. The PSUSD Energy and Water Management policy, based within AR 3511, requires sit lighting to be turned off from 11:00 p.m. until 5:00 a.m., unless otherwise authorized for specific uses.[18]

Light sources that currently exist on the RMHS campus include the lighting associated with the existing football stadium as the primary nighttime source. Existing sources of glare include reflected light from windows of campus buildings and vehicles in the adjacent parking lots during the daytime.

The proposed Project would introduce new light poles ranging in height from 50 to 90 feet tall and would include fixtures to individually shield lights (luminaries) as well as reflective housing around the lamps to control glare. The lighting fixtures will be designed such that they are directed downward to limit glare off the site and minimize impacts to surrounding areas. The proposed lighting fixtures would project downwards toward the fields and glare from the lights would be localized within the existing high school campus.

Field lighting would be designed to ensure that all fields meet the CIF and industry standards for field light to ensure safety and playability. As previously noted, this would include:

- minimum lighting level for high school baseball fields is typically set at 500 lux or about 45 foot-candles; and
- Lighting uniformity is a crucial factor in ensuring the safety and visibility of players on a baseball field. Regulations for lighting uniformity typically specify the maximum allowable difference in lighting levels between different areas of the field, such as the infield and the outfield. This helps to ensure that players have consistent visibility and are not disadvantaged by uneven lighting.

The new lighting poles would result in a total of 251 luminaires with an average kilowatt (kW) of 38.4 (55.8 maximum). All luminaires would utilize LED technology and would be fixed to cast light downward to reduce spill onto adjacent properties. LED sports field lighting provides benefits for large areas or sites requiring illumination because of how they generate light and how they distribute light. Light emitting diodes generate light via a semi-conductor, as opposed to the consumption of a “fuel source” like in HID lamps. In regard to “distributing” light, LED sport light fixtures commonly utilize “multi-point” sources, meaning the fixtures have multiple diodes with individual optics. When you compare this to the way most HID fixtures distribute light (with a single bulb and reflectors within the fixture), the result is light that is more evenly “distributed’ across a given area.

18 Palm Springs Unified School District, AR 3511 Business and Noninstructional Operations, Energy and Water Management, Lighting, 2019.

Moving on to the way LED fixtures distribute light: as a result of the multi-point design, LED sports field fixtures provide a very evenly distributed light pattern. What this means is that light levels across a given surface will vary less as the distance from the pole or fixture changes. Compared to high intensity discharge (HID) fixtures, which often produce a "bright spot" directly underneath the fixture with light levels decreasing drastically as the distance from the pole increases. The result, in regard to LED vs HID, is a more even foot candle distribution from the LED conversion. In addition to the even distribution of light, LEDs are available in a range of color temperatures, and as a result provide a range of options to increase the visual perception of "brightness."

The nearest residence is located approximately 10 feet immediately west of the proposed Project Site- it lies adjacent to the high school campus. The proposed lighting fixtures would project light downward towards the fields, not including the football field. Light and potential glare from the proposed lighting fixtures would be localized to the fields and confined to the area within the existing lighting fixtures.

The District prepared a photometric analysis of the illumination that would be produced within the fields and adjacent areas. The complete analysis including the lighting design sheets and specifications can be found in **Appendix B: Lighting Plan**.

As Lead Agency under CEQA, the District established a threshold of 0.5-foot candle.[19] Illumination offsite that exceed the 0.5 footcandle threshold was used to analyze the impact of the new lighting on residential uses immediately adjacent to west of the RMHS campus. As indicated in the lighting study (see **Appendix B**), there is potential for a light spill-over to occur on adjacent residential properties to the west of the campus.

As noted in the preliminary design, light poles and accompanying fixtures would be located adjacent to residences uses to the western side of the high school campus. Spill-over lighting would be reduced to offsite areas though the use of H shields placed on the luminaries to control the direction and glare of the lights. However, based on preliminary design and modeling, not all off site light spillage would be reduced to the 0.5-foor-candle threshold for all impacted properties.

The 2006 EIR also determined that the new RMHS would introduce new sources of light to the area.[20] These sources would include parking lot lighting, exterior building lights, security lighting throughout the campus and lighting associated with the football stadium and baseball/softball diamonds. Lighting associated with the stadium and ball diamonds would be of short duration in early nighttime hours and seasonal in use. A well-designed lighting plan and management policies directed at reducing the impact

19 A foot candle is a measure of luminance. One foot candle is the illumination provided by a standard candle one foot (0.3048 m) away from the candle flame. The "lumen" is a more modern term, equivalent to a one foot-candle illumination level per square foot of area.

20 Palm Springs Unified School District, Draft Environmental Impact Report, Section 3.1: Aesthetics, 2006.

of night events would decrease the impact of lighting of the proposed project on the neighborhood and the Mt. Palomar observatory to less than significant.

The 2006 EIR also provided for the District to implement a lighting plan will be required by the District to address light and glare on adjacent properties and to address the special needs of the Mount Palomar Observatory.[21]

The District has adopted Terms and Conditions for the Use of School Facilities and Grounds.[22] For field use, As noted therein, fields are rented per field. User Groups may not use additional fields beyond what the permit states. Additionally, the District maintains Regulation 3511: Energy and Water, that addresses field use and lights.[23] This stipulates:

- Athletic fields, including football stadium lighting, will be turned off at times established by city lighting code, or by 10 pm, unless otherwise approved by the district administration. Lighting should only be on for approved school sports, band, cheer, or other school related or approved events, including graduation-related activities.

Use of lights would follow this policy, to prevent any potential light nuisances to the residents that live adjacent to the Project Site.

Impacts on light and glare conditions as a result of the proposed Project could be considered significant.

CUMULATIVE IMPACTS

The evaluation of aesthetic and visual impacts is by nature a subjective exercise due to widely varying personal perceptions. As mentioned above, implementation of the Project would not substantially alter views of surrounding visual resources and would also not substantially alter the visual character of the Project Site and surrounding areas.

The following cumulative impacts are analyzed based on a list of past, present, and probable future projects producing related cumulative impacts, described in **Section 4.0: Environmental Setting**.

---

21 Palm Springs Unified School District, Draft Environmental Impact Report, Section 3.1: Aesthetics, 2006.

22 Palm Springs Unified School District, Terms and Conditions: Use of School Facilities and Grounds https://www.psusd.us/site/handlers/filedownload.ashx?moduleinstanceid=615&dataid=2495&FileName=UOF%20Terms%20and%20Conditions%20072820_.pdf#:~:text=All%20school-related%20activitiesandprogramsshallbegivenpriorityintheuseoffacilitiesandgroundsundertheCivicCenter%20Act.%20Thereafter%2C%20the%20use%20shall,Center%20activities%20shall%20be%20scheduled%20during%20non-school%20hours. Accessed May 2023.

23 Palm Springs Unified School District, AR 3511 Business and Noninstructional Operations, Energy and Water Management, 2019.

Scenic Vistas and Visual Character

Past and existing cumulative development within the immediate vicinity of the Project Site has been relatively limited. Scenic vistas and visual character continue to be defined by views of low-lying desert flatlands, sloping dunes and distant mountain views, with single-family residential development to the west and commercial development south.

Future development includes the Section 24 Specific Plan which is proposed less than one mile southeast of the Project Site. This project may affect aesthetic character of the area considering the existing site is vacant and consists of sand dunes and desert flat land. However, development would be largely set back on Ramon Road and there is an existing residential development located adjacent west of the Section 24 Specific Plan area. Section 24 Specific Plan development would include similar elements to the existing development and create consistency within that area.

Other proposed projects described in **Section 4.0: Environmental Setting** would not have a substantial bearing on the visual character of the area near the proposed Project in that they are a distance away from the existing campus and would not affect views in and around the campus.

The proposed Project impacts on scenic views and vistas would be considered cumulatively considerable.

Light and Glare

Similarly, past and present uses within the Project Site vicinity have not contributed to significant light and glare conditions. Exceptions would be the existing high school campus (includes security and pedestrian lighting), the Westin Mission Hills residential and golf course complex, tall marquees associated with the commercial development at the Ramon Road/I-10 interchange in Thousand Palms, as well as the Agua Caliente Casino at Bob Hope Drive and Ramon Road.

The proposed Section 24 Specific Plan development has the potential to increase light and glare that could have local impacts on the surrounding area and potentially alter dark sky conditions, depending on the level of night-time light that will be implemented. However, the proposed Section 24 Specific Plan development would be required to comply with the City's conditions of approval for lighting, which would reduce this potential impact.

Other proposed projects described in **Section 4.0: Environmental Setting** would not have a substantial bearing on the light and glare in the area near the proposed Project in that they are a distance away from the existing campus and would not affect views in and around the campus. While they would each increase night time lighting and new sources of light and glare, each would be required to comply with the City's conditions of approval for lighting, which would reduce this potentially impacts

While probable future development within the vicinity would each potentially impacts relative to light and glare, each would be required to address impacts on a project specific basis. Further, the City of Rancho Mirage is a relatively built out city with numerous existing light sources; new light sources wud

result in an incremental increase in light and glare and would not be considered cumulatively considerable.

As the Project's impacts would be considered less than significant, the Project would not result in a cumulatively considerable contribution.

MITIGATION MEASURES

The 2006 EIR included the following mitigation measures which were adopted by the District:

A-1 Light fixtures shall be selected to provide downward lighting with minimal horizontal travel and minimum levels to provide sufficient safety at night. Use of stadium and sports field lighting shall be limited to scheduled events.

A-2 Site development shall include the planting of trees and shrubs to reduce glare and provide screening to soften the visual impact of buildings and parking lots.

The District has considered the installation of trees along the western perimeter of the fields. However, in considering this, the District has decided not to install trees or other shrubs. This decision is based on the ability of the District to ensure that the trees and shrubs would provide adequate screening, and that that they would maintain adequate life and not require substantial ongoing maintenance or replacement.

The following mitigation measures been identified to reduce further potentially significant impacts of the proposed Project in the Supplement EIR:

MM AES-1: The District shall coordinate with all residence along the western border of the RMHS who have yards that abut the campus to address the placement of light poles. Light poles adjacent to residences, along the west side of the fields, would be located in conjunction with discussion with the owners of the impacted properties so as to align the poles to avoid visual impacts. This will include, to the degree feasible in maintain lighting standards for field safety, the potential for locating poles in between each residential property line and away from any back yard viewing locations, Poles would be located, to the degree feasible, to align out of direct view of the residences.

MM AES-2: Luminaires shall be directed aways for residential and offsite uses such that the light level at the property line between the residential use and campus does not exceed 0.5-foot candles. If necessary, the District may need to increase/or decrease the number of light poles, their height, and luminaires at any specific location.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the lamentation of the identified mitigation measure, impacts from light and glare would be less than significant.

5.2 AIR QUALITY

INTRODUCTION

This section of the Draft Supplemental Environmental Impact Report (SEIR) evaluates the potential impacts air quality on a local and regional context. More specifically, this section evaluates impacts associated with the Project that may potentially affect regional and local air quality. Various federal, State, regional, and local programs and regulations related to anticipated air quality impacts are also discussed in this section. Emission calculations and air quality modeling completed for the Project are contained in **Appendix C: Air Quality and Greenhouse Gas Data** of this Draft SEIR.

Impacts found to be less than significant are further discussed in **Section 6.1: Effects Not Found to be Significant** of this Draft SEIR.

ENVIRONMENTAL SETTING

Existing Conditions

As part of the 2006 EIR for the RMHS Campus,[1] air quality impacts were analyzed for the construction and operation of the high school and elementary school. The analysis concluded that construction would lead to generation emissions that exceed local and regional standards; however, construction would be short-term and health effects were anticipated to be less than significant. Operational impact analysis determined that there would be a significant level of volatile organic compounds (VOC) during the summer months due to traffic, and as a result mitigation measures were implemented to reduce impacts to a less than significant level.

Additionally, the 2006 EIR noted the location of the project in the Coachella Valley, where it is exposed to frequent gusty winds. Within the project area, there is "blowsand," a natural sand migration process that can directly and indirectly affect air quality due to the generation of particulate matter with a diameter of 10 microns or less (PM_{10}). The EIR identified short term impacts for fugitive dust during the construction of the project; however, the emissions were stated to cease once construction was completed due to the high volume of development in the western Coachella Valley.

Air Quality Background

The Project Site lies within the Salton Sea Air Basin (SSAB), which spans the Coachella Valley portion of the County of Riverside and the entire County of Imperial. The air quality management of the Riverside County portion of the SSAB is overseen by the South Coast Air Quality Management District (SCAQMD). The Riverside County portion of the SSAB is bound by the San Jacinto Mountains to the west and spans

1 Palm Springs Unified School District, Draft Environmental Impact Report for the Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School (SCH 2006011095), September 2006., Section 3.2: Air Quality.

eastward up to the Palo Verde Valley. The SSAB and the adjacent Mojave Desert Air Basin were previously included in a single large air basin known as the Southeast Desert Air Basin. However, the California Air Resources Board (CARB) has subdivided this larger basin into the two separate air basins that are in place today.

The SSAB is classified as having a desert climate characterized by low precipitation, hot summers, mild winters, low humidity, and strong temperature inversions. The annual average temperature varies little throughout the SSAB, ranging from the low 40s to the low 100s, measured in degrees Fahrenheit (°F). The Western Regional Climate Center (WRCC) maintains historical climate information for the western US, including the City of Palm Springs which is the closest meteorological monitoring station to the Project Site (Station ID No. 046635). According to this Station, the annual maximum temperature in the local vicinity is 108.2°F in July, while the annual minimum temperature reported is 42.3°F in December and January. The average annual rainfall for the Project area ranges from 5 to 6 inches.[2]

Air pollutant emissions within the SSAB are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point sources and area sources. Point sources occur at an identified location and are usually associated with manufacturing and industry. Examples of point sources are boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and produce many small emissions. Examples of area sources include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and consumer products, such as barbeque lighter fluid and hair spray. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

The U.S. Environmental Protection Agency (USEPA) and the CARB designate air basins where air pollution levels exceed the State or federal ambient air quality standards (AAQS) as "nonattainment" areas. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria, which have been adopted for them. The federal and State standards have been set at levels considered safe to protect public health, including the health of "sensitive" populations, such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, an area is considered "unclassified." Federal nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation

2 Western Regional Climate Center. "Palm Springs Station: Period of Record Monthly Climate Summary" (period of record 03/01/1906-06/10/2016). https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6635. Accessed March 2023.

from standards. Transportation conformity for nonattainment and maintenance areas is required under the federal Clean Air Act (CAA) to ensure federally supported highway and transit projects conform to the State Implementation Plan (SIP). The USEPA approved California's SIP revisions for attainment of the 1997 8-hour ozone (O3) National AAQS for the Basin in October 2019. The State and federal AAQS are summarized in **Table 5.2-1: Ambient Air Quality Standards**.

Ambient air pollution can cause public health concerns and can contribute to increases in respiratory illness and death rates. Air pollution can affect the health of both adults and children. The adverse health effects associated with air pollution are diverse and include cardiovascular effects, premature mortality, respiratory effects, cancer, reproductive effects, neurological effects, and other health outcomes.[3]

TABLE 5.2-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O3)	1 hour	0.09 ppm (180 µg/m^3)	Ultraviolet photometry	—	Same as primary standard	Ultraviolet photometry
	8 hours	0.07 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable particulate matter (PM10)	24 hours	50 µg/m^3	Gravimetric or beta attenuation	150 µg/m^3	Same as primary standard	Inertial separation and gravimetric analysis
	Annual arithmetic mean	20 µg/m^3		—		
Fine particulate matter (PM2.5)	24 hours	No separate State standard		35 µg/m^3	Same as primary standard	Inertial separation and gravimetric analysis
	Annual arithmetic mean	12 µg/m^3	Gravimetric or beta attenuation	15 µg/m^3		
Carbon monoxide (CO)	8 hours	9.0 ppm (10 mg/m^3)	Nondispersive infrared photometry (NDIR)	9 ppm (10 mg/m^3)	None	NDIR
	1 hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
Nitrogen dioxide (NO2)	Annual arithmetic mean	0.03 ppm (57 µg/m^3)	Gas phase chemilumi-nescence	0.053 ppm (100 µg/m^3)	Same as primary standard	Gas phase chemilumi-nescence
	1 hour	0.18 ppm (339 µg/m^3)		0.100 ppm (188 µg/m^3)		

Source: California Air Resources Board website at: http://www.arb.ca.gov/research/aaqs/aaqs.htm. Accessed March 2023.
Note: ppm = parts per million.

3 South Coast Air Quality Management District (SCAQMD). *2022 Air Quality Management Plan*, Chapter 2: Air Quality and Health Effects, http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/05-ch2.pdf?sfvrsn=12. Accessed March 2023.

Criteria Air Pollutants and Health Effects

The criteria air pollutants that are most relevant to current air quality planning and regulation in the SSAB include, ozone (O_3) carbon monoxide (CO), nitrogen dioxide (NO_2), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), sulfur dioxide (SO_2), and lead (Pb). In addition, volatile organic compounds (VOC) and toxics air contaminants (TACs) are a concern in the SSAB but are not classified under AAQS.

Elevated concentrations of certain air pollutants in the atmosphere have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants. In the United States, such pollutants have been identified and are regulated as part of the overall endeavor to prevent further deterioration and facilitate improvement in air quality. The following pollutants are regulated by the USEPA and are subject to emissions control requirements adopted by federal, State, and local regulatory agencies. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria, which have been adopted pertaining to them.

The USEPA established the National Ambient Air Quality Standards (NAAQS) to "provide public health protection, including protecting the health of 'sensitive' populations such as asthmatics, children, and the elderly," allowing "an adequate margin of safety." California Ambient Air Quality Standards (CAAQS) were "established to protect the health of the most sensitive groups in our communities" and "defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without any harmful effects on people or the environment."[4] The characteristics of each criteria pollutant and their health effects are briefly described below.

Ozone (O_3)

O_3 is a highly reactive and unstable gas that is formed when reactive organic gases (ROGs), sometimes referred to as VOCs, and NO_X, byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

According to USEPA, O_3 can cause the muscles in the airways to constrict potentially leading to wheezing and shortness of breath. O_3 can make it more difficult to breathe deeply and vigorously; cause shortness of breath and pain when taking a deep breath; cause coughing and sore or scratchy throat; inflame and damage the airways; aggravate lung diseases such as asthma, emphysema and chronic bronchitis; increase the frequency of asthma attacks; make the lungs more susceptible to infection; continue to

4 California Air Resources Board (CARB). "California Ambient Air Quality Standards." https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed March 2023.

damage the lungs even when the symptoms have disappeared; and cause chronic obstructive pulmonary disease.[5]

Long-term exposure to O_3 is linked to aggravation of asthma and is likely to be one of many causes of asthma development. Long-term exposures to higher concentrations of O_3 may also be linked to permanent lung damage, such as abnormal lung development in children.[6] According to CARB, inhalation of ozone causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms, and exposure to O_3 can reduce the volume of air that the lungs breathe in and cause shortness of breath.[7]

USEPA states that people most at risk from breathing air containing O_3 include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers.[8] Children are at greatest risk from exposure to O_3 because their lungs are still developing and they are more likely to be active outdoors when O_3 levels are high, which increases their exposure.[9] According to CARB, studies show that children are no more or less likely to suffer harmful effects than adults; however, children and teens may be more susceptible to O_3 and other pollutants because they spend nearly twice as much time outdoors and engaged in vigorous activities compared to adults.[10] Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults and are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults.

Carbon Monoxide (CO)

CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the SSAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

According to the USEPA, breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the blood stream to critical organs like the heart and brain and at very high levels,

---

5 US Environmental Protection Agency (USEPA). "Health Effects of Ozone Pollution." https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed March 2023.

6 USEPA. "Health Effects of Ozone Pollution." https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed March 2023.

7 USEPA. "Health Effects of Ozone Pollution." https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed March 2023.

8 USEPA. "Health Effects of Ozone Pollution." https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed March 2023.

9 USEPA. "Health Effects of Ozone Pollution." https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed March 2023.

10 USEPA. "Health Effects of Ozone Pollution." https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed March 2023.

which are possible indoors or in other enclosed environments, CO can cause dizziness, confusion, unconsciousness and death.[11] Very high levels of CO are not likely to occur outdoors; however, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease since these people already have a reduced ability for getting oxygenated blood to their hearts and are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as angina.

According to CARB, the most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain.[12] For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress; inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO.

Nitrogen Dioxide (NO_2) and Nitrogen Oxides (NO_X)

NO_2 is a reddish-brown, highly reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO), similar to O_3. NO_2 is also a byproduct of fuel combustion. NO and NO_2 are collectively referred to as NO_X and are major contributors to O_3 formation. NO_2 also contributes to the formation of PM_{10}. High concentrations of NO_2 can cause breathing difficulties and there is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase of bronchitis in children (2-3 years old) has been observed at concentrations below 0.3 ppm.

According to the USEPA, short-term exposures to NO_2 can potentially aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. According to CARB, controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics.[13]

In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses.[14] Infants and children are particularly at risk from exposure to NO_2 because they have disproportionately higher exposure to

11 USEPA. "Carbon Monoxide (CO) Pollution in Outdoor Air." https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution. Accessed March 2023.

12 CARB. "Carbon Monoxide & Health." https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health. Accessed March 2023.

13 CARB. "Nitrogen Dioxide & Health." https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health. Accessed March 023.

14 CARB. "Nitrogen Dioxide & Health." https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health. Accessed March 2023.

NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration while in adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease.

CARB states that much of the information on distribution in air, human exposure and dose, and health effects is specifically for NO_2 and there is only limited information for NO and NO_X, as well as large uncertainty in relating health effects to NO or NO_X exposure.[15]

Particulate Matter (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$)

Particulate Matter (PM) consists of small liquid and solid particles floating in the air, including smoke, soot, dust, salts, acids, and metals and can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Sources of PM_{10} emissions include dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, and wind-blown dust from open lands.[16] Sources of $PM_{2.5}$ emissions include combustion of gasoline, oil, diesel fuel, or wood. PM_{10} and $PM_{2.5}$ may be either directly emitted from sources (primary particles) or formed in the atmosphere through chemical reactions of gases (secondary particles) such as SO_2, NO_X, and certain organic compounds.

A consistent correlation between elevated ambient respirable and fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks, and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life span, and an increased mortality from lung cancer.

According to CARB, both PM_{10} and $PM_{2.5}$ can be inhaled, with some depositing throughout the airways; PM_{10} is more likely to deposit on the surfaces of the larger airways of the upper region of the lung, while $PM_{2.5}$ is more likely to travel into and deposit on the surface of the deeper parts of the lung, which can induce tissue damage, and lung inflammation.[17] Short-term (up to 24 hours duration) exposure to PM_{10} has been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits. The effects of long-term (months or years) exposure to PM_{10} are less clear, although studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer.

---

15 CARB. "Nitrogen Dioxide & Health." https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health. Accessed March 2023.

16 CARB. "Inhalable Particulate Matter and Health (PM2.5 and PM10)." https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health. Accessed March 2023.

17 CARB. "Inhalable Particulate Matter and Health (PM2.5 and PM10)." https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health. Accessed March 2023.

Short-term exposure to $PM_{2.5}$ has been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. Long-term exposure to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children.[18] According to CARB, populations most likely to experience adverse health effects with exposure to PM_{10} and $PM_{2.5}$ include older adults with chronic heart or lung disease, children, and asthmatics. Children and infants are more susceptible to harm from inhaling pollutants such as PM_{10} and $PM_{2.5}$ compared to healthy adults because they inhale more air per pound of body weight than adults, spend more time outdoors, and have developing immune systems.

Sulfur Dioxide (SO_2) and Sulfur Oxides (SO_X)

Sulfur Dioxide (SO_2) is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, as well as from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_X).

According to the USEPA, short-term exposures to SO_2 can harm the human respiratory system and make breathing difficult.[19] According to CARB, health effects at levels near the State one-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath and chest tightness, especially during exercise or physical activity and exposure at elevated levels of SO_2 (above 1 parts per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.[20] Children, the elderly, and those with asthma, cardiovascular disease, or chronic lung disease (such as bronchitis or emphysema) are most likely to experience the adverse effects of SO_2.[21,22]

Lead (Pb)

Lead (Pb) occurs in the atmosphere as particulate matter and is also considered a TAC. The combustion of leaded gasoline is the primary source of airborne lead in the SSAB. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so the majority of such combustion emissions are associated with off-road vehicles. However, because leaded gasoline was emitted in large amounts from vehicles when leaded gasoline was used for on-road motor vehicles, Pb is present in many urban soils and can be

18 CARB. "Inhalable Particulate Matter and Health (PM2.5 and PM10)." https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health. Accessed March 2023.

19 USEPA. "What is SO_2 and how does it get in the air?" https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#what%20is%20so2. Accessed March 2023.

20 CARB. "Sulfur Dioxide & Health." https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health. Accessed March 2023.

21 CARB. "Sulfur Dioxide & Health." https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health. Accessed March 2023.

22 USEPA. "What is SO_2 and how does it get in the air?" https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#what%20is%20so2. Accessed March 2023.

resuspended in the air. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and the use of secondary Pb smelters.

Pb can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system, and affects the oxygen carrying capacity of blood. The Pb effects most commonly encountered in current populations are neurological effects in children, such as behavioral problems and reduced intelligence, anemia, and liver or kidney damage.[23] Excessive Pb exposure in adults can cause reproductive problems in men and women, high blood pressure, kidney disease, digestive problems, nerve disorders, memory and concentration problems, and muscle and joint pain.

While the SCAQMD CEQA Air Quality Handbook contains numerical indicators of significance for Pb, project construction and operation would not include sources of Pb emissions and would not exceed the numerical indicators for Pb.

Volatile Organic Compounds (VOCs)

VOCs include any compound of carbon, excluding CO, CO_2, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, a precursor of ozone formation. VOC emissions often result from the evaporation of solvents in architectural coatings. Reactive organic gases are any reactive compounds of carbon, excluding methane, CO, CO_2 carbonic acid, metallic carbides or carbonates, ammonium carbonate, and other exempt compounds. ROG emissions are generated from the exhaust of mobile sources.[24] Both VOCs and ROGs are precursors to ozone and the terms can be used interchangeably.[25]

Toxic Air Contaminants (TACs)

Toxic Air Contaminants (TACs) or hazardous air pollutants (HAPs), are defined by the USEPA as those contaminants that are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. For consistency within this document, they will be referred to as TACs. TACs are also defined as an air pollutant that may increase a person's risk of developing cancer and/or other serious health effects. TACs are emitted by a variety of industrial processes such as petroleum refining, electric utility and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. TACs may exist as PM_{10} and $PM_{2.5}$ or as vapors (gases). TACs include metals, other particles, gases absorbed by particles, and certain vapors from fuels and other sources. The emission of a TAC does not automatically create a health hazard. Other factors, such as the amount of TAC, its toxicity, how it is released into the air, the weather, and the

23 CARB. "Lead & Health." https://ww2.arb.ca.gov/resources/lead-and-health. Accessed March 2023.

24 SCAQMD. "Appendix A: Calculation Details for CalEEMod (May 2021)." http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-a2020-4-0.pdf?sfvrsn=6. Accessed March 2023.

25 Both VOC and ROGs are precursors to ozone so they are summed in the CalEEMod report under the header ROG. For the purposes of comparing the ROG value to a VOC significance threshold, the terms can be used interchangeably.

terrain, all influence whether the emission could be hazardous to human health. Emissions of TACs into the air can be damaging to human health and to the environment. Human exposure to TACs at sufficient concentrations and durations can result in cancer, poisoning, and rapid onset of sickness, such as nausea or difficulty in breathing. Other less measurable effects include immunological, neurological, reproductive, developmental, and respiratory problems. TACs deposited onto soil or into lakes and streams affect ecological systems and eventually human health through consumption of contaminated food. The carcinogenic potential of TACs is a particular public health concern because many scientists currently believe that there is no "safe" level of exposure to carcinogens. Any exposure to a carcinogen poses some risk of contracting cancer.[26]

The public's exposure to TACs is a significant public health issue in California. The Air Toxics "Hotspots" Information and Assessment Act is a State law requiring facilities to report emissions of TACs to air districts.[27] The program is designated to quantify the amounts of potential TACs released, the location of the release, the concentrations to which the public is exposed, and the resulting health risks. The Air Toxics "Hotspots" Program (AB 2588) identified over 200 TACs, including the 188 TACs identified in the CAA.[28]

The USEPA has assessed this expansive list and identified 21 TACs as Mobile Source Air Toxics (MSATs).[29] MSATs are compounds emitted from highway vehicles and nonroad equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxins are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline. USEPA also extracted a subset of these 21 MSAT compounds that it now labels as the nine priority MSATs: 1,3-butaidene, acetaldehyde, acrolein, benzene, diesel particulate matter (DPM)/diesel exhaust organic gases, ethylbenzene, naphthalene, and polycyclic organic matter (POM). While these nine MSATs are considered the priority transportation toxics, USEPA stresses that the lists are subject to change and may be adjusted in future rules.[30]

Diesel Exhaust

According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from the exhaust of diesel-fueled engines (i.e., Diesel Particulate Matter (DPM) differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances).

---

26 Centers for Diseuse Control and Prevention, «NIOSH Chemical Carcinogen Policy,». Accessed March 2023.

27 CARB. "General Information About 'Hot Spots.'" https://www.arb.ca.gov/ab2588/general.htm. Accessed March 2023.

28 CARB. "AB 25188 Air Toxics 'Hot Spots' Program." https://www.arb.ca.gov/ab2588/ab2588.htm. Accessed March 2023.

29 USEPA. *Air Toxics Risk Assessment Reference Library, Volume 1 Technical Resource Manual*. April 2004.

30 US Department of Transportation Federal Highway Administration. *Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents*.

Diesel exhaust is composed of two phases, gas and particle, and both phases contribute to the health risk. The gas phase is composed of many urban TACs, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra-fine diesel particulates are of the greatest health concern and may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals, and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines; on-road diesel engines of trucks, buses and cars and off-road diesel engines that include locomotives, marine vessels, and heavy-duty equipment. Although DPM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

The most common exposure to DPM is breathing air that contains diesel exhaust. The fine and ultra-fine particles are respirable (similar to $PM_{2.5}$), which means that they can avoid many of the human respiratory defense mechanisms and enter deeply into the lungs. Exposure to DPM comes from both on-road and off-road engine exhaust that is either directly emitted from the engines or lingering in the atmosphere.

Diesel exhaust causes health effects from long-term chronic exposures. The type and severity of health effects depends upon several factors including the amount of chemical exposure and the duration of exposure. Individuals also react differently to different levels of exposure. There is limited information on exposure to only DPM, but there is enough evidence to indicate that inhalation exposure to diesel exhaust causes chronic health effects as well as having cancer-causing potential.

DPM also contributes noncancer health effects in the same manner as $PM_{2.5}$ exposure. Several studies suggest that exposure to DPM may also facilitate development of new allergies. Those most vulnerable to noncancer health effects are children whose lungs are still developing and the elderly who often have chronic health problems.[31]

Gasoline Exhaust

Similar to diesel exhaust, gasoline is composed of two phases, gas and particle, and both phases contribute to the health risk. The gas phase is composed of the same TACs, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra-fine diesel particulates are of the greatest health concern and may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals, and other trace elements. Gasoline exhaust is primarily emitted from light-duty passenger vehicles. The compounds in the gas and

31 CARB. "Overview: Diesel Exhaust & Health." https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed March 2023.

particles phases can cause health effects from short- and long-term exposures similar to those described under the TAC and particulate matter discussions above.

Visibility Reducing Particles

Visibility-reducing particles are any particles in the atmosphere that obstruct the range of visibility by creating haze.[32] These particles vary in shape, size and chemical composition, and come from a variety of natural and manmade sources including windblown metals, soil, dust, salt, and soot. Other haze-causing particles are formed in the air from gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles) which are the major constituents of fine PM, such as $PM_{2.5}$ and PM_{10}, and are caused from the combustion of fuel. CARB's standard for visibility reducing particles is not based on health effects, but rather on welfare effects, such as reduced visibility and damage to materials, plants, forests, and ecosystems. The health impacts associated with $PM_{2.5}$ and PM_{10} are discussed above under Particulate Matter.

Regional

The Southern California region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of air pollution in the SSAB is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography affect the accumulation and dispersion of pollutants throughout the SSAB.

California Health and Safety Code section 39607(e) requires CARB to establish and periodically review area designation criteria. **Table 5.2-2: Salton Sea Air Basin Attainment Status** provides a summary of the attainment status of the Riverside County portion of the SSAB with respect to the federal and State standards.

As shown, the SSAB is currently designated as being in nonattainment at the federal level for O_3 and PM_{10}; and at the State level for O_3 and PM_{10}. Emissions of O_3, NO_X, VOC, and CO have been decreasing in the SSAB since 1975 and are projected to continue to decrease through 2031.[33] These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although vehicle miles traveled (VMT) in the SSAB continue to increase, emissions are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles.

---

32 CARB. "Visibility Reducing Particles and Health." https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed March 2023.

33 SCAQMD. *Final 2022 Air Quality Management* Plan http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan. Accessed March 2023.

TABLE 5.2-2
SALTON SEA AIR BASIN ATTAINMENT STATUS

Pollutant	State Status	National Status
Ozone (O_3)	Nonattainment	Nonattainment
Carbon monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen dioxide (NO_2)	Attainment	Unclassified/Attainment
Sulfur dioxide (SO_2)	Attainment	Unclassified/Attainment
Respirable particulate matter (PM_{10})	Nonattainment	Nonattainment
Fine particulate matter ($PM_{2.5}$)	Attainment	Unclassified/Attainment

Source: California Air Resources Board (CARB) Area Designation Maps / State and National, https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed March 2023.

In 1984, as a result of public concern for exposure to airborne carcinogens, CARB adopted regulations to reduce the amount of TAC emissions resulting from mobile and area sources, such as cars, trucks, stationary products, and consumer products. According to the *Ambient and Emission Trends of Toxic Air Contaminants in California* journal article[34] which was prepared for CARB, results show that between 1990-2012, ambient concentration and emission trends for the seven TACs responsible for most of the known cancer risk associated with airborne exposure in California have declined significantly. The decline in ambient concentration and emission trends of these TACs are a result of various regulations CARB has implemented to address cancer risk.

SCAQMD has prepared an Air Basin-wide air toxics study, the Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-V).[35] MATES V field measurements were conducted at ten fixed sites (the same sites selected for MATES III and IV) to assess trends in air toxics levels. MATES V also included measurements of ultrafine particles (UFP) and black carbon (BC) concentrations, which can be compared to the UFP levels measured in MATES IV. In addition to new measurements and updated modeling results, several key updates were implemented in MATES V. First, MATES V estimates cancer risks by taking into account multiple exposure pathways, which includes inhalation and non-inhalation pathways. This approach is consistent with how cancer risks are estimated in SCAQMD's programs such as permitting, Air Toxics Hot Spots (AB 2588), and CEQA. Previous MATES studies quantified the cancer risks based on the inhalation pathway only. Second, along with cancer risk estimates, MATES V includes information on the chronic non-cancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and

34 Ralph Propper, Patrick Wong, Son Bui, Jeff Austin, William Vance, Alvaro Alvarado, Bart Croes, and Dongmin Luo. *Ambient and Emission Trends of Toxic Air Contaminants in California, American Chemical Society: Environmental Science & Technology*. 2015.

35 SCAQMD. *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES V) Final Report*. https://www.aqmd.gov/docs/default-source/planning/mates-v/mates-v-final-report-9-24-21.pdf?sfvrsn=6. Accessed March 2032.

chronic non-cancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazard Assessment (OEHHA) and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time. Overall, cancer risks have decreased across MATES II to MATES V at all monitoring stations.

Local Air Quality

For evaluation purposes, SCAQMD has divided its territory into 36 Source Receptor Areas (SRA) with operating monitoring stations in most of the SRAs. These SRAs are designated to provide a general representation of the local meteorological, terrain, and air quality conditions within the particular geographical area. The Project Site is within SRA 30, Coachella Valley.[36] The nearest air monitoring station SCAQMD operates is located at 590 E. Racquet Club Avenue.[37] **Table 5.2-3: Air Quality Monitoring Summary** lists the ambient pollutant concentrations registered and the violations of State and federal standards that have occurred at the abovementioned monitoring stations from 2019 through 2021 the most recent years for which data are available. The data shows that during the past few years, the region has exceeded the O_3 and PM_{10} standards.

Surrounding Land Uses

The Project Site is adjacent to single-family homes along the west side of RMHS. The surrounding areas to the north, south, and east are currently vacant and undeveloped.

Sensitive Receptors

Some receptors are considered more sensitive to air pollutants than others, because of preexisting health problems, proximity to the emissions source, or duration of exposure to air pollutants. Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality related health problems than the general public. Residential areas are also considered sensitive to poor air quality because people in residential areas are often at home for extended periods. Recreational land uses are moderately sensitive to air pollution because vigorous exercise associated with recreation places having a high demand on respiratory system function. CARB has identified the following people as most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and those with cardiovascular and chronic respiratory diseases. As discussed above, residential uses are located to the west of the Project Site.

36 SCAQMD. "General Forecast Areas and Air Monitoring Areas." Map. http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf. Accessed March 2023.

37 SCAQMD. "Site Survey Report for Palm Springs, AQS ID 060655001." https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:7df3369d-c7b8-30db-9a2e-e26276a87845 Accessed March 2023.

TABLE 5.2-3
AIR QUALITY MONITORING SUMMARY

Air Pollutant	Average Time (Units)	2019	2020	2021
Ozone (O_3)	State Max 1 hour (ppm)	0.100	0.119	0.110
	Days > CAAQS threshold (0.09 ppm)	5	9	10
	National Max 8 hour (ppm)	0.084	0.094	0.092
	Days > NAAQS threshold (0.075 ppm)	34	49	35
	State Max 8 hour (ppm)	0.085	0.094	0.093
	Days > CAAQS threshold (0.07 ppm)	39	53	38
Carbon monoxide (CO)*	Max 1 hour (ppm)	1.3	0.8	0.8
	Days > CAAQS threshold (20 ppm)	0	0	0
	Days > NAAQS threshold (35 ppm)	0	0	0
	Max 8 hours (ppm)	0.7	0.5	0.4
	Days > CAAQS threshold (9.0 ppm)	0	0	0
	Days > NAAQS threshold (9.0 ppm)	0	0	0
Nitrogen dioxide (NO_2)	National Max 1 hour (ppm)	0.041	0.047	0.036
	Days > NAAQS threshold (0.100 ppm)	0	0	0
	State Max 1 hour (ppm)	0.041	0.047	0.035
	Days > CAAQS threshold (0.18 ppm)	0	0	0
Respirable particulate matter (PM_{10})	National 24 hours ($\mu g/m^3$)	75.6	129.8	35.2
	National Annual Average ($\mu g/m^3$)	20.7	23.2	18.4
	Days > NAAQS threshold (150 $\mu g/m^3$)	0	0	0
	State 24 hours ($\mu g/m^3$)	51.8	40.8	34.5
	State Annual Average ($\mu g/m^3$)	19.9	N/A	18.0
	Days > CAAQS threshold (50 $\mu g/m^3$)	1	0	0
Fine particulate matter ($PM_{2.5}$)	National Max ($\mu g/m^3$)	15.5	23.9	13.5
	National Annual Average ($\mu g/m^3$)	6.0	6.4	6.1
	Days > NAAQS threshold (35 $\mu g/m^3$)	0	0	0

***Source:** California Air Resources Board, Top 4 Summary, https://www.arb.ca.gov/adam/topfour/topfour1.php.*
**** CO data from at SCAQMD, Historical Data By Year, https://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year.***

REGULATORY SETTING

Federal

Clean Air Act

The United States Environmental Protection Agency (USEPA) is responsible for the implementation of portions of the CAA[38] of 1970, which regulates certain stationary and mobile sources of air emissions and other requirements. Charged with handling global, international, national, and interstate air pollution issues and policies, the USEPA sets national vehicle and stationary source emission standards, oversees the approval of all State Implementation Plans,[39] provides research and guidance for air pollution programs, and sets NAAQS.[40] NAAQS for the six common air pollutants (O_3, PM_{10} and $PM_{2.5}$, NO_2, CO, Pb, and SO_2) are identified in the CAA.

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA that are most applicable to the Basin include Title I, Nonattainment Provisions, and Title II, Mobile Source Provisions.

The NAAQS were also amended in July 1997 to include an 8-hour standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. The NAAQS were amended in September 2006 to include an established methodology for calculating $PM_{2.5}$ and to revoke the annual PM_{10} threshold.

State

California Clean Air Act

The California CAA, signed into law in 1988, requires all areas of the State to achieve and maintain the California AAQS by the earliest practicable date. CARB, a part of the CalEPA, is responsible for the coordination and administration of both State and federal air pollution control programs within California. In this capacity, CARB conducts research, sets State AAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions and the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the State. The CAAQS include more stringent standards than the NAAQS.

---

38 42 U.S.C § 7401, et seq. https://www.law.cornell.edu/uscode/text/42/7401. Accessed March 2023.

39 A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain National Ambient Air Quality Standards (NAAQS).

40 The NAAQS were established to protect public health, including that of sensitive individuals; for this reason, the standards continue to change as more medical research becomes available regarding the health effects of the criteria pollutants. The primary NAAQS define the air quality considered necessary, with an adequate margin of safety, to protect the public health.

California Air Toxics Program

The California Air Toxics Program was established in 1983, when the California Legislature adopted Assembly Bill (AB) 1807 to establish a two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air. In the risk identification step, CARB and the OEHHA determine if a substance should be formally identified, or "listed," as a TAC. Since the inception of the program, a number of such substances have been listed. In 1993, the California Legislature amended the program to identify the 189 federal hazardous air pollutants (HAPs) as TACs. In 1999, CARB completed the final staff report, Update to the Toxic Air Contaminant List. The list represented the priorities for identifying and regulating substances as directed by State law. The report described the process followed by CARB in reviewing and revising the TAC List and presented changes to the list.

In the risk management step, CARB reviews emission sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on results of that review, CARB has promulgated a number of airborne toxic control measures (ATCMs), both for mobile and stationary sources. In 2004, CARB adopted an ATCM to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to DPM and other TACs (see below for additional information).

Air Toxics "Hotspots" Program (AB 2588)

AB 2588 was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The Air Toxics program's goals include collecting emission data, identifying facilities having localized impacts, ascertaining health risks, notifying nearby residents of significant risks, and reducing those significant risks to acceptable levels. The Air Toxics program provides direction and criteria to facilities on how to compile and submit air toxic emission data required by the "Hot Spots" Program and requires the local air district to prioritize facilities to determine which facilities must perform a health risk assessment. Facilities identified as high risk are required to reduce their toxic emissions to acceptable levels as determined by the local air district.[41]

California Code of Regulations

The California Code of Regulations (CCR) includes regulations that pertain to air quality emissions. Specifically, 13 Cal. Code of Regs. § 2485 limits idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction to 5 minutes at any location. Additionally, 17 Cal. Code of Regs. § 93115 requires operation of any stationary, diesel-fueled, compression-ignition engines meet specified fuel and fuel additive requirements and emission standards.

41 CARB. "Hot Spots Inventory Guidelines," https://ww2.arb.ca.gov/our-work/programs/ab-2588-air-toxics-hot-spots/hot-spots-inventory-guidelines. Accessed March 2023.

California Motor Vehicle Code

The vehicle programs are a critical component in the SIP for achieving national ambient air quality standards in the South Coast.[42] They are also integral in CARB's Scoping Plan[43] to achieve the greenhouse gas (GHG) emission reduction goals that were established through the California legislation and Executive Orders. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13 of the California Code of Regulations, Section 2485).

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling[44] measure includes regulations that pertain to air quality emissions. Specifically, Section 2485 states that the idling of all diesel-fueled commercial vehicles weighing more than 10,000 pounds shall be limited to five minutes at any location. In addition, Section 93115 in Title 17 of the CCR[45] states that operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

CARB Rule 2449, General Requirements for In-Use Off-Road Diesel-Fueled Fleets

CARB Rule 2449 requires off-road diesel vehicles to limit nonessential idling to no more than five consecutive minutes.[46] In addition, fleets are required to phase-out the oldest and highest polluting off-road diesel vehicles in California.[47]

California Building Standards Code

California Energy Code

California's Energy Efficiency Standards for Residential and Nonresidential Buildings[48] were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 requires the design of building shells and components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

---

42 CARB. "California State Implementation Plans" https://ww2.arb.ca.gov/our-work/programs/california-state-implementation-plans. Accessed March 2023.

43 CARB. *AB 32 Scoping Plan (November 16, 2022)*. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed March 2023.

44 CARB. "Airborne Toxic control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling." https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling Accessed March 2023.

45 CARB. *Final Regulation Order: Amendments to the Airborne Toxic Control Measure For Stationary Compression Ignition Engines*. May 19, 2011. https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/finalreg2011.pdf. Accessed March 2023.

46 CARB. *Final Regulation Order: Regulation For In-Use Off-Road Diesel-Fueled Fleets*. https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation. Accessed March 2023.

47 CARB. "CARB Approves Amendments to Off-Road Regulations to Further Reduce Emissions." https://ww2.arb.ca.gov/news/carb-approves-amendments-road-regulation-further-reduce-emissions. Accessed March 2023.

48 California Energy Commission (CEC). "2022 Building Energy Efficiency Standards." https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency Accessed March 2023.

The California Energy Commission (CEC) adopted the Title 24 standards as well as the 2022 Title 24 standards, which became effective on January 1, 2023, and are applicable to the Project.[49] The 2022 standards will continue to improve upon prior Title 24 standards for new construction of, and additions and alterations to, residential and nonresidential buildings.[50]

California Green Building Code

The California Green Building Standards Code, which is Part 11 of the CCR, is commonly referred to as the CALGreen Code.[51] The most current version of the CALGreen building code went into effect in January 2023. The purpose is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by regulating and controlling the design, construction, quality of materials, outdoor lighting standards, use and occupancy, location, and maintenance of all building and structures within its jurisdiction.

Regional and Local

South Coast Air Quality Management District

SCAQMD shares responsibility with CARB for ensuring that all State and federal AAQS are achieved and maintained over an area of approximately 10,743 square miles, including the Basin. This area includes all of Orange and Los Angeles counties except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County.

SCAQMD shares responsibility with CARB for ensuring that all State and federal ambient air quality standards are achieved and maintained over an area of approximately 10,743 square miles. This area includes the South Coast Air Basin and portions of the Salton Sea and Mojave Desert Air Basins, all of Orange County, and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. It does not include the Antelope Valley or the non-desert portion of western San Bernardino County.

SCAQMD is responsible for controlling emissions primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout the Air Basins. SCAQMD, in coordination with the SCAG, is also responsible for developing, updating, and implementing the AQMP for the Air Basins. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as "nonattainment" of the national and/or California ambient air quality standards. The term "nonattainment area" is used to refer to an air basin in which one or more ambient air quality standards are exceeded.

SCAQMD adopted the 2022 AQMP on December 2, 2022. The 2022 AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2020 Regional Transportation

49 See CEC "2022 Building Energy Efficiency Standards" for additional information.

50 See CEC "2022 Building Energy Efficiency Standards" for additional information.

51 California Buildings Standards Commission. "California Green Building Standards Code (Cal. Code Regs., Title 24, Part 11)." https://www.dgs.ca.gov/BSC/CALGreen. Accessed March 2023.

Plan/Sustainable Communities Strategy (RTP/SCS) and updated emission inventory methodologies for various source categories. The AQMP also includes an update on the current air quality status of the SSAB. The Coachella Valley Planning Area, the desert portion of Riverside County in the SSAB, is designated as a nonattainment area for the federal 2015, 2008, and 1997 8-hour ozone standards as well as the federal 2006 24-hour PM10 standard. The Coachella Valley monitored data also shows that it will meet the PM10 NAAQS, pending SCAQMD documentation submittal and subsequent USEPA approval of days flagged for high-wind exceptional events. However, USEPA has requested that SCAQMD conduct additional monitoring in the southeastern portion of the Coachella Valley before a re-designation can be considered.

The 2022 AQMP does not include new modeling efforts for PM10; since the mid-1990s, peak 24-hour average PM10 concentrations have not exceeded the current federal standard (150 µg/m3) other than on days with windblown dust from natural events, which can be excluded upon USEPA concurrence. Regardless, the USEPA has requested additional ambient monitoring prior to consideration of re-designation. With further implementation of cleaner technologies, the 2022 AQMP anticipates the Coachella Valley Planning area to be in attainment of the federal 1997 8-hour ozone standard by mid 2024and the 2015 8-hour ozone standard by August 2033.

SCAQMD is responsible for limiting the amount of emissions that can be generated throughout the Air Basins by various stationary, area, and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board, which limit the emissions that can be generated by various uses/activities and that identify specific pollution reduction measures, which must be implemented in association with various uses and activities. These rules not only regulate the emissions of the federal and State criteria pollutants but also TACs and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD.

Among the SCAQMD rules applicable to the Project are Rule 403 (Fugitive Dust), Rule 403.1 (Supplemental Fugitive Dust Control Requirements For Coachella Valley Sources), and Rule 1113 (Architectural Coatings). Rule 403 requires the use of stringent best available control measures to minimize PM10 emissions during grading and construction activities. Rule 403.1 requires active operations within a Blowsand Zone stabilize new man-made deposits of bulk material and requires a fugitive dust control plan for construction projects. Rule 1113 will require reductions in the VOC content of coatings, with a substantial reduction in the VOC content limit for flat coatings to 50 grams per liter (g/L) in July 2008.[52] Additional details regarding these rules and other potentially applicable rules are presented as follows.

Rule 403 (Fugitive Dust). This rule requires fugitive dust sources to implement Best Available Control Measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. This may include application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour (mph), sweeping loose dirt

52 SCAQMD. Rule 1113 Architectural Coating (amended February 5, 6, 2016).

from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites. SCAQMD Rule 403 is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust (see also Rule 1186).

Rule 403.1 (Supplemental Fugitive Dust Control Requirements For Coachella Valley Sources). This rule requires the reduction or prevention of the amount of PM_{10} emitted in the ambient air from man-made fugitive dust sources. The provisions of this rule are supplemental to Rule 403 and apply only to fugitive dust sources in the Coachella Valley. In addition, this rule requires a fugitive dust control plan for construction projects with a disturbed surface area of more than 5,000 square feet. This rule also includes provisions for the Coachella Valley "Blowsand Zone," the area within two miles of either side of Interstate 10. This rule requires fugitive dust sources to stabilize deposits of bulk material originating from undisturbed natural desert area within 72 hours plus one stabilization procedure (70% cover water application 3x/day, dust suppressant six-month application, or install windbreaks).

Rule 1186 (PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations). This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM_{10} emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

Stationary emissions sources subject to these rules are regulated through SCAQMD's permitting process. Through this permitting process, SCAQMD also monitors the amount of stationary emissions being generated and uses this information in developing AQMPs. The Project would be subject to SCAQMD rules and regulations to reduce specific emissions and to mitigate potential air quality impacts.

Coachella Valley PM10 State Implementation Plan

The 2003 PM_{10} Coachella Valley State Implementation Plan (CVSIP) was jointly developed by the SCAQMD, Coachella Valley Association of Governments (CVAG) and its member cities and was approved by the USEPA. The 2003 PM_{10} CVSIP updated the 1990 plan, which was drafted as a requirement of the federal Clean Air Act to demonstrate expeditious attainment of PM_{10} standards.[53] On April 18, 2003, the USEPA approved the updated CVSIP.

Historically, PM_{10} levels in the Coachella Valley are elevated due to fugitive dust emission from grading and construction activities, agricultural practices, and strong wind. The finer materials, including sand and silt, can be picked up and transported by the wind and are referred to as "blowsand." PM_{10} particles associated with blowsand are of two types: (1) natural PM_{10} produced by direct particle erosion and fragmentation, and (2) secondary PM_{10} whereby sand deposited on roadways is further pulverized by

53 SCAQMD. *Final 2003 Coachella Valley PM10 State Implementation Plan.* August 1, 2003. https://www.aqmd.gov/docs/default-source/clean-air-plans/pm10-plans/final-2003-coachella-valley-pm10-state-implementation-plan.pdf?sfvrsn=2. Accessed March 2023.

motor vehicles and then re-suspended in the air by those vehicles. The Project area is located in a PM_{10} non-attainment area for the state and federal PM_{10} standards.

The Coachella Valley was eligible for redesignation as attainment in 2009–2010 due to the annual average PM_{10} concentrations meeting the revoked federal standard. On February 25, 2010, the California Air Resources Board approved the Coachella Valley PM_{10} Redesignation Request and Maintenance Plan from serious non-attainment to attainment for the PM_{10} National Ambient Air Quality Standard under Federal CAA Section 107. However, the Coachella Valley began exceeding thresholds for PM_{10} shortly after the redesignation request and continues to exceed thresholds today. The Coachella Valley continues to be in non-attainment for PM_{10}.

SCAQMD employs measures to reduce particulate matter in the basin, sets forth new measures that could further reduce particulate matter, and lists those new measures that need further evaluation prior to implementation. In addition, applicable State code and AQMD Rules, including Rule 403 (Fugitive Dust), enforce fugitive dust compliance for all activities within the SSAB.

SCAQMD Air Quality Analysis Guidance Handbook

In 1993, SCAQMD prepared its *CEQA Air Quality Handbook* to assist local government agencies and consultants in preparing environmental documents for projects subject to CEQA.[54] However, SCAQMD is in the process of developing its *Air Quality Analysis Guidance Handbook* to replace the *CEQA Handbook*. The *CEQA Handbook* and the *Air Quality Analysis Guidance Handbook* describe the criteria that SCAQMD uses when reviewing and commenting on the adequacy of environmental documents. The *Air Quality Analysis Guidance Handbook* provides the most up-to-date recommended thresholds of significance in order to determine if a project will have a significant adverse environmental impact. Other important subjects covered in the *CEQA Handbook* and the *Air Quality Analysis Guidance Handbook* include methodologies for estimating project emissions and mitigation measures that can be implemented to avoid or reduce air quality impacts. Although the Governing Board of SCAQMD has adopted the *CEQA Handbook* and is in the process of developing the *Air Quality Analysis Guidance Handbook*, SCAQMD does not, nor does it intend to, supersede a local jurisdiction's CEQA procedures.[55]

While the *Air Quality Analysis Guidance Handbook* is being developed, supplemental information has been adopted by SCAQMD. These include revisions to the air quality significance thresholds and a procedure referred to as "localized significance thresholds," which has been added as a significance threshold under the Local Significance Threshold (LST) Methodology.[56] The applicable portions of the

54 SCAQMD. "Air Quality Analysis Guidance Handbook." 2010. http://www.aqmd.gov/CEQA/hdbk.html. Accessed MArch2023.

55 SCAQMD. "Frequently Asked CEQA Questions." http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/frequently-asked-questions. Accessed March 2023.

56 SCAQMD. *Final Localized Significance Threshold Methodology*. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf. Accessed March 2023.

CEQA Handbook, the *Air Quality Analysis Guidance Handbook*, and other revised methodologies were used in preparing the air quality analysis in this Section, as discussed and referenced later in this section.

Southern California Association of Governments (SCAG)

SCAG is the metropolitan planning organization (MPO) for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and serves as a forum for the discussion of regional issues related to transportation, the economy, community development, and the environment. As the federally designated MPO for the Southern California region, SCAG is mandated by the federal government to research and develop plans for transportation, hazardous waste management, and air quality. Pursuant to California Health and Safety Code Section 40460(b),[57] SCAG has the responsibility for preparing and approving the portions of the AQMP relating to regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. SCAG is also responsible under the CAA for determining conformity of transportation projects, plans, and programs with applicable air quality plans.

With regard to air quality planning, SCAG has prepared and adopted the 2020–2045 RTP/SCS,[58] which includes a SCS that addresses regional development and growth forecasts. The SCAG 2020–2045 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, with a specific goal of achieving an 8 percent reduction in passenger vehicle GHG emissions on a per capita basis by 2020, 19 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level. Although the RTP/SCS is not technically an air quality plan, consistency with the RTP/SCS has air quality implications, including the reduction of VMT which reduces air quality emissions.

Division of State Architects

Pursuant to California Education Code Sections 17280-17313, the state shall supervise the design and construction of any school building or the reconstruction or alteration of or addition to any school building.[59] The proposed Project would be subject to the Division of State Architects (DSA) which provides design and construction oversight for k-12 schools, community colleges, and various other state-owned and leased facilities. DSA-related programs include but are not limited to Access Compliance, Plan Review, CALGreen Code Development, Construction Oversight, and Sustainability Plan Review.[60] Light poles greater than 35 are considered by the Division of State Architects (DSA) to

57 California Health and Safety Code. Division 26. Air Resources, PART 3. Air Pollution Control Districts. "Chapter 5.5. South Coast Air Quality Management District." ARTICLE 5. Plan, Section 40460(b). https://law.justia.com/codes/california/2014/code-hsc/division-26/part-3/chapter-5.5. Accessed March 2023.

58 Southern California Association of Governments (SCAG). "Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies Draft." https://www.connectsocal.org/Pages/Connect-SoCal-Draft-Plan.aspx. Accessed March 2023.

59 California Education Code, Sections 17280-17316.

60 Division of State Architects, Resources, https://www.dgs.ca.gov/DSA/Resources. Accessed April 2023.

be a "school building". As such, the DSA is responsible for providing design and construction oversight for projects located on school campuses, including the proposed Project.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The CEQA Guidelines include thresholds to determine the significance of Air Quality emissions impacts (Appendix G of the CEQA Guidelines), which are being used by the City for this analysis. Appendix G provides that a project would have a significant environmental impact if it would:

Threshold 5.2-1: **Conflict with or obstruct implementation of the applicable air quality plan?**

Threshold 5.2-2: **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?**

Threshold 5.2-3: **Expose sensitive receptors to substantial pollutant concentrations?**

Threshold 5.2-4: **Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

Threshold 5.2-5: **Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the School?**

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to assist in making these determinations. As the City has not adopted specific Citywide significance thresholds for air quality impacts, the thresholds and methodologies contained in the SCAQMD *CEQA Air Quality Handbook* (Handbook) for both construction and operational emissions are utilized for evaluating projects in the City. These thresholds are described below.

Construction Emission Thresholds

The Project will have a significant impact if it exceeds the construction thresholds listed in **Table 5.2-4: Construction Thresholds**.

Operation Emission Thresholds

Based on the SCAQMD Handbook, thresholds for each criteria pollutant for the operations of the Project are provided in **Table 5.2-5: Operational Thresholds.**

TABLE 5.2-4
CONSTRUCTION THRESHOLDS

Pollutant	Construction Emissions (pounds/day)
Volatile organic compounds (VOCs)	75
Nitrogen dioxide (NO_2)	100
Carbon monoxide (CO)	550
Sulfur dioxide (SO_2)	150
Respirable particulate matter (PM_{10})	150
Fine particulate matter ($PM_{2.5}$)	55

TABLE 5.2-5
OPERATIONAL THRESHOLDS

Pollutant	Operational Emissions (pounds/day)
Volatile organic compounds (VOCs)	55
Nitrogen dioxide (NO_2)	55
Carbon monoxide (CO)	550
Sulfur dioxide (SO_2)	150
Respirable particulate matter (PM_{10})	150
Fine particulate matter ($PM_{2.5}$)	55

Construction and Operational Localized Significance Thresholds

The local significance thresholds are based on the SCAQMD's Final Localized Significance Threshold (LST) Methodology (LST Methodology)[61] guidance document for short-duration construction activities. The SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project Site because of construction activities. The SCAQMD provides voluntary guidance on the evaluation of localized air quality impacts to public agencies conducting environmental review of projects located within its jurisdiction. Localized air quality impacts are evaluated by examining the on-site generation of pollutants and their resulting downwind concentrations. For construction, pollutant concentrations are compared to significance thresholds for particulates (PM10 and PM2.5), CO, and NO2. The significance threshold for PM10 represents compliance with SCAQMD Rule 403 (Fugitive Dust). The threshold for PM2.5 is designed to limit emissions and to allow progress toward

61 SCAQMD. *Final Localized Significance Threshold (LST) Methodology*. June 2003, rev. July 2008.

attainment of the AAQS. Thresholds for CO and NO2 represent the allowable increase in concentrations above background levels that would not cause or contribute to an exceedance of their respective AAQS.

Toxic Air Contaminants

As set forth in the SCAQMD Handbook, the determination of significance of a project with respect TACs shall be made on a case-by-case basis, considering the following factors:

- Regulatory framework for toxic materials and process involved;
- Proximity of TACs to sensitive receptors;
- Quantity, volume, and toxicity of the contaminants expected to be emitted;
- Likelihood and potential level of exposure; and
- Degree to which project design will reduce risk of exposure.

Consistency with Applicable Air Quality Plans

Section 15125 of the State CEQA Guidelines requires an analysis of project consistency with applicable governmental plans and policies. In accordance with the SCAQMD Handbook, the following criteria were used to evaluate the Project's consistency with SCAQMD and SCAG regional plans and policies, including the AQMP:

Will the Project result in any of the following:

- Increase the frequency or severity of existing air quality violations?
- Cause or contribute to new air quality violations?
- Delay the timely attainment of the air quality standards or the interim emission reductions specified in the AQMP?
- Will the Project exceed the assumptions utilized in preparing the AQMP?
- Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based?
- Does the Project include air quality mitigation measures?
- To what extent is Project development consistent with the AQMP land use policies?

Cumulative Threshold

SCAQMD recommends that a project be considered to result in a cumulatively considerable impact to air quality if any construction-related emissions and operational emissions from individual development projects exceed the mass daily emissions thresholds for individual projects.[62]

62 SCAQMD. Board meeting, Agenda No. 29. "White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions." September 5, 2003. Appendix D, p. D-3.

A project is also considered to result in a cumulatively considerable contribution to significant impacts if the population and employment projections for the project exceed the rate of growth defined in SCAQMD's AQMP.

Methodology

The California Emissions Estimator Model, known as CalEEMod, is the CARB–approved computer program model recommended by SCAQMD for use in the quantification of air quality emissions. CalEEMod was developed under the auspices of SCAQMD, with input from other California air districts. CalEEMod utilizes widely accepted models for emissions estimates combined with appropriate data that can be used if site-specific information is not available. For example, CalEEMod incorporates USEPA-developed emission factors; CARB's on-road and off-road equipment emission models, such as EMFAC and OFFROAD;[63] and studies commissioned by other California agencies, such as the California Energy Commission and California Department of Resources Recycling and Recovery (CalRecycle).

CalEEMod provides a platform to calculate both construction emissions and operational emissions from a land use development project. CalEEMod version 2022.1 was used to quantify the Project's construction air quality pollutants. The proposed Project would not result in long-term air quality emissions during operations as the proposed Project would not increase the local population, number of students, or number of faculty on site.

Refer to **Section 3.0: Project Description** of this EIR, for more detailed characteristics of the Project. Information needed to parameterize the Project in CalEEMod was obtained from the Project Applicant.

Construction Emissions

Construction activities produce combustion emissions from various sources, such as on-site heavy-duty construction vehicles, vehicles hauling materials to and from the site, loose dirt from paved site access roadways, and motor vehicles transporting the construction crew. Grading activities produce fugitive dust emissions (PM_{10} and $PM_{2.5}$) from soil-disturbing activities. Exhaust emissions from construction activities on site would vary daily as construction activity levels change. Short-term emissions of criteria air pollutants (e.g., CO, SOx, PM_{10}, and $PM_{2.5}$) generated by construction and ozone precursors (e.g., VOCs and NO_x) were assessed in accordance with SCAQMD-recommended methods. These emissions were modeled using the CARB-approved CalEEMod computer program as recommended by SCAQMD.

Construction of the Project must comply with SCAQMD Rules which are mandatory for all construction projects in SCAQMD jurisdiction within SSAB. The emission calculations take into account compliance

63 EMFAC is an emissions factor model used to calculate emissions rates from on-road vehicles (e.g., passenger vehicles). OFFROAD is an emissions factor model used to calculate emission rates from off-road mobile sources (e.g., construction equipment). CalEEMod version 2020.4.0 utilizes CARB's 2017 version of EMFAC.

with Rule 403 by incorporating the watering of exposed surfaces and unpaved roads three times daily, reducing speed on unpaved roads to less than 15 mph, and sweeping loose dirt from access roadways.

Construction activities would last approximately 6 to 9 months beginning in September 2023 and ending in May 2024. The proposed Project includes trenching to install wiring between the poles and electrical control panels and installation of the light fixtures. Construction staging would last the entire 6 to 9 months. Construction would be staggered among the various athletic fields to accommodate ongoing practice and field needs at the campus. The staging area would change for each field and would place the area away from active school areas.

A variety of construction equipment would be used including but not limited to tractors, loaders, backhoes, trenchers, cement and mortar mixers, cranes, and excavators. No street closure is anticipated during construction. Additionally, construction activities would require up to 84 construction personnel per day. **Table 5.2-6: Project Construction Diesel Equipment Inventory** displays the construction equipment required for each activity described above.

TABLE 5.2-6
PROJECT CONSTRUCTION DIESEL EQUIPMENT INVENTORY

Phase	Off-Road Equipment Type	Amount	Daily Hours	Horsepower [HP] (Load Factor)
Construction	Tractors/Loaders/Backhoes	1	8	84 (0.37)
	Trenchers	1	8	40 (0.50)
	Cement and Mortar Mixers	1	8	10 (0.56)
	Cranes	1	8	367 (0.29)
	Excavators	1	8	36 (0.38)

Refer to **Appendix C** for air quality data.

Operational Emissions

The proposed Project would not result in long-term air quality emissions during operations as the proposed Project would not increase the local population, number of students, or number of faculty on site. As such, the proposed Project would not generate additional air quality emissions during operation.

Project Impacts

Threshold 5.2-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Consistency with AQMP

In accordance with the procedures established in the SCAQMD's *CEQA Air Quality* Handbook,[64] the analysis below addresses the following criteria identified by the SCAQMD to determine the proposed Project's consistency with SCAQMD and SCAG air quality related policies.

Will the project result in any of the following:

- Increase the frequency or severity of existing air quality violations?
- Cause or contribute to new air quality violations?

According to the SCAQMD's CEQA Handbook, the consistency determination based on the first criterion pertains to ambient pollutant concentrations, rather than to total regional emissions, thus, requiring an analysis of the Project's pollutant emissions relative to localized pollutant concentrations.[65] A complete review of the proposed Project's potential impact on ambient pollutant concentrations during construction and operation is provided below.

Regional Construction

It is mandatory for all construction projects in SSAB to comply with SCAQMD Rule 403 for fugitive dust. Rule 403 control requirements include measures to prevent the generation of visible dust plumes. Measures include, but are not limited to, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system or other control measures to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project Site, and maintaining effective cover over exposed areas. Thus, compliance with SCAQMD rules is incorporated into the analysis provided below.

As discussed previously, the 6 to 9 months of construction, beginning in September 2023 and ending in May 2024, would include trenching to install wiring between the poles and electrical control panels and installation of the light fixtures. The Project would use off-road diesel-powered equipment such as tractors, loaders, backhoes, trenchers, cement and mortar mixers, cranes, and excavators during construction. Emissions of air quality would also result from the combustion of fossil fuels from on-road vehicles such as vendor trucks delivering materials, and construction worker vehicles commuting to and from the Project Site. The maximum daily regional construction emissions associated with these activities are provided in **Table 5.2-7: Maximum Construction Emissions**. As shown, the daily maximum emissions

64 SCAQMD. *CEQA Air Quality Handbook*. April 1993. p. 12-3.
65 SCAQMD. *CEQA Air Quality Handbook*. April 1993. p. 12-3.

would not exceed the SCAQMD daily significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during 2023 or 2024 as construction would begin in 2023 and conclude in 2024.

TABLE 5.2-7
MAXIMUM CONSTRUCTION EMISSIONS

Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	pounds/day					
2023	1	10	14	<1	2	1
2024	1	10	17	<1	2	1
Maximum Emissions	1	10	17	<1	2	1
SCAQMD Mass Daily Threshold	75	100	550	150	150	55
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod.
Notes: CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; SOx = sulfur oxides; VOC = volatile organic compounds.
*Refer to **Appendix C** for air quality data.*

Localized Emissions

Construction

The LST Methodology provides lookup tables of emissions that are based on construction projects of up to 5 acres in size. Although the Project Site is larger than 5-acres, this analysis conservatively compares emissions from mass grading and off-site street improvements to the 5-acre localized thresholds for SRA 30 with sensitive receptors located within 25 meters of the Project Site.[66] The maximum localized construction emissions associated with these activities are provided in **Table 5.2-8: Localized Construction Emissions**. As shown, the daily localized emissions would not exceed the SCAQMD daily significance thresholds for VOC, NO_x, CO SO, PM_{10} or $PM_{2.5}$.

66 The off-road equipment assumed during mass grading would be capable of covering up to 19.5 acres per day per the CalEEMod User Guide. Therefore assuming 5-acre LSTs is considered conservative.

TABLE 5.2-8
LOCALIZED CONSTRUCTION EMISSIONS

Source	NO_x	CO	PM_{10}	$PM_{2.5}$
	On-Site Emissions (pounds/day)			
Total maximum emissions	8	8	<1	<1
LST threshold	*304*	*2292*	*14*	*8*
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: CalEEMod.
Notes: CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; SOx = sulfur oxides; VOC = volatile organic compounds.
*Refer to **Appendix C** for air quality data.*

As shown in **Table 5.2.8** above, the localized construction emissions would not result in an exceedance of the localized significance thresholds. Therefore, emissions during construction would be less than significant.

Consistency with 2020 – 2045 RTP/SCS

SCAG has prepared and adopted the 2020–2045 RTP/SCS,[67] which includes a SCS that addresses regional development and growth forecasts. The SCAG 2020–2045 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, and establishes a specific goal of achieving an 8 percent reduction in passenger vehicle GHG emissions on a per capita basis by 2020, 19 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level. Although the 2020–2045 RTP/SCS is not technically an air quality plan, consistency with the 2020–2045 RTP/SCS has air quality implications, including the reduction of VMT which reduces air quality emissions.

The Project would not increase population, employment, or housing projections. The proposed Project would install field lighting improvements on the Rancho Mirage High School campus. As such, the proposed Project would not induce an increase in population, employment, or housing, and the Project would not conflict with SCAG's 2020-2045 population increase forecast.

The Project would not conflict with the 2020–2045 RTP/SCS and impacts would be less than significant.

Threshold 5.2-2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?

67 SCAG. *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies Final Plan.* https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx. Accessed November 2022.

According to SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants.

As shown in **Table 5.2-2**, the SSAB is currently nonattainment for federal and State O_3 and PM_{10}. By applying SCAQMD's cumulative air quality impact methodology, implementation of the Project would not result in exceedance of regional emissions during construction, (refer to **Table 5.2-7**).

Impacts would be less than significant.

Threshold 5.2-3: Expose sensitive receptors to substantial pollutant concentrations?

As mentioned previously, the Project Site is a fully developed and operational school predominately surrounded by undeveloped land and adjacent residential uses to the west. Per SCAQMD, these uses would be considered sensitive receptors. By applying SCAQMD's LST methodology, implementation of the Project would not exceed LST thresholds of emission during construction, (refer to **Table 5.2-8**).

Impacts would be less than significant.

CUMULATIVE IMPACTS

Implementation of the proposed Project in conjunction with other related projects within the City of Rancho Mirage, may result in cumulative impacts to air quality. As mentioned above, implementation of the Project would not substantially impact air quality.

The following cumulative impacts are analyzed based on a list of past, present, and probable future projects producing related cumulative impacts, described in **Section 4.0: Environmental Setting**.

Future development includes the Section 24 Specific Plan which is proposed less than one mile southeast of the Project Site. This project may include construction and operation emissions during buildout of the plan.

The cumulative significance methodologies contained in the *CEQA Air Quality Handbook*, SCAQMD suggest that the emissions-based thresholds be used to determine if a project's contribution to regional cumulative emissions is cumulatively considerable. Based on the construction of the proposed Project taking place from September 2023 and ending in May 2024, there would no overlap with other related projects**.** Additionally, the project would not exceed SCAQMD thresholds during construction as discussed under **Threshold: 5.2-2** and **Threshold 5.2-3.** Operation of the proposed Project would not result in long-term air quality emissions during operations as the proposed Project would not increase the local population, number of students, or number of faculty on site. As such, construction and operation of the proposed Project would not interfere with air quality emissions of related projects.

Other proposed projects described in **Section 4.0** would not have a substantial bearing on the air quality in the area near the proposed Project in that they are a distance away from the existing campus. While probable future development within the vicinity would each potentially have impacts relative to air quality, each would be required to address impacts on a project specific basis.

As the Project's impacts would be considered less than significant, the Project would not result in a cumulatively considerable contribution.

MITIGATION MEASURES

No mitigation measures required.

5.3 BIOLOGICAL RESOURCES

INTRODUCTION

This section of the Draft Supplemental Environmental Impact Report (SEIR) evaluates the potential for the proposed Rancho Mirage High School (RMHS) Field Lighting Project (Project) to affect biological resources on the Project Site, the City of Rancho Mirage (City), and within the broader Coachella Valley. Impacts found to be less than significant are further discussed in **Section 6.1: Effects Not Found to be Significant** of this Draft SEIR.

This section incorporates information from the following sources:

- Coachella Valley Association of Governments (CVAG), *Coachella Valley Multiple Species Habitat Conservation Plan* (CVMSHCP), September 2007 (Amended August 2016).
- The California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) Maps and Data.
- The Cornell Lab of Ornithology, eBird database (eBird).

REGULATORY SETTING

Federal

Federal Endangered Species Act of 1973

The Federal Endangered Species Act (FESA) of 1973, as amended, was promulgated to protect and conserve any species of plant or animal that is endangered or threatened with extinction and the habitats in which these species are found.[1] Section 4(a) of the FESA requires that critical habitat be designated by the USFWS "to the maximum extent prudent and determinable, at the time a species is determined to be endangered or threatened."

Critical habitat is formally designated by USFWS to provide guidance for planners/managers and biologists with an indication of where suitable habitat may occur and where high priority of preservation for a particular species should be given. "Take" of endangered species is prohibited under Section 9 of the FESA. Take, as defined under FESA, means to "harass, harm, pursue, hunt, wound, kill, trap, capture, collect, or attempt to engage in any such conduct."

1 United States, Endangered Species Act, 93rd United States Congress, 16 U.S.C., 1973.

Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 is the domestic law that affirms or implements the United States' commitment to four international conventions with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources.[2] It governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations.

As with the FESA, the act also authorizes the Secretary of the Interior to issue permits for take. The procedures for securing such permits are found in Title 50 of the Code of Federal Regulations, together with a list of the migratory birds covered by the act.[3] This law is generally protective of migratory birds but does not specify the type of protection required. USFWS administers permits to take migratory birds in accordance with the regulations promulgated by the MBTA. Nesting raptors, such as red-tailed hawks and burrowing owls, are protected under the MBTA. In common practice, USFWS places restrictions on disturbances allowed near active raptor nests.

State

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects.[4] It applies to actions directly undertaken, financed, or permitted by State lead agencies.

Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA).[5] Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

---

2 United States, The Migratory Bird Treaty Act, United States Code, 16 U.S.C., Chapter 7, Subchapter II, 1916.

3 Wildlife and Fisheries, Code of Federal Regulations, Title 50, 2014.

4 State of California, California Environmental Quality Act (CEQA), Title 14, 1970.

5 California Environmental Quality Act (CEQA), State of California, Title 14, Section 15380.

California Endangered Species Act (CESA)

In addition to federal laws, the State of California implements the California Endangered Species Act (CESA) which is enforced by CDFW.[6] The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might need concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

California Fish and Game Code

California Fish and Game Code Sections 3503,[7] 3503.5,[8] 3511,[9] and 3513,[10] are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes

---

6 California Endangered Species Act (CESA), State of California, 1970.

7 California Code, Fish and Game Code, Section 3503, 2021.

8 California Code, Fish and Game Code, Section 3503.5, 2020.

9 California Code, Fish and Game Code, Section 3511, through 2012 legislative session.

10 California Code, Fish and Game Code, Section 3513, 2018.

or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the State of California.[11] The act requires all State agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

Regional and Local

Habitat Conservation Plans

Under Section 10(a)(1)(B) of the FESA, an incidental take permit from the USFWS is required when nonfederal activities will result in "take" of threatened or endangered wildlife.[12] A Habitat Conservation Plan (HCP) must accompany any application to the USFWS for an incidental take permit.

The purpose of the HCP planning process is to reduce conflicts between conservation and economic growth and to minimize, to the extent feasible, impacts to endangered, threatened, or sensitive species resulting from a project. The purpose of the permit is to authorize the incidental take of a listed species, not to authorize the activities that result in take.

Coachella Valley Multiple Species Habitat Conservation Plan

The Coachella Valley Multiple Species Conservation Plan and Habitat Conservation Plan/Natural Community Conservation Plan (CVMSHCP) addresses numerous species in the Coachella Valley.[13]

The goal of the Coachella Valley MSHCP is to preserve the natural ecosystems and biological diversity on a regional scale in Coachella Valley. Local developments must pay a local development mitigation fee prior to the issuance of a building permit. The fee is used to mitigate the impacts of new development, for the purchase of land, and perpetual conservation.

The District is not a participant in the Coachella Valley MSHCP.

Agua Caliente Tribal Habitat Conservation Plan

---

11 California Code, Fish and Game Code, Sections 1900-1913, 2018.

12 United States, Endangered Species Act as amended by Public Law, Section 10(a)(1)(B), 1982.

13 Southern California Association of Governments. SCAG GIS Open Data Portal. Natural Community Conservation Plan and Habitat Conservation Plan (NCCP & HCP). https://gisdata-scag.opendata.arcgis.com/datasets/natural-community-conservation-plan-nccp/explore?location=34.320967%2C-116.670397%2C8.71. Accessed March 2023.

The Agua Caliente band of Cahuilla Indians maintain and implement the Tribal Habitat Conservation Plan (HCP).[14] The Tribal HCP protects and manages natural resources and habitat within the Tribe's jurisdictional territory. Its primary conservation mechanisms include creation of a Habitat Preserve; adoption of avoidance, minimization, and mitigation measures to enhance the habitats and survivability of Covered species; and payment of a mitigation fee that funds Tribal acquisition and management of replacement habitat. It has not yet been approved by the USFWS.

The District is not a participant in the Tribal HCP programs.

City of Rancho Mirage General Plan

The Conservation and Open Space chapter of the City's General Plan was prepared to address the conservation, development, and sustainable use of Indio's natural resources.[15] The Conservation chapter includes the following policies associated with biological resource conservation:

Goal COS-3: The protection and preservation of biological resources in Rancho Mirage, especially sensitive and special status wildlife species and their natural habitats.

Existing Conditions

The Project Site is currently located within Rancho Mirage High School and existing turf playing fields, and is subject to disturbances daily from school- and extracurricular-related. The following consists of the existing fields on campus: junior varsity (JV) and varsity softball fields, JV and varsity baseball fields, practice field 1 and 2, as well as soccer fields 1 and 2. These areas are routinely impacted by human activities and now support non-native plant species.

Land uses around the Project Site primarily consist of existing development to the west, undeveloped land to the north and east, and vacant land separating existing development to the south. The Project Site is located northeast of the intersection of Ramon Road and Da Vall Drive, east of Rattler Road, specifically at 31001 Rattler Road. The Project Site has been directly and indirectly impacted by human activity on all boundaries.

The RMHS fields are comprised of turf grass suitable for athletic programs. There are no naturally occurring springs or permanent aquatic habitats within the Project Site. The National Wetlands Inventory (NWI) identified one (1) freshwater approximately 0.4 miles southwest of the Project site.[16] This 0.90-acre freshwater pond is not within the Project Site or RMHS campus boundaries.

---

14 Agua Caliente band of Cahuilla Indians, Tribal Habitat Conservation Plan, https://www.aguacaliente.org/documents/planning-department/THCPAugust2010.pdf. Accessed March 2023.

15 City of Rancho Mirage, General Plan (2017) Update, Conservation and Open Element, https://ranchomirageca.gov/wp-content/uploads/2019/01/rm-general-plan-17.pdf. Accessed April 2023.

16 U.S. Fish & Wildlife Service, National Wetlands Inventory, surface waters and wetlands, https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/. Accessed April 2023.

The Project Site is relatively flat with no areas of significant topographic relief. The elevation of the Project Site ranges from approximately 300 to 330 feet above mean sea level (AMSL). The Project Site is relatively flat with no areas of significant topographic relief.

There are no riparian corridors, creeks, or useful patches of natural habitat within the RMHS campus.

Biological Communities/Habitat

Habitat describes the place or set of environmental conditions in which plants and animals naturally live and grow. Temperature and precipitation are primary factors in determining specific locations of different habitats and the assortment of plant and animal species they support. In the Coachella Valley and surrounding areas, desert habitats are generally distinguished by physical differences in slope, soil substrate, solar and wind exposure, and water supply. The interrelationships of the physical environment of the habitat with the biological resources contained within define an ecological system. The value and diversity of habitats are determined by various factors, including climate, varied terrain, adequate space, a dependable supply of food and water, soils for vegetation growth, and shelter and nesting sites.

Plant Communities

Since the Project Site has been previously subject to institutional (high school) and on-going educational and recreational activities, most natural plant communities that once existed on the site have been eliminated. Further, the surrounding residential development has eliminated natural plant communities from the immediate area surrounding the RMHS campus to the west.

Common plant species noted in Rancho Mirage, but not on the high school campus, are the winged cryptantha (*Johnstonella holoptera*) and the Palomar monkeyflower (*Erythranthe diffusa*).[17]

Special Status Plant Species

The Inventory of Rare and Endangered Vascular Plants of California, published online by the California Native Plant Society (CNPS) and the California Natural Diversity Database (CNDDB), lists a total of eighty-two (82) special-status plant species as having potential to occur within the nine (9) quadrangles that include Martinez Mountain, Palm Springs, Butterfly Peak, Cathedral City, La Quinta, Myoma, Toro Peak, Palm View Peak, and Rancho Mirage.[18] See **Appendix D: Biological Resources** for the full list of species.

The CNDDB lists two (2) special-status vegetation community as being identified within the nine (9) quadrangles that include Desert Fan Palm Oasis Woodland and Southern Riparian Forest.[19] As the Project

---

17 California Department of Fish and Wildlife, California Natural Diversity Database, Rancho Mirage Quadrangle, March 2023. See **Appendix D**.

18 California Department of Fish and Wildlife. California Natural Diversity Database (CNDDB) – BIOS Viewer. March 2023. See **Appendix D**.

19 California Department of Fish and Wildlife. California Natural Diversity Database (CNDDB), 9-quadrangle search around Rancho Mirage, March 2023. See **Appendix D**.

Site is within a developed and operational high school, no special-status plant communities are expected to be onsite, nor have been previously noted.

Based on habitat requirements for the identified special-status species, known species distributions, and existing site conditions, it was determined that the RMHS campus has a very low potential to support the twelve (12) special-status plant species that might occur within the Rancho Mirage quadrangle, as the Project Site is within a developed and operational high school campus. The 12 species include the spear-leaf matelea (*Matalea parvifolia*), glandular ditaxis (*Ditaxis claryana*), Abrams spurge (*Euphorbia abramsiana*), Horns milk-vetch (*Astragalus hornii var. hornii*), California marina (*Marina orcuttii var, orcuttii*), Coves cassia (*Senna covesii*), San Jacinto mariposa-lily (*Calochortus palmeri var. munzii*), narrow-leaf sandpaper-plant (*Petalonyx linearis*), California ayenia (*Ayenia compacta*), purple stemodia (*Stemodia durantifolia*), Peninsular spineflower (*Chorizanthe leptotheca*), and the desert spike-moss (*Selaginella eremophila*). None of these species have been observed on the RMHS campus or Project Site, but the Chaparral Sand-verbena (Abronia villosa var. Aurita) and Coachella Valley milk-vetch (Astragalus lentiginosus var. Coachellae) were observed as close as 80 meters from the Project Site.

No special-status plant species are determined to have a moderate or higher potential to occur within the RMHS campus, as the site is a developed and operational high school in which natural vegetation has been disturbed. Species that are known to potentially occur within the general vicinity of the Project Site are provided below in **Table 5.3-1: Special-Status Plant Species with Potential to Occur within Project Vicinity**.

Wildlife Species

The fauna of the RMHS campus and surrounding vicinity is composed of species typically found in sandy, windswept habitat in the Coachella Valley portion of the Colorado Desert. The CNDDB database search identified eighty-two (82) special-status wildlife species as having potential to occur within the nine (9) quadrangles that include Martinez Mountain, Palm Springs, Butterfly Peak, Cathedral City, La Quinta, Myoma, Toro Peak, Palm View Peak, and Rancho Mirage.[20]

[20] California Department of Fish and Wildlife. California Natural Diversity Database (CNDDB) – BIOS Viewer. March 2023. See **Appendix D**.

TABLE 5.3-1
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE PROJECT VICINITY

Species	Status (Federal/State/CNPS)	Suitable Habitat Description	Potential to Occur On Project Site
spear-leaf matelea (*Matalea parvifolia*)	none/none/2B.3	It is native to the southwestern United States and northern Mexico, where it grows in and on the edges of deserts.	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.
glandular ditaxis (*Ditaxis claryana*)	none/none/4.3	It is native to Arizona, California, and Sonora, Mexico. It generally grows in habitats with Mojavean desert scrubs or Sonoran Desert scrubs, preferring sandy microhabitats.	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.
Abrams spurge (*Euphorbia abramsiana*)	none/none/2B.2	It is native to southwestern United States and northwestern Mexico. It generally grows in habitats with Mojavean desert scrubs or Sonoran Desert scrubs, preferring sandy microhabitats.	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.
Horn's milk-vetch (*Astragalus hornii var. hornii*)	none/none/1B.1	It is native to southern California. Generally seen in meadows, seeps, and playas, preferring lake margins and alkaline rich soil.	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.
California marina (*Marina orcuttii var. orcuttii*)	none/none/1B.3	It is native to California and Baja California. It prefers rocky outcrops in chaparral, pinyon and juniper woodland, and Sonoran Desert scrub habitats.	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.
Coves cassia (*Senna covesii*)	none/none/2B.2	It is native to Arizona, Baja California, California, and Nevada. Its general habitat is the Sonoran Desert scrub, preferring dry, sandy desert washes and slopes.	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.
San Jacinto mariposa-lily (*Calochortus palmeri var. munzii*)	none/none/1B.2	It is native to southern California. It prefers Chaparral, lower montane coniferous forest, as well as Meadows and seeps as its habitat	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.

TABLE 5.3-1
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN THE PROJECT VICINITY

Species	Status (Federal/State/CNPS)	Suitable Habitat Description	Potential to Occur On Project Site
narrow-leaf sandpaper-plant (*Petalonyx linearis*)	none/none/2B.3	It is native to Arizona, Baja California, California, and Sonora, Mexico. Its habitat consists of Mojavean Desert scrub and Sonoran Desert scrub, preferring canyons and occasionally rocky or sandy regions.	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.
California ayenia (*Ayenia compacta*)	none/none/2B.3	It is native to Arizona, Baja California, California, and Sonora, Mexico. Its habitat consists of Mojavean Desert scrub and Sonoran Desert scrub, preferring rocky regions.	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.
Purple stemodia (*Stemodia durantifolia*)	none/none/2B.1	It is native to Arizona, Baja California, Puerto Rico, Sonora, Mexico, South America, Texas, and Virgin Islands. Its habitat is the Sonoran Desert scrubs, often mesic or sandy regions.	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.
Peninsular spineflower (*Chorizanthe leptotheca*)	none/none/4.2	It is native to Baja California and California. Its habitats include chaparral, coastal scrub, and lower montane coniferous forests, preferring areas with granitic alluvial fans.	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.
desert spike-moss (*Selaginella eremophila*)	none/none/2B.2	It is native to Arizona, Baja California, and California. Its habitats are chaparral and Sonoran Desert scrub, specifically gravelly and rocky areas.	Unlikely. Suitable habitat not found within the Project site. Potential habitat disrupted around school and athletic fields.

CNPS Rare Plant Ranks and Threat Code Extensions

1B: Plants that are considered Rare, Threatened, or Endangered in California and elsewhere.

2B: Plants that are considered Rare, Threatened, or Endangered in California, but more common elsewhere.

1: Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat).

2: Fairly endangered in California (20-80% occurrences threatened).

3: Not very endangered in California (<20% of occurrences threatened, or no current threats known)

TABLE 5.3-2
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE PROJECT VICINITY

Species	Status (Federal/State/CDFW)	Suitable Habitat Description	Potential to Occur On Project Site
burrowing owl (Athene cunicularia)	none/none/SSC	Open, dry, annual or perennial grasslands, desert, or scrubland, with available small mammal burrows.	Unlikely. High level of disturbance around stadium and on campus. Suitable burrow habitat not found at the project site.
golden eagle (Aquila chrysaetos)	none/none/FP|WL	Found in the western United States. They prefer partially or completely open country, especially around mountains, hills, and cliffs. They range from arctic to desert, including tundra, shrublands, grasslands, coniferous forests, farmland, and areas along rivers and streams.	Somewhat likely. High level of disturbance around stadium and on campus. May occur onsite when area is unoccupied.
prairie falcon (Falco mexicanus)	none/none/WL	Found throughout central and western U.S., Baja California, and the northern half of Mexico. Habitats include grasslands, shrubsteppe desert, alpine tundra, and agricultural fields.	Somewhat likely. High level of disturbance around stadium and on campus. May occur onsite when area is unoccupied.
black-tailed gnatcatcher (Polioptila melanura)	none/none/WL	Found in southwestern U.S. and northern Mexico. Habitats include semiarid and desert thorn scrub, preferring areas with less than 8 inches of rain per year.	Unlikely. High level of disturbance around stadium and on campus. Suitable habitat not found at the project site.
southwestern willow flycatcher (Empidonax traillii extimus)	Endangered/Endangered/none	Found throughout the U.S. during breeding season, otherwise found in Central and northern South America. Habitats include areas with willows or other shrubs near standing or running water.	Unlikely. High level of disturbance around stadium and on campus. Suitable habitat not found at the project site.
desert pupfish (Cyprinodon macularius)	Endangered/Endangered/none	Found in Arizona, California, Baja California, and Sonora, Mexico. Habitat is shallow Waters of desert springs, small streams, and marshes.	Unlikely. High level of disturbance around stadium and on campus. Suitable habitat not found at the project site (shallow water).

TABLE 5.3-2
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE PROJECT VICINITY

Species	Status (Federal/State/CDFW)	Suitable Habitat Description	Potential to Occur On Project Site
Crotch bumble bee (Bombus crotchii)	none/Candidate Endangered/none	Primarily found on California's Central Coast, specifically near the Los Padres Mayional Forest and the Carrizo Plain National Monument. Habitats include grasslands, shrublands, specifically hot and dry areas.	Unlikely. High level of disturbance around stadium and on campus. May occur onsite when area is unoccupied.
Peninsular bighorn sheep (Ovis canadensis nelson pop.2)	Endangered/Threatened/FP	Found in the San Jacinto Mountains to the U.S.-Mexico border. Habitats are the desert slopes of the Peninsular Ranges throughout California.	Unlikely. High level of disturbance around stadium and on campus. Suitable habitat not found at the project site.
pallid San Diego pocket mouse (Chaetodipus fallax pallidus)	none/none/SSC	Found in area ranging from San Diego to Mexico. Habitats include desert scrub and Yucca as cover, in rocky, sandy areas.	Unlikely. High level of disturbance around stadium and on campus. May occur onsite when area is unoccupied, or at night.
southern California ringtail (Bassariscus astutus octavus)	none/none/FP	Found in arid regions of North America, primarily in Southern California. Commonly found in rocky desert habitats, with nests in hollows of trees.	Unlikely. High level of disturbance around stadium and on campus. Suitable habitat not found at the project site.
western yellow bat (Lasiurus xanthinus)	none/none/SSC	Found in southern California, Baja California, and Mexico. Their habitats include dead fronds of palm trees.	Somewhat likely. High level of disturbance around stadium and on campus. May occur onsite at night or attracted by the residual light.
flat-tailed horned lizard (Phrynosoma mcallii)	none/none/SSC	Endemic to the Sonoran desert of the southwestern U.S. and northwestern Mexico.	Unlikely. High level of disturbance around stadium and on campus. Suitable habitat not found at the project site.
Coachella Valley fringed-toed lizard (Uma inornate)	Threatened/Endangered/none	Found in the Coachella Valley of California. Habitat includes the sand dunes of the valley.	Unlikely. High level of disturbance around stadium and on campus. Suitable habitat not found at the project site.

TABLE 5.3-2
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE PROJECT VICINITY

Species	Status (Federal/State/CDFW)	Suitable Habitat Description	Potential to Occur On Project Site
desert tortoise (Gopherus agassizii)	Threatened/Endangered/none	Found in the Mojave and Sonoran Desert of the U.S. and northwestern Mexico. They prefer habitats with sandy loam soils with gravel and clay, alluvial fans, washes, and canyons.	Unlikely. High level of disturbance around stadium and on campus. Suitable habitat not found at the project site.
red-diamond rattlesnake (Crotalus ruber)	none/none/SSC	Found in southwestern California and Baja California. Habitat includes cooler coastal zones, dense chaparrals, cactus patches, and boulders covered with brush.	Unlikely. High level of disturbance around stadium and on campus. Suitable habitat not found at the project site.

Notes:

Federal (USFWS)

FE: Listed as Endangered under the Federal Endangered Species Act.
FT: Listed as Threatened under the Federal Endangered Species Act.
FC: A Candidate for listing as Threatened or Endangered under the Federal Endangered Species Act. FSC: Species of Special Concern.
FD: Delisted under the Federal Endangered Species Act.

State (CDFW)

SE: Listed as Endangered under the California Endangered Species Act.
ST: Listed as Threatened under the California Endangered Species Act.
SR: Listed as Rare under the California Endangered Species Act.
SC: A Candidate for listing as Threatened or Endangered under the California Endangered Species Act.
SSC: Species of Special Concern.
SFP: Fully Protected species under the California Fish and Game Code.
SD: Delisted under the California Endangered Species

Based on habitat requirements, known distributions, and routine disturbance, the Project Site does not have the potential to support the fifteen (15) special-status wildlife species identified within the Rancho Mirage quadrangle.[21] Species including Prairie falcons, Coachella Valley jerusalem crickets and Coachella Valley fringe-toed lizards were observed as close as about 0.5 mile from the Project Site.[22] A Coachella giant sand treader cricket, flat-tailed horned lizard, Le Conte's thrasher, and Palm Springs round-tailed ground squirrel were observed about a mile away from the Project Site. No species were found on the Project Site.

Species that are known to potentially occur within the general vicinity of the Project Site are provided below in **Table 5.3-2: Special-Status Wildlife Species with Potential to Occur within Project Vicinity**.

Wildlife Movement Corridors

Habitat linkages provide links between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

Opportunities for wildlife corridors in Rancho Mirage are limited due to the City's urban development and transportation patterns. The City identifies two specific east-west wildlife corridors: the Santa Rosa Mountains and the Whitewater River.[23] The Project Site is not located within or near any identified wildlife migratory corridors or linkages, such as the Santa Rosa Mountains and the Whitewater River.[24]

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The CEQA Guidelines include thresholds to determine the significance of biological resource impacts (Appendix G of the CEQA Guidelines). Appendix G provides that a project would have a significant environmental impact if it would:

---

21 California Department of Fish and Wildlife, CNDDB Database- Bios. See Appendix D.

22 California Department of Fish and Wildlife, CNDDB Database- Bios, Species within a half-mile of the Project Site. See Appendix D.

23 City of Rancho Mirage, General Plan (2017) Update, Conservation and Open Element, Biological Resources, https://ranchomirageca.gov/wp-content/uploads/2019/01/rm-general-plan-17.pdf. Accessed April 2023

24 City of Rancho Mirage, General Plan (2017) Update, Conservation and Open Element, Biological Resources, https://ranchomirageca.gov/wp-content/uploads/2019/01/rm-general-plan-17.pdf. Accessed April 2023

Threshold 5.3-1: **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.**

Threshold 5.3-4: **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.**

Threshold 5.3-6: **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other adopted local, regional, or state habitat conservation plan.**

Project Impacts

Threshold 5.3-1: **Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?**

The CNDDB database search identified eighty-two (82) special-status wildlife species as having potential to occur within the nine (9) quadrangles that include Martinez Mountain, Palm Springs, Butterfly Peak, Cathedral City, La Quinta, Myoma, Toro Peak, Palm View Peak, and Rancho Mirage. The nine (9)-quadrangle search centered around Rancho Mirage yielded a total of 164 identified animal and plant species. The species identified in **Appendix D** were found within the nine (9)-quadrangle search as being listed either federally, or State, threatened or endangered, or as a special-status species. Fourteen species in the nine (9)-quadrangle around Rancho Mirage have a federal conservation status, ten (10) species have a State level conservation status, and one species is listed as "Candidate Endangered". An additional 53 wildlife species are listed with CDFW status, 82 total plant species are listed with a rare plant status, and two (2) terrestrial communities are listed.[25] There are 15 wildlife and 11 plant species within the Rancho Mirage quadrangle identified as a candidate, sensitive, or special status species by a local, regional, State, or federal level authority. Based on habitat requirements, known distributions, and routine disturbance, the Project Site does not have the potential to support the fifteen (15) special-status wildlife species identified within the Rancho Mirage quadrangle.[26]

Twelve (12) wildlife and plant species were identified within 0.5 mile of the RMHS campus, four (4) of which are plant species.[27] Two (2) species, the Coachella giant sand treader cricket and the Coachella

---

25 California Department of Fish and Wildlife. California Natural Diversity Database (CNDDB) – BIOS Viewer. March 2023. See Appendix D.

26 California Department of Fish and Wildlife. California Natural Diversity Database (CNDDB) – BIOS Viewer. March 2023. See Appendix D.

27 California Department of Fish and Wildlife. California Natural Diversity Database (CNDDB) – BIOS Viewer, Species within Half a Mile of RMHS. March 2023. See Appendix D.

Valley jerusalem cricket, were identified as nocturnal. There is a potential for the two (2) nocturnal species or other identified species to occur onsite when human activity levels are low.

The RMHS campus is fully developed and contains turf fields and ornamental landscaping. Species likely to occur on site are limited to small terrestrial and avian species typically found in developed settings. Additionally, the campus does not contain the habitat necessary to support the referenced species. The field turf and other lawn areas of the campus do not provide habitat for sensitive or special status wildlife species.

During construction of the proposed Project, construction staging areas would be located within an actively used part of the RMHS campus and within the fields, away from any potential habitat. Short-term construction would not be anticipated to affect nesting or roosting bird species in the vicinity, because the fields are regularly maintained by a tractor-mounted mower, which produces noise levels similar to the equipment anticipated for trenching and light pole installation. Therefore, bird species that elect to nest in the area would already be acclimated to similar noise levels from field maintenance activities. Further, the proposed Project would not remove any native plant species, nor remove any shrubs. The proposed Project would therefore not have direct or indirect impacts upon sensitive or special-status plants.

The introduction of light fixtures for nighttime use, as part of the operation of the proposed Project, may create a distraction and nuisance to wildlife species, specifically nocturnal species. This impact would be significant, but the addition of "hoods" (as shown in **Section 3.0: Project Description**, **Figure 3.0-4: Lighting Structure System**) would focus the light onto the fields and reduce significant impact on nocturnal species. Impacts would still be potentially significant to nesting birds. As such, mitigation measure (**MM) BIO-1** would be included to reduce these impacts to less than significant.

Threshold 5.3-4: 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?

The Project Site and immediate surroundings west of the site, include developed residential communities. Open space lies east, south, and north of the Project Site. The school campus is abutted by a residential neighborhood directly to the west; natural open space habitat area exists to the north, south, and east of the school, which is already continuous land that allows wildlife movement around the perimeter of the campus, with the exception of the western perimeter of the school.

According to the Rancho Mirage General Plan, the RMHS campus does not occur within any identified wildlife migratory corridors or linkages.[28] The RMHS campus is fully developed and has existing on-site

28 City of Rancho Mirage, General Plan (2017) Update, Conservation and Open Element, Biological Resources, https://ranchomirageca.gov/wp-content/uploads/2019/01/rm-general-plan-17.pdf. Accessed April 2023.

landscaping consisting of shrubs and bushes that may provide suitable habitat, including nesting habitat for migratory birds.

The Project does not involve the relocation of existing vegetation and open space areas. Therefore, the likelihood of migratory birds and burrowing owls inhabiting the site is minimal.

Habitat connectivity is an essential aspect of viable habitat conservation and wildlife management. Habitat connectivity is accomplished by establishing habitat linkages and wildlife movement corridors that connect fragmented pieces of habitat. This allows for the movement of wildlife, a place for new vegetation to recolonize, and diversifies the plant and wildlife gene pools across areas of available habitat. The existing fields within the RMHS campus, lack the constituent elements of a wildlife corridor or habitat linkage, namely linear or patchy habitat connecting adjacent larger patches of habitat. Although the RMHS campus is currently developed for school uses, there is a potential for small, highly mobile species to traverse the existing fields and surrounding area. In particular, bird species are anticipated to migrate through the fields and possibly nest in the adjacent vegetation.

RMHS does not serve as a significant wildlife corridor or habitat linkage in this region, and the introduction of light standards would not directly block existing travel routes for smaller wildlife, including birds. Therefore, the proposed Project would not interfere with the movement to wildlife across the region and no direct or indirect impacts to wildlife corridors or habitat linkages is expected.

Impacts would be potentially significant with regard to impacts to migratory birds. However, MM BIO-1 would reduce these impacts to less than significant.

CUMULATIVE IMPACTS

Implementation of the proposed Project in conjunction with other related projects within the City of Rancho Mirage, may result in cumulative impacts to biological resources. As mentioned above, implementation of the Project would not substantially impact biological resources with the implementation of the proposed mitigation measures.

The following cumulative impacts are analyzed based on a list of past, present, and probable future projects producing related cumulative impacts, described in **Section 4.0: Environmental Setting**.

Past and existing cumulative development within the immediate vicinity of the Project Site has been relatively limited. The Project Site is characterized by direct and indirect human impacts on biological resources, such as wildlife and plant species, with single-family residential development to the west and commercial development south.

Future development includes the Section 24 Specific Plan which is proposed less than 1.0 mile southeast of the Project Site. This project may affect biological resources in the area considering the existing site is vacant and consists of sand dunes and desert flat land. However, development would be largely set back on Ramon Road and there is an existing residential development located adjacent west of the

Section 24 Specific Plan area. Section 24 Specific Plan development would include similar elements to the existing development, in an area with limited biological resources due to human activities.

Other proposed projects described in **Section 4.0** would potentially have a substantial bearing on the biological resources in the area near the proposed Project, but as they are far from the existing campus and away from existing wildlife corridors or protected regions, this would not substantially affect wildlife and plant species on and around the campus. Additionally, while each project would increase and provide new disturbances to potential habitats, each would be required to comply with the City's, State's, and Federal government's conditions of approval for biological resources, which would reduce this potentially impacts.

While probable future development within the vicinity would each potentially result in impacts relative to plant and wildlife species, each would be required to address impacts on a project specific basis. Further, the City of Rancho Mirage is a relatively built out city and new developments would not result in an incremental decrease in biological resources and would not be considered cumulatively considerable.

As the Project's impacts would be considered less than significant, the Project would not result in a cumulatively considerable contribution.

MITIGATION MEASURES

The following mitigation measure have been identified to reduce potentially significant impacts:

MM BIO-1: Pre-Construction Surveys for Migratory Birds (including avoidance if found)

If ground disturbance is proposed between February 1st and August 31st, a qualified biologist shall conduct a nesting bird survey within 7 to 10 days of initiation of grading on site, focusing on covered species. If active nests are reported, species-specific measures shall then be prepared. At a minimum, grading in the vicinity of a nest shall be postponed until the young birds have fledged. For construction between September 1st and January 31st, no pre-removal nesting bird survey is required.

Additionally, pre-construction surveys for burrowing owls should be undertaken between 14 and 30 days prior to any kind of ground disturbance related to modifications to facilities and properties.

In the event active nests are found, exclusionary fencing shall be placed 200 feet around the nest until such time as nestlings have fledged. Nests of raptors and burrowing owls shall be provided with a 500-foot buffer. Ground disturbance between September 1 and January 31 shall be exempt from this requirement.

LEVEL OF SIGNIFICANCE OF MITIGATION

Implementation of the mitigation measure below would reduce impacts to less than significant.

5.4 CULTURAL RESOURCES

INTRODUCTION

This section of the Draft Supplemental Environmental Impact Report (SEIR) addresses the potential for implementation of the proposed Rancho Mirage High School (RMHS) Field Lighting Project (Project) to affect cultural resources within the Project Site and in the immediate surrounding area. Cultural resources include places, objects, and settlements that reflect group or individual religious, archaeological, or architectural activities. Such resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements.

Impacts found to be less than significant are further discussed in **Section 6.1: Effects Not Found to be Significant** of this Draft SEIR.

REGULATORY SETTING

Federal

National Historic Preservation Act

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

National Register of Historic Places

Section 106 of the NHPA requires federal agencies to take into account the effects of an undertaking on historic properties, which are defined as cultural resources included in or eligible for listing in the NRHP.[1] Section 106 Review refers to the federal review process designed to ensure that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation, an independent federal agency, administers the review process, with assistance from State Historic Preservation Offices (SHPOs). If any impacts are identified, the agency undergoing the project must identify the appropriate SHPO to consult with during the process.

Determination of NRHP eligibility for cultural resources prior to making a finding of effect is made according to the following criteria:

1 National Historic Preservation Act (NHPA), Section 106: National Register of Historic Places (NRHP). 1966.

1. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
2. that are associated with events that have made a significant contribution to the broad patterns of our history; or
3. that are associated with the lives of persons significant in our past; or
4. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
5. that have yielded, or may be likely to yield, information important in prehistory or history.

If cultural resources do not meet the above criteria, they are not historic properties and are not further considered in the Section 106 process. In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired or significant individuals made their important contributions.

State

State Health and Safety Code

The discovery of human remains is regulated by *California Health and Safety Code*, Section 7050.5,[2] which states that:

> *"…(b) In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code that the remains are not subject to…provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible or the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.*
>
> *(c) If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native*

2 California Code, Health and Safety Code, sec. 7050.5.

> *American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission."California Register of Historical Resources*

The California Register of Historical Resources (CRHR) is an authoritative guide to the State's significant archaeological and historical resources. It closely follows the eligibility criteria of the NRHP but deals with State and local-level resources. The CRHR serves to identify, evaluate, register, and protect California's historical resources. For purposes of CEQA, a historical resource is any building, site, structure, object, or historic district listed in or eligible for listing in the CRHR (Public Resources Code, Section 21084.1).[3] A resource is considered eligible for listing in the CRHR if it meets any of the following criteria:

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

b) Is associated with the lives of people important in our past.

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

d) Has yielded, or may be likely to yield, information important in prehistory or history [Public Resources Code Section 5024.1(c)].[4]

Historical resources meeting one or more of the criteria listed above are eligible for listing in the CRHR. In addition to significance, resources must have integrity for a period of significance-the date or span of time within which significant events transpired or significant individuals made important contributions. Important archaeological resources are required to be at least 50 years old to be considered. "Integrity is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance."[5] Simply put, resources must "retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance."

CEQA also requires the lead agency to consider whether there is a significant effect on unique archaeological resources that are not eligible for listing in the California Register. As defined in CEQA, a unique archaeological resource is:[6]

> *"an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:*
>
> *1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.*

3 California Environmental Quality Act Guidelines (CEQA Guidelines), California Public Resources Code [PRC], sec. 21084.1.

4 California Environmental Quality Act Guidelines (CEQA Guidelines), California Public Resources Code [PRC], sec. 5024.1(c).

5 California Code of Regulations (CCR). Title 14. Section 4852 (c).

6 California Public Resources Code (PRC). Section 21083.2 (g).

2. *Has a special and particular quality such as being the oldest of its type or the best available example of its type.*
3. *Is directly associated with a scientifically recognized important prehistoric or historic event or person."*

If an archaeological resource is found eligible for listing in the CRHR, then it is considered under CEQA to be a historic resource that needs to be protected. This may also apply to unique archaeological resources. If a historic resource may be impacted by a project, under CEQA, avoidance and preservation in place is the preferred alternative. If that is not feasible, then a data recovery plan will need to be created and enacted to lessen impacts to the environment to a less than significant level. If the archaeological resource is not eligible for listing in the CRHR, and it is not a unique archaeological resource, then no further action is required to protect or mitigate possible impacts to it.

California Public Resources Code

Archaeological and historical sites are protected pursuant to a wide variety of State policies and regulations enumerated under the *California Public Resources Code*. In addition, cultural resources are recognized as a non-renewable resource and, therefore, receive protection under the *California Public Resources Code* and CEQA:

- California Public Resources Code Sections 5020-5029.5 continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission (SHRC).[7] The SHRC oversees the administration of the California Register of Historical Resources and is responsible for the designation of State Historical Landmarks and Historical Points of Interest.

- California Public Resources Code Sections 5079-5079.65 defined the functions and duties of the Office of Historic Preservation (OHP).[8] OHP is responsible for the administration of federally and State mandated historic preservation programs in California and the California Heritage Fund.

- California Public Resources Code Sections 5097.9-5097.998 provide protection to Native American historical and cultural resources and sacred sites, and identify the powers and duties of the Native American Heritage Commission (NAHC).[9] These sections also require notification of discoveries of Native American human remains, descendants and provide for treatment and disposition of human remains and associated grave goods.

7 California Environmental Quality Act Guidelines (CEQA Guidelines), California Public Resources Code [PRC], sec. 5020-5029.5.

8 California Environmental Quality Act Guidelines (CEQA Guidelines), California Public Resources Code [PRC], sec. 5079-5079.65.

9 California Environmental Quality Act Guidelines (CEQA Guidelines), California Public Resources Code [PRC], sec. 5097.9-5097.998.

Regional and Local

City of Rancho Mirage

General Plan 2017 Update

The City's most recent General Plan 2017 Update includes provisions for protecting cultural and historic resources within the City. Chapter 5 Conservation and Open Space Element includes guidance to enhance and protect cultural and historic resources. Identifying and preserving significant cultural and historic resources strengthens community heritage and identity. These resources provide a constant reminder of the culture and history of the City and the Coachella Valley and serve as a valuable educational resource for residents and visitors.

The following goals and policies are relevant to the proposed Project:

Goal COS-8: **Archaeological and Historic Resources.** The preservation, maintenance, continuity, and enhancement of cultural heritage and resources in Rancho Mirage, including historic and prehistoric sites, objects, landscapes, and structures.

COS-8.2 **D**evelopment or land use proposals that have the potential to disturb or destroy sensitive cultural resources shall be evaluated by a qualified professional and appropriate mitigation measures shall be incorporated into project approvals, if necessary.

ENVIRONMENTAL SETTING

Existing Conditions

As part of the 2006 EIR for the RMHS Campus, a cultural resource survey was completed entitled Phase I Cultural Resources Inventory of 120 Acres prepared by the Keith Companies in October 2004.[10] That report is available as Appendix D of the 2006 EIR. As part of that report, a cultural resource records search was conducted at the Eastern Information Center of the California Historical Resources Information System, University of California, Riverside and Agua Caliente Tribal Office in Palm Springs for the two parcels. The search indicated that no previously recorded archaeological or historical sites had been recorded within the two parcels or anywhere within Section 14 (the 640-acre land area including and surrounding the property). Subsequent to the prior cultural resource report completion, the RMHS was built, and no cultural resources were discovered during site development.

Regional and Local Setting

California is divided into geomorphic provinces which are distinctive, generally easy-to-recognize natural regions in which the geologic record, types of landforms, pattern of landscape features, and climate in all parts are similar.

---

10 Palm Springs Unified School District, Draft Environmental Impact Report, Appendix D: Phase I Cultural Resources Inventory, 2006.

The Project Site is located in the Coachella Valley in the northern part of the Colorado Desert Geomorphic Province, which is a low-lying barren desert basin. More specifically, the Project Site is located in the City of Rancho Mirage within Riverside County. The Project Site is located in the center of the Coachella Valley, a low valley sandwiched between the Santa Rosa Mountains to the south and southeast and the Little San Bernardino Mountains to the north. The Coachella Valley consists of alternating lacustrine and fluvial sediments, termed the Lake Cahuilla beds, which have previously yielded fossil remains representing diverse freshwater diatoms, land plants, sponges, ostracods, mollusks, fish, and small terrestrial vertebrates.[11,12] Topographically, the elevation of the Project Site is approximately 300 feet above mean sea level (AMSL). The Project Site is relatively flat with no areas of significant topographic relief.

The approximately 60-acre Project Site includes an existing and developed high school campus that has been operational since 2013. The Project Site is located in a portion of the Coachella Valley identified as having low to moderate prehistoric/ethnohistoric cultural resource sensitivity.

Cultural Setting

Prehistoric Background

Beginning about 8,000 years ago, the climate became hotter and drier, and it appears that the northern Coachella Valley was basically abandoned during that time When the climate began to cool, after about 4,000 years ago, during the Late Archaic period, it appears that the Colorado Desert was reoccupied, and several archaeological sites in the northern Coachella Valley are dated to this time. It appears that, as with later occupations, much of the occupation centered on the shores of Lake Cahuilla.[13] However, very little is known about overall Late Archaic period adaptations or social structure.

One of the best-documented Late Archaic period sites in the Colorado Desert, and the oldest cultural remains in the Rancho Mirage area, is the Indian Hill Rockshelter near Anza-Borrego State Park, located approximately 70 miles south of the Project Site.[14] Excavators found a number of rock-lined storage pits as well as hearths and Elko Eared projectile points. Radiocarbon dates from these levels indicated that they were occupied approximately 4,000 years ago. A rockshelter from Tahquitz Canyon also contained rock-lined pits and similar artifacts, but no radiocarbon dates were taken at the site; so, its true age is

11 University of California, Riverside, The EDGE Institute, Lake Cahuilla Research Coalition, https://edge.ucr.edu/research/lake-cahuilla-research-coalition. Accessed April 2023.

12 United states Bureau of Reclamation. Lower Colorado Basin- Interior Region 8, Coachella Canal Area Resource Management Plan/ Environmental Assessment, Cultural Resources, https://www.usbr.gov/lc/yuma/environmental_docs/Coachella/coachella-chap5-5.pdf. Accessed April 2023.

13 K remkau, S.H. and A. Hill. Statistical Research, Inc. Section 31 Specific Plan Cultural Resource Study, Rancho Mirage, Riverside County, California. The Archaic Period (8000-1500 B.P.). https://ranchomirageca.gov/wp-content/uploads/2019/07/eApx_E_Cultural.pdf. Accessed April 2023.

14 City of Rancho Mirage, General Plan (2017), Conservation and Open Space Element, Archaeological and Historic Resources, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter_5_Conservation_and_Open_Space.pdf. Accessed April 2023.

unclear. Taken together, these sites suggest that people lived in highly mobile bands and took advantage of a variety of resources in the area.

Beginning about 1500 B.P., Yuman (or Patayan) agricultural groups along the Colorado River area began to influence Colorado Desert groups, particularly in the Coachella Valley. This Patayan pattern included a preceramic phase and three ceramic phases, Patayan I (ca. 1500–1000 B.P.), II (ca. 1000–500 B.P.), and III (after ca. 500 B.P.).[15] After about 1000 B.P. (Patayan II), a number of cultural traits, including new ceramic types, small triangular points, and cremations, moved west from the Colorado River, either through diffusion or perhaps carried by some migrating Yuman people.[16] Whichever the case, long-distance trade networks were established between the Coachella Valley and Colorado River.

Agricultural crops were also probably introduced into the area during this time. Along the Colorado River, domesticated crops constituted up to half of the diet of Yumans. Ethnographically, the Cahuilla were known to have large, walk-in wells that could have been used in pot irrigation, although small check dams and other simple irrigation technologies likely also were used. The oldest radiocarbon dated occupation in the Coachella Valley is approximately 900 years old- a Patayan style broken pot located at the intersection of Washington Street and Highway 111.[17] The Late Prehistoric period groups that occupied the Coachella Valley were the direct ancestors of the ethnographic Cahuilla. This period represents a significant increase in human occupation of the valley, and several large archaeological sites from the period have been identified.

Prior to the disappearance of the Ancient Lake Cahuilla 500 years ago, the Desert Cahuilla Indians lived in villages along the Lake.[18] Once the Lake was no longer an available resource, canyons and mountains became the primary source of water, foods, and fibers.

Ethnographic Background

The Aboriginal group that occupied the northern Coachella Valley during the historical period was the Desert Cahuilla, who, along with the Mountain and Pass Cahuilla, constituted the ethnographic Cahuilla.[19] The Cahuilla spoke a language of the Takic branch of Northern Uto-Aztecan, and the Desert Cahuilla spoke a distinct dialect of Cahuilla. There have been few archaeological studies of the historical-

---

15 Panich, L. M. and M. Wilken-Robertson. Paipai Pottery Past and Present: Evolution of an Indigenous Ceramic Tradition. Pacific Coast Archaeological Society. https://www.pcas.org/documents/V481and2Panich.pdf. Accessed April 2023.

16 Panich, L. M. and M. Wilken-Robertson. Paipai Pottery Past and Present: Evolution of an Indigenous Ceramic Tradition. Pacific Coast Archaeological Society. https://www.pcas.org/documents/V481and2Panich.pdf. Accessed April 2023.

17 City of Rancho Mirage, General Plan (2017), Conservation and Open Space Element, Archaeological and Historic Resources, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter_5_Conservation_and_Open_Space.pdf. Accessed April 2023.

18 City of Rancho Mirage, General Plan (2017), Conservation and Open Space Element, Archaeological and Historic Resources, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter_5_Conservation_and_Open_Space.pdf. Accessed April 2023.

19 The Cahuilla People, Augustine Band of Cahuilla Indians, https://augustinetribe-nsn.gov/cahuilla-people/. Accessed April 2023.

period Cahuilla, but testing at the former Mission Creek Indian Reservation, approximately 15.1 miles northwest of the Project Site, identified occupations stretching from the Late Prehistoric period into the early twentieth century. Similarly, excavations at Tahquitz Canyon, approximately 7.8 miles west of the Project Site, found a large village complex dating to between A.D. 1600 and 1870.

In 1876, the Agua Caliente Indian Reservation (Reservation) was founded by an Executive Order of President Ulysses S. Grant which was expanded in 1877 and 1907. The Reservation covers roughly 31,500 acres and consists of all even-numbered sections and all portions of Township 4 South, Ranges 4 and 5 East, and Township 5 South, Range 4 East, on the San Bernardino Meridian, that have not been surveyed with the exception of sections already given out by the United States (US) government. The odd-numbered sections had already been given to railroads as an incentive to develop cross-country rail lines, and as such, the Reservation appears as a checkerboard pattern on maps. In 1891, Congress passed the Mission Indian Relief Act, which authorized allotments of Reservation land to be given to individuals. The allotment elections were finally approved by the Secretary of the Interior as part of the Equalization Act in 1959, which finalized the individual Indian allotments and set aside certain lands for Agua Caliente Tribal use and cemeteries. The Agua Caliente Tribe has a land-exchange agreement with the U.S. Department of the Interior (USDI) Bureau of Land Management (BLM) and is actively acquiring other non-reservation land.

Historical Background

The extreme aridity of the Colorado Desert acted as a deterrent to many early explorers. The earliest recorded European visit to the Coachella Valley was by José Romero in the winter of 1823–1824, the leader of an expedition attempting to reach the Colorado River by a new route.[20] Until the mid-nineteenth century, however, most expeditions into the Coachella Valley were confined to the established prehistoric trail systems. In 1853, William P. Blake described the Coachella Valley during the Pacific Railroad Survey expedition.[21] Blake recorded the general environment, noted the location of Indian villages, described native agriculture in the Coachella Valley, and recorded some oral traditions of the Indians concerning life around ancient Lake Cahuilla. In 1855 and 1856, the US Land Office Survey surveyed the valley and divided it into townships and sections.

In the 1880s, the Homestead Act and the Desert Land Act opened much of the public land in the area to private development. Farming was the primary economic activity in the valley, supported by a variety of wells that accessed sizable underground water resources. Prior to the installation of a canal system, the lack of runoff and an increase in land development made well-pumping a necessity So, in 1938,

20 Lowell J. Bean and William Mason. *Diaries & Accounts of the Romero Expeditions in Arizona and California, 1823-1826.* Palm Springs, CA: Palm Springs Desert Museum. 1962.

21 Blake, William P. *Reports of Explorations in California for Railroad Routes to Connect with Routes near the 35th and 32nd Parallels of North Latitude.* 1857.

construction began for the 123-mile Coachella Canal. This canal would supply additional water from the Colorado River to the valley for crop irrigation and to aid in flood control.

During the late twentieth century, development in the Coachella Valley expanded rapidly; scores of country clubs and housing developments appeared along SR 111 and I-10.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The CEQA Guidelines include thresholds to determine whether a project would have a significant effect on the environment (Appendix G of the CEQA Guidelines). Appendix G provides that a project would have a significant impact to cultural resources if it would:

Threshold 5.4-2: **Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.**

Threshold 5.4-3: **Disturb any human remains, including those interred outside of formal cemeteries.**

Project Impacts

Threshold 5.4-2: **Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?**

As previously noted, as part of the 2006 EIR for the RMHS Campus, a cultural resource survey was completed entitled Phase I Cultural Resources Inventory of 120 Acres prepared by the Keith Companies in October 2004.[22] That report is available as Appendix D of the 2006 EIR. As part of that report, a cultural resource records search was conducted at the Eastern Information Center of the California Historical Resources Information System, University of California, Riverside and Agua Caliente Tribal Office in Palm Springs for the two parcels. The search indicated that no previously recorded archaeological or historical sites had been recorded within the two parcels or anywhere within Section 14 (the 640-acre land area including and surrounding the property). Subsequent to the prior cultural resource report completion, the RMHS was built, and no cultural resources were discovered during site development.

The Project Site has been used as a high school campus regularly since 2013, and no artifacts of note were discovered during the construction of the campus. As such, there would be relatively low chances of discovering archaeological resources on the Project Site during construction and operation.

22 Palm Springs Unified School District, Draft Environmental Impact Report, Appendix D: Phase I Cultural Resources Inventory, 2006.

Furthermore, according to the Rancho Mirage's General Plan, the Project Site is located in a portion of the Coachella Valley identified as having low to moderate prehistoric/ethnohistoric cultural resource sensitivity.[23]

The proposed Project would occur within the graded and developed areas of the high school campuses and would not affect the off-site areas; as such, the potential for encountering intact archaeological resources is low. The proposed Project would include trenching and boring excavations of up to 10 feet deep to install the light poles and associated electrical cables. It is possible that previously undiscovered cultural resources could be unearthed during these activities.

Considering the lack of general archaeological sensitivity, the fact that portions of and the areas surrounding the proposed Project Site have been studied with negative results, that the proposed Project Site has been subject to considerable ground disturbance and that the proposed disturbances are minimal, the potential for inadvertently encountering cultural resources during ground disturbing activities is unlikely. However, there is potential for inadvertently encountering unknown cultural resources and in the event a cultural resource is encountered during project related activities.

Impacts to resources may be potentially significant.

Threshold 5.4-3: Would the project disturb any human remains, including those interred outside of formal cemeteries?

Much of the prehistoric occupation of the Coachella Valley appears to be correlated with the presence of Lake Cahuilla, with most of the earliest known sites in the valley located at or near the ancient lakeshore. However, based on the cultural sensitivity of the area there is the low to moderate potential to find human remains during subsurface grading activities.[24]

Desert Memorial Park Cemetery is the closest cemetery to the Project site, lying less than a mile west of RMHS. No human remains were found on campus during the development of RMHS.

As the proposed Project Site has been subject to considerable ground disturbance and the proposed disturbances are minimal, the potential for inadvertently encountering human remains during ground disturbing activities is unlikely. As previously discussed, Project construction would include minor grading and excavation, which could result in the discovery of previously unrecorded human remains, including Native American burials.

---

23 City of Rancho Mirage, General Plan Update (2017), Land Use Element, https://ranchomirageca.gov/wp-content/uploads/2019/01/rm-general-plan-17.pdf. Accessed April 2023.

24 City of Rancho Mirage, General Plan Update (2017), Conservation and Open Space Element, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter_5_Conservation_and_Open_Space.pdf. Accessed April 2023.

Impacts would be potentially significant.

CUMULATIVE IMPACTS

Implementation of the proposed Project in conjunction with other related projects within the City of Rancho Mirage, may result in cumulative impacts to cultural resources. As mentioned above, implementation of the Project would not substantially impact cultural resources with the implementation of the proposed mitigation measures.

The following cumulative impacts are analyzed based on a list of past, present, and probable future projects producing related cumulative impacts, described in **Section 4.0: Environmental Setting**.

Past and existing cumulative development within the immediate vicinity of the Project Site has been relatively limited. Cultural characteristics of the area continue to be defined by ethnographic Cahuilla and the occasional prehistoric artifacts.

Future development includes the Section 24 Specific Plan which is proposed less than 1.0 mile southeast of the Project Site. This project may affect cultural resources of the area considering the existing site is vacant and consist of sand dunes and desert flat land. However, development would be largely set back Ramon Road and there is an existing residential development located adjacent west of the Section 24 Specific Plan area. Section 24 Specific Plan development would include similar elements to the existing development and create consistency within that area. As the area is undeveloped, there is a moderate likelihood of encountering previously undiscovered cultural artifacts, and the appropriate mitigation measures would need to be implemented to reduce any potential significant impacts.

Other projects described in **Section 4.0** would not have a substantial bearing on the cultural resources of the area near the proposed Project in that they are far from the existing RMHS campus and would not affect potentially discovered artifacts in and around the campus. While each project listed in **Section 4.0** would increase the probability of discovering and disturbing a cultural resource, each would be required to comply with the City's conditions of approval for lighting, which would reduce any potential impacts.

While probable future development within the vicinity would potentially have impacts on cultural resources, each would be required to address impacts on a project specific basis. Further, the City of Rancho Mirage is a relatively built out city with extensive ground-disturbances. New developments would not result in an incremental decrease in cultural resources and would not be considered cumulatively considerable.

As the Project's impacts would be considered less than significant with mitigation, the Project would not result in a cumulatively considerable contribution.

MITIGATION MEASURES

The prior 2006 EIR for RMHS identified mitigation measures for cultural resources that were implemented at the time of construction of the campus.[25] The following mitigation measures have been identified that would reduce cultural resource potentially significant impacts during construction of the Project:

MM CUL-1: WEAP Training: All construction personnel and monitors who are not trained archaeologists shall be briefed regarding inadvertent discoveries prior to the start of construction activities. A basic presentation and handout or pamphlet shall be prepared, by a qualified archaeologist meeting the Secretary of Interior's Standards, in order to ensure proper identification and treatment of inadvertent discoveries. The purpose of the Workers Environmental Awareness Program (WEAP) training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.

Plan Requirements and Timing: Prior to commencement of project construction, PSUSD shall contract with a qualified archaeologist to prepare materials and deliver WEAP training to construction workers engaged in trenching and light pole foundation excavation; the requirement for WEAP training shall be included on grading or civil improvement plan sheets. The WEAP training shall be completed before ground disturbing activities begin. Monitoring: The construction contractor or PSUSD facilities management staff will verify workers receive the WEAP training prior to construction start.

MM CUL-2: Inadvertent Discoveries/Spot Monitoring: A qualified archaeologist, meeting the Secretary of Interior's Standards, shall be retained and on-call to conduct spot monitoring and respond to and address any inadvertent discoveries identified during ground disturbing activities whether within disturbed, imported or native soils. A qualified archaeological principal investigator, meeting the Secretary of the Interior's Professional Qualification Standards, shall oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs for those days monitoring occurs.

25 Palm Springs Unified School District, Draft Environmental Impact Report, Section 3.4: Cultural Resources, 2006.

In the event that potential prehistoric or historic-era archaeological resources (sites, features, or artifacts) are exposed during construction activities for the project, all construction work occurring within 50 feet of the find shall immediately stop and a qualified archaeologist must be notified immediately to assess the significance of the find and determine whether or not additional study is warranted.

Depending upon the significance of the find under the California Environmental Quality Act, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work (e.g., preparation of an archaeological treatment plan, testing, or data recovery) may be warranted.

If Native American resources are discovered or are suspected, each of the consulting tribes for the Project will be notified and as dictated by California Health and Safety Code Section 7050.5, PRC Section 5097.98, and the California Code of Regulations (CCR) Section 15064.5(e).

MM CUL-3: In the unlikely event that earth-disturbing activities conducted by the District and/or its construction contractors identify undiscovered human remains, the District will comply with Government Code Sections 27460 et seq.86, Section 27491, and Public Resources Code (PRC) Section 5097.9887. These regulations would require earthmoving activities to halt until the Riverside County Coroner can determine whether the remains are subject to the provisions of Section 27491 or any other related provisions of law. The required recommendations concerning the treatment and disposition of the human remains would be subject to the person responsible for the excavation, or to his or her authorized representative.

Additionally, pursuant to California Health and Safety Code Section 7050.588, the coroner shall make a determination within two working days of notification of the discovery of the human remains. If the coroner determines that the remains are not subject to his or her authority and recognizes, or has reason to believe, that they are those of a Native American, he or she shall contact the Native American Heritage Commission by telephone within 24 hours. The District will comply with existing regulations and potential impact related to the accidental discovery of human remains.

LEVEL OF SIGNIFICANCE OF MITIGATION

Impacts associated with cultural resources would be less than significant. Therefore, no significant unavoidable adverse impacts relating to cultural resources would result from the proposed Project.

5.5 GREENHOUSE GAS EMISSIONS

INTRODUCTION

This section of the Draft Supplemental Environmental Impact Report (SEIR) evaluates the potential for the proposed Rancho Mirage High School (RMHS) Field Lighting Project (Project) to generate greenhouse gas (GHG) emissions that may have a significant effect on the environment or to conflict with plans and policies adopted for the purpose of reducing greenhouse gas emissions. Various federal, State, regional, and local programs and regulations related to greenhouse gas emissions are discussed in this section.

A quantified estimate of the GHG emissions that could result from the development of the land uses that would be allowed by the Project is provided. Modeling datasheets for global climate change emissions are included as part of the air quality modeling in **Appendix C: Air Quality and Greenhouse Gas Data** of this EIR.

REGULATORY SETTING

Federal

Federal Clean Air Act

The US Supreme Court ruled in *Massachusetts v. Environmental Protection Agency*[1] that carbon dioxide (CO_2) and other GHGs are pollutants under the federal Clean Air Act (CAA), which the US Environmental Protection Agency (USEPA) must regulate if it determines they pose an endangerment to public health or welfare.[2] The Court did not mandate that the USEPA enact regulations to reduce GHG emissions. Instead, the Court found that the USEPA could avoid taking action if it found that GHGs do not contribute to climate change or if it offered a "reasonable explanation" for not determining that GHGs contribute to climate change.

On April 17, 2009, the USEPA issued a proposed finding that GHGs contribute to air pollution that may endanger public health or welfare. On April 24, 2009, the proposed rule was published in the Federal Register under Docket ID No. EPA-HQ-OAR-2009-0171.[3] The USEPA stated that high atmospheric levels of GHGs "are the unambiguous result of human emissions and are very likely the cause of the observed increase in average temperatures and other climatic changes." The USEPA further found that "atmospheric concentrations of greenhouse gases endanger public health and welfare within the meaning

1 *Massachusetts v. Environmental Protection Agency*, 127 S.Ct. 1438 (2007).

2 Perry W. Payne and Sara Rosenbaum. "Massachusetts et al. v Environmental Protection Agency: Implications for Public Health Policy and Practice." *Public Health Reports 122 No. 6 (2007)*: 817–819. https://doi.org/10.1177/003335490712200614. Accessed March2023.

3 Federal Register. "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act" (December 15, 2009). https://www.federalregister.gov/documents/2009/12/15/E9-29537/endangerment-and-cause-or-contribute-findings-for-greenhouse-gases-under-section-202a-of-the-clean. Accessed March 2023.

of Section 202 of the Clean Air Act." The final rule was effective on January 14, 2010.[4] While these findings alone did not impose any requirements on industry or other entities, this action was a prerequisite to regulatory actions by the USEPA, including, but not limited to, GHG emissions standards for light-duty vehicles.

In response, the USEPA promulgated a regulation to require reporting of all GHG emissions from all sectors of the economy. The final rule applies to fossil fuel suppliers and industrial gas suppliers, direct greenhouse gas emitters and manufacturers of heavy-duty and off-road vehicles and engines. The rule does not require control of greenhouse gases; rather, it requires only that sources above certain threshold levels monitor and report emissions.[5]

Corporate Average Fuel Economy (CAFE) Standards

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the George W. Bush administration issued Executive Order 13432 in 2007, directing the USEPA, the US Department of Transportation (USDOT), and the US Department of Energy (USDOE) to establish regulations that reduce GHG emissions from motor vehicles, nonroad vehicles, and nonroad engines by 2008.[6] In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency for and GHG emissions from cars and light-duty trucks for model year 2011; in 2010, the USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.[7]

In 2010, President Obama issued a memorandum directing the USEPA, USDOT, USDOE, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles.[8] The proposed standards projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021. On May 2, 2022, NHTSA also finalized fuel economy standards for passenger cars and light trucks for model years 2024–2025 that increase at a rate of 8 percent per year and increase at a rate of 10 percent per year for

4 United States Environmental Protection Agency (USEPA). "Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Section 202(a) of the Clean Air Act." https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a. Accessed March 2023.

5 Federal Register. "Mandatory Reporting of Greenhouse Gases." October 30, 2009. https://www.federalregister.gov/documents/2009/10/30/E9-23315/mandatory-reporting-of-greenhouse-gases. Accessed March 2023.

6 US Government Publishing Office, Administration of George W. Bush. *Executive Order 13432—Cooperation Among Agencies in Protecting the Environment With Respect to Greenhouse Gas Emissions From Motor Vehicles, Nonroad Vehicles, and Nonroad Engines, 631.* May 14, 2007. https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:bad1942b-aebc-3416-b8c0-5115a5c50227. Accessed March 2023.

7 USEPA. "Regulations for Greenhouse Gas Emissions from Commercial Trucks & Buses." December 27, 2017. https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucksAccessed March 2023.

8 USEPA. "Presidential Announcements and Letters of Support related to Greenhouse Gas Emissions." August 28, 2017. https://www.epa.gov/regulations-emissions-vehicles-and-engines/presidential-announcements-and-letters-support-relatedAccessed March 2023.

model year 2026 vehicles. NHTSA currently projects that the revised standards would require an industry fleet-wide average of roughly 49 mpg in model year 2026 and would reduce average fuel outlays over the lifetimes of affected vehicles that provide consumers hundreds of dollars in net savings.[9]

In addition to the regulations applicable to cars and light-duty trucks described above, in 2016, the USEPA and NHTSA finalized Phase 2 standards for medium and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution. If implemented, the Phase 2 standards would be expected to lower CO_2 emissions by approximately 1.1 billion metric tons (MT), save vehicle owners fuels costs of about $170 billion.[10] But as discussed above, the USEPA and NHTSA have proposed to roll back GHG and fuel economy for cars and light-duty trucks, which suggest a similar rollback of Phase 2 standards for medium and heavy-duty vehicles may be pursued.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:[11]

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of renewable fuel in 2022, with at least 16 billion gallons from cellulosic biofuels and a cap of 15 billion gallons for corn-starch ethanol;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks; and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

9 Federal Register. "Corporate Average Fuel Economy Standards for Model Years 2024–2026 Passenger Cars and Light Trucks." May 2, 2022. https://www.govinfo.gov/content/pkg/FR-2022-05-02/pdf/2022-07200.pdf. Accessed March 2023.

10 USEPA. *USEPA and NHTSA Adopt Standards to Reduce GHG and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles for Model Year 2018 and Beyond*. August 2016. https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100P7NL.txt. accessed March 2023.

11 USEPA. "Summary of the Energy Independence and Security Act." https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act. accessed March 2023.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."[12]

State

Executive Orders

Executive Order S-3-05

Executive Order S-3-05, signed by Governor Arnold Schwarzenegger and issued in June 2005, proclaimed that California is vulnerable to the impacts of climate change. It declared that increased temperatures could reduce the Sierra snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established the following total GHG emission targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

However, in adopting the California Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32 (Pavley), discussed below, the Legislature did not adopt the 2050 horizon-year goal from Executive Order No. S-3-05 and, in the 2006 legislative session, rejected legislation to enact the Executive Order's 2050 goal.

Executive Order S-01-07

Executive Order S-1-07, the Low Carbon Fuel Standard (issued on January 18, 2007), requires a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020.[13] Regulatory proceedings and implementation of the Low Carbon Fuel Standard have been directed to the California Air Resources Board (CARB). The Low Carbon Fuel Standard has been identified by CARB as a discrete early action item in the adopted Climate Change Scoping Plan (discussed below). CARB expects the Low Carbon Fuel Standard to achieve the minimum 10 percent reduction goal; however, many of the early action items outlined in the Climate Change Scoping Plan work in tandem with one another. Other specific emission reduction measures included are the Million Solar Roofs Program[14] and Assembly Bill (AB) 1493 (Pavley I), Vehicle Emissions: Greenhouse Gases, which establishes motor vehicle GHG emissions

12 A green job, as defined by the United States Department of Labor, is a job in business that produce goods or provide services that benefit the environment or conserve natural resources.

13 Office of the Governor. *Executive Order S-01-07*. January 18, 2007. http://climateactionnetwork.ca/wp-content/uploads/2011/06/eos0107.pdf. Accessed March 2023.

14 US Department of Energy. "Laying the Foundation for Solar America: The Million Solar Roofs Initiative." October 2016. https://www.nrel.gov/docs/fy07osti/40483.pdf. Accessed March 2023.

standards.[15] To avoid the potential for double-counting emission reductions associated with AB 1493, the Climate Change Scoping Plan has modified the aggregate reduction expected from the Low Carbon Fuel Standard to 9.1 percent. In accordance with the Climate Change Scoping Plan, this analysis incorporates the modified reduction potential for the Low Carbon Fuel Standard. CARB released a draft version of the Low Carbon Fuel Standard in October 2008. The final regulation was approved by the Office of Administrative Law and filed with the Secretary of State on January 12, 2010; the Low Carbon Fuel Standard became effective on the same day.

Executive Order B-30-15

Executive Order B-30-15, signed by Governor Edmund Gerald "Jerry" Brown and issued on April 29, 2015, established a new Statewide policy goal to reduce GHG emissions to 40 percent below their 1990 levels by 2030. Reducing GHG emissions by 40 percent below 1990 levels in 2030, and by 80 percent below 1990 levels by 2050 (consistent with Executive Order S-3-05), aligns with scientifically established levels needed to limit global warming to less than 2 degrees Celsius.[16]

Executive Order B-55-18

Executive Order B-55-18, issued by Governor Brown in September 2018, establishes a new statewide goal to achieve carbon neutrality as soon as possible, but no later than 2045, and achieve and maintain net negative emissions thereafter. Based on this executive order, CARB would work with relevant state agencies to develop a framework for implementation and accounting that tracks progress towards this goal, as well as ensuring future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

In October 2020, CARB released a study which evaluated three scenarios that achieve carbon neutrality in California by 2045. The study was used by CARB in development of the 2022 Scoping Plan update, released May 10, 2022.[17] More ambitious carbon reduction scenarios that achieve carbon neutrality prior to 2045 may be considered as part of future analyses by the State.

The scenarios analyzed to achieve carbon neutrality include a High Carbon Dioxide Removal (CDR) scenario, Zero Carbon Energy scenario, and a Balanced scenario. The High CDR scenario achieves GHG reductions by relying on CO_2 removal strategies. The Zero Carbon Energy scenario is based on the assumption of zero-fossil fuel emissions by 2045. The Balanced scenario represents a middle point between the High CDR scenario and Zero Carbon Energy scenario. The scenarios would achieve at least

15 The standards enacted in Pavley I are the first GHG standards in the nation for passenger vehicles and took effect for model years starting in 2009 and going through 2016. Pavley I could potentially result in 27.7 million metric tons CO2e reduction in 2020. Pavley II will cover model years 2017 to 2025 and potentially result in an additional reduction of 4.1 million metric tons CO2e.

16 Office of the Governor. "Governor Brown Established Most Ambitious Greenhouse Gas Reduction Target in North America." April 29, 2015. https://www.ca.gov/archive/gov39/2015/04/29/news18938/index.html. Accessed March 2023.

17 Energy+Environmental Economics (E3). *Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board*. October 2020. https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:85bd16aa-f670-3fa2-813f-eedd14dd9f82. Accessed March 2023.

an 80-percent reduction in GHGs by 2045, relative to 1990 levels. Remaining CO_2 would be reduced to zero by applying carbon dioxide removal strategies, including sinks from natural and working lands and negative emissions technologies like direct air capture.[18,19]

Under each of these scenarios, CARB proposed reduction strategies for various sectors that contribute GHG emissions throughout the State. Although specific details are not yet available for the GHG reduction measures discussed above, implementation of these measures would require regulations to be enforced by the State.

Assembly Bill 32 and Related Legislation

AB 32, the Global Warming Solutions Act of 2006, requires a sharp reduction of GHG emissions to 1990 levels by 2020, which is consistent with the California Climate Action Team, which works to coordinate statewide efforts to implement global warming emission reduction programs and the state's Climate Adaptation Strategy after the passing of AB 32. To achieve these goals, AB 32 mandates that CARB establish a quantified emissions cap and institute a schedule to meet the cap; implement regulations to reduce Statewide GHG emissions from stationary sources consistent with the California Climate Action Team strategies; and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. To reach the reduction targets, AB 32 requires CARB to adopt—in an open, public process—rules and regulations that achieve the maximum technologically feasible and cost-effective GHG reductions.

The California Climate Action Team stated that "smart land use" is an umbrella term for strategies that integrate transportation and land-use decisions. Such strategies generally encourage jobs/housing proximity, promote transit-oriented development (TOD), and encourage high-density residential/commercial development along transit corridors. These strategies develop more efficient land-use patterns within each jurisdiction or region to match population increases, workforce, and socioeconomic needs for the full spectrum of the population. "Intelligent transportation systems" is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and the movement of people, goods, and service.[20]

Climate Change Scoping Plan

CARB approved a Climate Change Scoping Plan (Scoping Plan) on December 11, 2008, as required by AB 32. The Scoping Plan proposed a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our

18 Sinks are defined as natural or artificial reservoirs that accumulate and store a carbon-containing chemical compound for an indefinite period.

19 Energy+Environmental Economics (E3), Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board, October 2020, p. 22.

20 California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the Legislature (March 2006), 58.

energy sources, save energy, create new jobs, and enhance public health."[21] The Scoping Plan had a range of GHG reduction actions, including direct regulations; alternative compliance mechanisms; monetary and nonmonetary incentives; voluntary actions; market-based mechanisms, such as a cap-and-trade system; and an AB 32 implementation regulation to fund the program.

The Scoping Plan called for a "coordinated set of strategies" to address all major categories of GHG emissions.[22] Transportation emissions were to be addressed through a combination of higher standards for vehicle fuel economy, implementation of the Low Carbon Fuel Standard, and greater consideration to reducing trip length and generation through land use planning and transit-oriented development. Buildings, land use, and industrial operations were encouraged and, sometimes, required to implement energy efficiency practices. Utility energy supplies will change to include more renewable energy sources through implementation of the Renewables Portfolio Standard. Established in 2002 under Senate Bill (SB) 1078, the California Renewables Portfolio Standards (RPS) were accelerated in 2006 under SB 107, which required that, by 2010, at least 20 percent of electricity retail sales come from renewable sources. In April 2016, the California Energy Commission (CEC) updated the RPS pursuant to SB 350, intended to set the new target 50 percent renewables by 2030.[23] This will be complemented with an emphasis on local generation, including rooftop photovoltaics and solar hot water installations. Additionally, the Scoping Plan emphasized opportunities for households and businesses to save energy and money through increasing energy efficiency. It indicated that substantial savings of electricity and natural gas would be accomplished through improving energy efficiency.

Subsequent to the adoption of the Scoping Plan, a lawsuit was filed challenging CARB's approval of the Scoping Plan Functional Equivalent Document (Supplemental FED). On May 20, 2011 (Case No. CPF-09-509562), the court found that the environmental analysis of the alternatives in the Supplemental FED to the Scoping Plan was not sufficient under CEQA. CARB staff prepared a revised and expanded environmental analysis of the alternatives, and the Supplemental FED to the Scoping Plan was approved on August 24, 2011. The Supplemental FED to the Scoping Plan indicated that the potential exists for adverse environmental impacts associated with implementation of the various GHG emission reduction measures recommended in the Scoping Plan.

CARB updated the Scoping Plan in May 2014 (2014 Scoping Plan). The 2014 Scoping Plan[24] adjusted the 1990 GHG emissions levels to 431 million metric tons of carbon dioxide equivalents ($MMTCO_2e$); the updated 2020 GHG emissions forecast is 509 $MMTCO_2e$, which credited for certain GHG emission reduction

21 CARB. *Climate Change Scoping Plan: A Framework for Change*. December 2008. https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed March 2023.

22 CARB. *Climate Change Scoping Plan*, p. ES-7.

23 California Energy Commission (CEC). *Enforcement Procedures for the Renewables Portfolio Standards for Local Publicly Owned Electric Utilities: Amended Regulations.* April 12, 2016. https://www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard/rps-enforcement-regulations-publicly. Accessed March 2023.

24 CARB. *First Update to the Climate Change Scoping Plan: Building on the Framework Pursuant to AB 32, The California Global Warming Solutions Act of 2006.* May 2014. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed March 2023.

measures already in place (e.g., the RPS). The 2014 Scoping Plan also recommended a 40 percent reduction in GH emissions from 1990 levels by 2030, and a 60 percent reduction in GHG emissions from 1990 levels by 2040.

The 2017 Scoping Plan,[25] approved on December 14, 2017, builds on previous programs, and takes aim at the 2030 target established by the 2016 SB 32 (Pavley), which is further discussed below. The 2017 Scoping Plan outlines options to meet California's aggressive goals to reduce GHGs by 40 percent below 1990 levels by 2030. In addition, the Scoping Plan incorporates the State's updated RPS requiring utilities to procure 50 percent of their electricity from renewable energy sources by 2030. It also raises the State's Low Carbon Fuel Standard and aims to reduce emissions of methane and hydrofluorocarbons by 40 percent from 2013 levels by 2030 and emissions of black carbon by 50 percent from 2013 levels.

The 2022 Scoping Plan,[26] adopted in November 2022, lays out the sector-by-sector roadmap for California, to achieve carbon neutrality by 2045 or earlier, outlining a technologically feasible, cost-effective, and equity-focused path to achieve the state's climate target. This is a challenging but necessary goal to minimize the impacts of climate change. Previous plans have focused on specific GHG reduction targets for our industrial, energy, and transportation sectors—first to meet 1990 levels by 2020, then to meet the more aggressive target of 40 percent below 1990 levels by 2030. The 2022 Scoping Plan extends and expands upon these earlier plans with a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. This plan also takes the unprecedented step of adding carbon neutrality as a science-based guide and touchstone for California's climate work. The 2022 Scoping Plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the state's natural and working lands and using a variety of mechanical approaches.

Cap-and-Trade Program

The Climate Change Scoping Plan identified a Cap-and-Trade Program as one of the strategies California would employ to reduce GHG emissions. CARB asserts that this program will help put California on the path to meet its goal of ultimately achieving an 80-percent reduction from 1990 levels by 2050. Under the Cap-and-Trade Program, an overall limit on GHG emissions from capped sectors was established, and facilities subject to the cap will be able to trade permits to emit GHGs.

CARB designed and adopted a California Cap-and-Trade Program[27] pursuant to its authority under AB 32. The Cap-and-Trade Program was designed to reduce GHG emissions from public and private major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve the State's emission-reduction mandates. The statewide cap for GHG emissions

25 CARB. *California's 2017 Climate Change Scoping Plan*. November 2017. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed March 2023.

26 CARB. *California's 2022 Climate Change Scoping Plan*. November 2022. https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf. Accessed March 2023.

27 California Code of Regulations 17, Sections 95800–96023.

from the capped sectors[28] (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the Program's duration.

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities that emit more than 25,000 $MTCO_2e$ per year must comply with the Cap-and-Trade Program.[29] Triggering of the 25,000 $MTCO_2e$ per year "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Mandatory Reporting Rule or "MRR").[30]

Each covered entity with a compliance obligation is required to surrender "compliance instruments"[31] for each $MTCO_2e$ of GHG they emit. Covered entities are allocated free allowances in whole or part (if eligible), and can buy allowances at auction, purchase allowances from others, or purchase offset credits. The Cap-and-Trade Regulation provides a firm cap, ensuring that the statewide emission limits will not be exceeded.

In sum, the Cap-and-Trade Program will achieve aggregate, rather than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory framework adopted by CARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures.

The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported.[32] Accordingly, for projects that are subject to CEQA, GHG emissions associated with electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period.[33]

The Program applies to emissions that cover approximately 80 percent of the State's GHG emissions. Demonstrating the efficacy of AB 32 policies, California achieved its 2020 GHG Reduction Target four years earlier than mandated. The largest reductions were the result of increased renewable electricity in the electricity sector, which is a covered sector in the Cap-and-Trade Program.

---

28 California Code of Regulations 17, Sections 95811, 95812.

29 California Code of Regulations 17, Section 95812.

30 California Code of Regulations 17, Sections 95100–95158.

31 Compliance instruments are permits to emit, the majority of which will be "allowances," but entities also are allowed to use CARB-approved offset credits to meet up to 8% of their compliance obligations.

32 California Code of Regulations 17, Section 95811(b).

33 California Code of Regulations 17, Sections 95811, 95812(d).

AB 398 was enacted in 2017 to extend and clarify the role of the State's Cap-and Trade Program through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-Trade Program to establish updated protocols and allocation of proceeds to reduce GHG emissions.

Pavley Standards

AB 1493 (Chapter 200, Statutes of 2002), enacted on July 22, 2002, requires CARB to set GHG emission standards for passenger vehicles, light duty trucks, and other vehicles whose primary use is non-commercial personal transportation manufactured in and after 2009. In 2004, CARB approved the Pavley regulation to require automakers to control GHG emissions from new passenger vehicles for the 2009 through 2016 model years. Upon adoption of subsequent federal GHG standards by the United States Environmental Protection Agency (USEPA) that preserved the benefits of the Pavley regulations, the Pavley regulations were revised to accept compliance with the federal standards as compliance with California's standards in the 2012 through 2016 model years. This is referred to as the "deemed to comply" option.

In January 2012, CARB approved GHG emission regulations which require further reductions in passenger GHG emissions for 2017 and subsequent vehicle model years. As noted above, in August 2012, the USEPA and USDOT adopted GHG emission standards for model year 2017 through 2025 vehicles. On November 15, 2012, CARB approved an amendment that allows manufacturers to comply with the 2017–2025 national standards to meet state law. Automobile manufacturers generally comply with these standards through a combination of improved energy efficiency in vehicle equipment (e.g., air conditioning systems) and engines as well as sleeker aerodynamics, use of strong but lightweight materials, and lower-rolling resistance tires.[34]

Advanced Clean Cars Regulations

In 2012, CARB approved the Advanced Clean Cars program, an emissions-control program for model years 2015–2025.[35] The components of the Advanced Clean Cars program include the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the ZEV regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years.[36] During the March 2017 midterm

34 CARB. *California's Advanced Clean Cars Midterm Review: Summary Report for the Technical Analysis of the Light Duty Vehicle Standards*, pp. ES-17, C-9. January 18, 2017https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:ba413172-1428-3c1f-ba9f-4975761871ab Accessed March 2023.

35 CARB. "California's Advanced Clean Cars Program." https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program. Accessed March 2023.

36 CARB. "California's Advanced Clean Cars Program." https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program. Accessed March 2023.

review, CARB voted unanimously to continue with the vehicle GHG emission standards and the ZEV program for cars and light trucks sold in California through 2025.[37]

In addition, Governor Gavin Newsom signed an executive order (Executive Order No. N-79-20) on September 23, 2020, that would phase out sales of new gas-powered passenger cars by 2035 in California with an additional 10-year transition period for heavy vehicles. The State would not restrict used car sales, nor forbid residents from owning gas-powered vehicles. In accordance with the executive order, CARB has developed a 2020 Mobile Source Strategy, a comprehensive analysis that presents scenarios for possible strategies to reduce the carbon, toxic and unhealthy pollution from cars, trucks, equipment, and ships. The strategies will provide important information for numerous regulations and incentive programs going forward by conveying what is necessary to address the aggressive emission reduction requirements.

The primary mechanism for achieving the ZEV target for passenger cars and light trucks is CARB's Advanced Clean Cars II (ACC II) Program. The ACC II regulations will focus on post-2025 model year light-duty vehicles, as requirements are already in place for new vehicles through the 2025 model year.

AB 197: Statewide GHG Emissions Limit

On September 8, 2016, Governor Brown signed AB 197, which requires CARB to approve a Statewide GHG emissions limit equivalent to the Statewide GHG emission level in 1990 to be achieved by 2020.[38] AB 197 requires the CARB to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions. The bill became effective on January 1, 2017.

AB 1279: California Climate Crisis Act

AB 1279[39] establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage (CCUS) technologies.

37 CARB. "News Release: CARB finds vehicle standards are achievable and cost-effective." https://ww2.arb.ca.gov/news/carb-finds-vehicle-standards-are-achievable-and-cost-effective. Accessed March 2023.

38 California Legislative Information. *Assembly Bill No. 197*. September 8, 2016. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB197. Accessed March 2023.

39 California Legislative Information. *Assembly Bill No. 1279*. September 16, 2022. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279. Accessed March 2023.

Senate Bills

Senate Bill 375

SB 375, signed into law in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations.[40] The act requires metropolitan planning organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) that prescribes land use allocation in that MPO's regional transportation plan (RTP).

Senate Bill X1-2: 2020 Renewable Portfolio Standard

On April 12, 2011, California governor Jerry Brown signed SB X1-2.[41] This bill supersedes the 33 percent by RPS created by Executive Order S-14-08, previously signed by Governor Schwarzenegger. The RPS required that all retail suppliers of electricity in California serve 33 percent of their load with renewable energy by 2020. A number of significant changes are made in SB X1-2. It extends application of the RPS to all electric retailers in the State, including municipal and public utilities, and community choice aggregators.

SB X1-2 creates a three-stage compliance period for electricity providers to meet renewable energy goals: 20 percent of retail sales must be renewable energy products by 2013, 25 percent of retail sales must be renewable energy products by 2016, and 33 percent of retail sales must be renewable energy products by 2020. The 33 percent level must be maintained in the years that follow. This three-stage compliance period requires the RPS to be met increasingly with renewable energy that is supplied to the California grid and is located within or directly proximate to California. SB X1-2 mandates that renewables from this category make up:

- At least 50 percent for the 2011–2013 compliance period;
- At least 65 percent for the 2014–2016 compliance period; and
- At least 75 percent for 2016 and beyond.

SB X1-2 sets rules for the use of Renewable Energy Credits (RECs) as follows:

- Establishes a cap of no more than 25 percent unbundled RECs going toward the RPS between 2011 and 2013, 15 percent from 2014 to 2016, and 10 percent thereafter;
- Does not allow for the grandfathering of tradable REC contracts executed before 2010, unless the contract was (or is) approved by the California Public Utilities Commission (CPUC);
- Allows banking of RECs for 3 years only; and

40 California Legislative Information. *Senate Bill No. 375.* September 30, 2008. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080SB375. Accessed March 2023.

41 CEC. "Renewable Portfolio." http://www.energy.ca.gov/portfolio. Accessed March 2023.

- Allows energy service providers, community choice aggregators, and investor-owned utilities with 60,000 or fewer customers to use 100 percent RECs to meet the RPS.

SB X1-2 also eliminates the Market Price Referent, which was a benchmark to assess the above-market costs of RPS contracts based on the long-term ownership, operating, and fixed-price fuel costs for a new 500-megawatt (mW) natural-gas-fired, combined-cycle gas turbine.

Senate Bill 350: Clean Energy and Pollution Reduction Act

SB 350, the Clean Energy and Pollution Reduction Act of 2015, was signed on October 7 of that year.[42] SB 350 implements some of the goals of Executive Order B-30-15 described above. The objectives of SB 350 are: (1) to increase the procurement of our electricity from renewable sources from 33 percent to 50 percent; and (2) to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.[43]

Senate Bill 32 and Assembly Bill 197

Enacted in 2016, SB 32 (Pavley, 2016) codifies the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that Statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. The reduction of GHG emissions is a priority for development projects throughout the State and is achieved through a combination of policies, planning, direct regulations, market approaches, incentives, and voluntary efforts. Generally speaking, the focus of GHG emission reductions is on energy production and motor vehicles.

SB 32 was coupled with a companion bill: AB 197 (Garcia, 2016). Designed to improve the transparency of CARB's regulatory and policy-oriented processes, AB 197 created the Joint Legislative Committee on Climate Change Policies, a committee with the responsibility to ascertain facts and make recommendations to the Legislature concerning Statewide programs, policies and investments related to climate change. AB 197 also requires CARB to make certain GHG emissions inventory data publicly available on its website; consider the social costs of GHG emissions when adopting rules and regulations designed to achieve GHG emission reductions; and include specified information in all Scoping Plan updates for the emission reduction measures contained therein.

Senate Bill 905

SB 905[44] requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate CCUS and carbon dioxide removal (CDR) projects and technology.

---

42 California Legislative Information. *Senate Bill No. 350.* October 7, 2015. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed March 2023.

43 California Legislative Information. *Senate Bill 350 (2015-2016 Reg, Session) Stats 2015, ch. 547.* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed March 2023.

44 California Legislative Information. *Senate Bill No. 905.* September 16, 2022. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB905. Accessed March 2023.

SB 905 requires CARB, on or before January 1, 2025, to adopt regulations creating a unified state permitting application for approval of CCUS and CDR projects. SB 905 also requires the Secretary of the Natural Resources Agency to publish a framework for governing agreements for two or more tracts of land overlying the same geologic storage reservoir for the purposes of a carbon sequestration project. Center for Biological Diversity v. California Department of Fish and Wildlife.

The California Supreme Court's decision published on November 30, 2015, in *Center for Biological Diversity v. California Department of Fish and Wildlife* (Case No. 217763; the Newhall Ranch case) reviewed the methodology used to analyze GHG emissions in an EIR prepared for a project that proposed 20,885 dwelling units with 58,000 residents on 12,000 acres of undeveloped land in a rural area of the City of Santa Clara.[45] That EIR used the "business as usual" (BAU) methodology to determine whether the project would impede the State of California's compliance with statutory emissions reduction mandate established by the AB 32 Scoping Plan. The Court did not invalidate the BAU approach entirely, but did hold that:

> *…the Scoping Plan nowhere related that statewide level of reduction effort to the percentage of reduction that would or should be required from individual projects, and nothing [Department of Fish and Wildlife] or Newhall have cited in the administrative record indicates the required percentage reduction from business as usual is the same for an individual project as for the entire state population and economy.*[46]

The California Supreme Court suggested regulatory consistency as a pathway to compliance, stating that a Lead Agency might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities. The Court recognized that to the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan, and adopted by CARB or other State agencies, a Lead Agency could appropriately rely on their use as showing compliance with performance-based standards adopted to fulfill a Statewide plan for the reduction or mitigation of greenhouse gas emissions.

This approach is consistent with CEQA Guidelines Section 15064, which provides that a determination that an impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including plans or regulations for the reduction of greenhouse gas emissions.

Division of State Architects

The proposed Project would be subject to the Division of State Architects (DSA) which provides design and construction oversight for k-12 schools, community colleges, and various other state-owned and

45 California Department of Fish and Wildlife. *Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan*. https://www.wildlife.ca.gov/regions/5/newhall. Accessed March 2023.

46 *Center for Biological Diversity et al. v. California Department of Fish and Wildlife (2015) (62 Cal.4th 204, 195 Cal.Rptr.3d 247, 361 P.3d 342).*

leased facilities in California.[47] DSA requires projects to comply with current California Energy Code as well as the California Green building standards code (CALGreen).[48]

CEQA Guidelines

In August 2007, the California State Legislature adopted Senate Bill 97 (SB 97) (Chapter 185, Statutes of 2007), requiring the OPR to prepare and transmit new CEQA Guidelines for the mitigation of GHG emissions or the effects of GHG emissions to the Resources Agency by July 1, 2009. In response to SB 97, the OPR adopted CEQA guidelines that became effective on March 18, 2010.

However, neither a threshold of significance or any specific mitigation measures are included or provided in the guidelines.[49] The guidelines require a lead agency to make a good-faith effort, based on the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. Discretion is given to the lead agency whether to: (1) use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance-based standards. Section 15064.4(b) states that the lead agency should focus on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. The analysis should consider a timeframe appropriate for the project and must reasonably reflect evolving scientific knowledge and state regulatory schemes (14 CCR 15064.4[b]). Furthermore, three factors are identified that should be considered in the evaluation of the significance of GHG emissions:

1. The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.[50]

Furthermore, while project- and cumulative level- significance determinations are provided below, it is generally recognized that global climate change and a project's GHG emissions are inherently cumulative issues, based on the science of global climate change.[51]

---

47 Division of State Architects, Resources , https://www.dgs.ca.gov/DSA/Resources. Accessed April 2023.

48 Division of Sate Architects, Sustainability Plan Review, https://www.dgs.ca.gov/DSA/Resources/Page-Content/Resources-List-Folder/Sustainability-Plan-Review?search=sustainbility%20plan. Accessed April 2023.

49 See 14 Cal. Code Regs. §§ 15064.7 (generally giving discretion to lead agencies to develop and publish thresholds of significance for use in the determination of the significance of environmental effects), 15064.4 (giving discretion to lead agencies to determine the significance of impacts from GHGs).

50 14 Cal. Code Regs. § 15064.4(b).

51 See, for example, Letter from Cynthia Bryant, Director of the Governor's Office of Planning and Research to Mike Chrisman, California Secretary for Natural Resources, dated April 13, 2009.

Regional and Local

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990.[52] The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan (AQMP).

In 2008, SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds. A GHG Significance Threshold Working Group was formed to further evaluate potential GHG significance thresholds.[53]

The SCAQMD proposed the use of a percent emission reduction target to determine significance for commercial/residential projects that emit greater than 3,000 $MTCO_2e$ per year. Under this proposal, commercial/residential projects that emit fewer than 3,000 $MTCO_2e$ per year would be assumed to have a less than significant impact on climate change. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 $MTCO_2e$ per year for stationary source/industrial projects where SCAQMD is the lead agency. However, the SCAQMD has yet to adopt a GHG significance threshold for land use development projects (e.g., residential/commercial projects). The Working Group has been inactive since 2011, and SCAQMD has not formally adopted any GHG significance threshold for other jurisdictions.

ENVIRONMENTAL SETTING

Existing Conditions

The 2006 EIR for the RMHS Campus[54] evaluated construction and operational emissions, as disused in **Section 5.02: Air Quality.** The EIR indicated that with mitigation measures, impacts to air quality would be less than significant. While greenhouse gas emissions were not analyzed at the time of the EIR, the air quality mitigation measures implemented would also reduce the amount of greenhouse gas emissions.

Greenhouse Gases and Climate Change

GHGs are global pollutants that have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere for a long enough time to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule depends on multiple variables and cannot be pinpointed, more CO_2 is currently emitted into the atmosphere than is avoided or sequestered. CO_2 sinks, or reservoirs,

52 SCAQMD. "SCAQMD's Historical Activity on Climate Change." http://www.aqmd.gov/nav/about/initiatives/climate-change. Accessed March 2023.

53 SCAQMD. "Greenhouse Gases CEQA Significance Thresholds." http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds. Accessed March 2023.

54 Palm Springs Unified School District, Draft Environmental Impact Report for the Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School (SCH 2006011095), September 2006., Section 3.2: Air Quality.

include vegetation and the ocean, which absorb CO_2 through photosynthesis and dissolution, respectively. These are two of the most common processes of CO_2 sequestration. Of the total annual human-caused CO_2 emissions, approximately 54 percent is sequestered within a year through ocean uptake, northern hemisphere forest regrowth, and other terrestrial sinks; the remaining 46 percent of human-caused CO_2 emissions are stored in the atmosphere.

Similarly, the effects of GHGs are borne globally (sea-level rise, hurricanes, droughts, etc.), as opposed to the localized air quality effects of criteria air pollutants and toxic air contaminants (TACs). The quantity of GHGs that it takes to ultimately result in climate change is not precisely known, but that quantity is enormous. No single project would be expected to measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or microclimates. However, it is the combined GHG contributions per project that create an impact.

Greenhouse Effect

GHGs play a critical role in determining the Earth's surface temperature because these gases absorb solar radiation. Solar radiation enters the Earth's atmosphere from space. A portion of the radiation is absorbed by the Earth's surface, and a smaller portion of this radiation is reflected back into space. The radiation absorbed by the Earth is reradiated as lower-frequency infrared radiation, which is then selectively absorbed by GHGs in the Earth's atmosphere. As a result, the greater the amount of GHGs in the atmosphere, the greater the amount of infrared radiation trapped, resulting in a warming of the atmosphere. This phenomenon is commonly referred to as the "greenhouse effect." Scientists have speculated that increased GHG emissions from human activity (anthropogenic) could lead to a less habitable climate. Anthropogenic GHG emissions leading to atmospheric levels in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the Earth's atmosphere and oceans, with corresponding effects on global air and water circulation patterns and climate. CO_2 emissions associated with fossil fuel combustion are the primary contributors to human-induced emissions.

Climate Change Effects for California

Climate change could affect environmental conditions in California in a variety of ways. One effect of climate change is rising sea levels. Sea levels along the California coast rose approximately 7 inches during the last century, and they are predicted to rise an additional 7 to 22 inches by 2100, depending on the future levels of GHG emissions. The effects of a rise in sea level could include increased coastal flooding, saltwater intrusion (especially a concern in the low-lying Sacramento–San Joaquin Delta, where pumps delivering potable water to Southern California could be threatened), and disruption of wetlands.

As the State's climate changes over time, the range of various plant and wildlife species could shift or be reduced, depending on the favored temperature and moisture regimes of each species. In the worst cases, some species would become extinct or be extirpated from the State if suitable conditions were no longer available. Additional concerns associated with climate change include a reduction in the

snowpack, leading to less overall water storage in the mountains (the largest "reservoir" in the State), and increased risk of wildfires caused by changes in rainfall patterns and plant communities. Changes in the climate can also impact California's weather patterns and rainfall, causing droughts in certain areas and flooding in others.

Sources of Greenhouse Gas Emissions

GHGs are the result of both natural and anthropogenic activities. With respect to anthropogenic activities, motor vehicle travel, air travel, consumption of fossil fuels for power generation, industrial processes, heating and cooling, landfills, agriculture, and wildfire are the primary sources of GHG emissions. Additionally, land use decisions and future development projects pursuant to implementation of a general plan can affect the generation of GHG emissions from multiple sectors, resulting in direct or indirect GHG emissions. For example, electricity consumed in the lighting and heating of buildings is an indirect source of GHG emissions because it requires electricity from power plants, which emits GHG directly into the atmosphere. Conversely, tailpipe emissions from the use of vehicles generates direct GHG emissions.

GHGs are a group of emissions that include CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, and nitrogen trifluoride (NF_3). Carbon dioxide is the most abundant GHG. As stated above, other GHGs are less abundant, but have higher global warming potential than CO_2. Thus, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2; denoted as CO_2e.

Greenhouse Gas Emissions Inventory and Trends

Existing Statewide GHG Emissions

California is the second largest contributor of GHGs in the United States and the 16th largest in the world.[55] In 2020, California produced 369.1 million metric tons of carbon dioxide equivalents ($MMTCO_2e$), including imported electricity, and excluding combustion of international fuels and carbon sinks or storage. The major source of GHGs in California is transportation, contributing to 37 percent of the State's total GHG emissions. The Statewide inventory of GHGs by sector is shown in **Table 5.5-1: California GHG Inventory 2012—2020.**

Table 5.5-1
California GHG Inventory 2012—2020

	Emissions ($MMTCO_2e$)								
Main Sector	2012	2013	2014	2015	2016	2017	2018	2019	2020
Transportation[a]	156.9	157.0	157.7	161.5	165.2	166.6	165.3	162.4	135.8
Electric Power	98.9	93.4	89.8	86.0	70.4	64.2	65.0	60.2	59.5
Industrial[b]	80.7	83.0	85.2	83.2	81.6	81.7	81.9	80.4	73.3

55 CEC. *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, Staff Final Report, CEC-600-2006-013-SF.* December 2006.

Table 5.5-1
California GHG Inventory 2012—2020

Main Sector	Emissions ($MMTCO_2e$)								
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Commercial and Residential	39.2	39.1	35.6	36.3	37.2	37.6	37.4	40.5	38.7
Agriculture	35.2	33.9	33.9	32.6	32.2	31.7	32.2	31.4	31.6
High GWP[c,d]	15.5	16.8	17.7	18.6	19.4	20.1	20.5	20.7	21.3
Recycled and waste	8.2	8.3	8.3	8.4	8.5	8.6	8.7	8.8	8.9
Total Emissions	**434.6**	**431.5**	**428.2**	**426.6**	**414.5**	**410.5**	**411.0**	**404.4**	**369.1**

Source: CARB. GHG Current California Emission Inventory Data. https://ww2.arb.ca.gov/ghg-inventory-data. Accessed March 2023.
[a] Includes equipment used in construction, mining, oil drilling, industrial and airport ground operations.
[b] Reflects emissions from combustion of natural gas, diesel, and lease fuel plus fugitive emissions.
[c] These categories are listed in the Industrial sector of CARB's GHG Emission Inventory sectors.
[d] This category is listed in the Electric Power sector of CARB's GHG Emission Inventory sector.
Note: $MMTCO_2e$ – million metric tons of carbon dioxide equivalent emissions

Regional Emissions

The breakdown of GHG emissions within the Coachella Valley follows the statewide pattern with the most significant sources of GHGs being transportation and fuel combustion, and electricity generation. On-road transportation and fuel combustion account for 94 percent of GHGs in the Coachella Valley. The Coachella Valley region produced 4.31 $MMTCO_2e$ GHGs in 2005 from direct emissions.[56]

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The CEQA Guidelines include thresholds to determine the significance of GHG emissions impacts (Appendix G of the CEQA Guidelines). Appendix G provides that a project would have a significant environmental impact if it would:

Threshold 5.5-1: **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**

Threshold 5.5-2: **Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.**

Pursuant to State CEQA Guidelines Section 15064.4, the methods suitable for analysis of GHG emissions are:

- Use a model or methodology to quantify greenhouse gas emissions resulting from a project. The Lead Agency has the discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The Lead Agency should explain the limitation of the particular model or methodology selected for use.

56 South Coast Air Quality Management District. *Greenhouse Gas (GHG) Inventories for the Coachella Valley, prepared for the Coachella Valley Association of Governments*. June 2011.

- Rely on a qualitative analysis or performance-based standards.

The SCAQMD, OPR, CARB, CAPCOA, or any other state or regional agency adopted a numerical significance threshold for assessing GHG emissions that is applicable to the Project. Since there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the Project's impacts related to GHG emissions focuses on its consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigation GHG emissions (CEQA Guidelines section 15183.5).

Consistency Analysis

The Project's GHG impacts are evaluated by assessing the Project's consistency with applicable GHG reduction strategies.

OPR encourages lead agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

CARB's Climate Change Scoping Plan includes a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and nonmonetary incentives, voluntary actions, market-based mechanisms, and an AB 32 implementation regulation. Thus, if the Project is designed in accordance with these policies and regulations, the Project would result in a less-than-significant impact, because it would be consistent with the overarching State regulations on GHG reduction (AB 32).

A consistency analysis is provided below and describes the Project's compliance with, or exceedance of performance-based standards included in the regulations outlined in the applicable portions of CARB's Climate Change Scoping Plan, SCAG's 2020—2045 RTP/SCS, and the 2022 California Energy Code and CALGreen.

Methodology

Methodologies for Evaluating Significance

The analysis of the Project's GHG emissions consists of a quantitative analysis of the GHG emissions generated by the Project and a qualitative analysis of the Project's consistency with adopted GHG-related legislation, plans, and policies. This approach is in accordance with CEQA Guidelines Section 15064.4, which affirms the discretion of a lead agency to determine, in the context of a particular project, whether to use quantitative and/or qualitative methodologies to determine the significance of a project's impacts.

Emissions Inventory Modeling

The total GHG emissions from the Project were quantified to determine the level of the Project's estimated annual GHG emissions. As with the Air Quality section of this EIR (see **Section 5.2: Air Quality**),

construction emissions were estimated using CalEEMod 2022.1 by assuming a conservative estimate of construction activities and applying the mobile-source emissions factors.

CalEEMod was also used to estimate operational GHG emissions due to increased electricity usage for field lighting. CalEEMod calculates energy use from systems covered by Title 24, including energy use from lighting.

Project Impacts

Threshold 5.5-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction

Construction activity impacts are relatively short in duration, they contribute a relatively small portion of the total lifetime GHG emissions of a project. The combustion of fossil fuels in construction equipment results in GHG emissions of CO_2 and smaller amounts of CH_4 and N_2O. The Project would use off-road diesel-powered equipment such as tractors, loaders, backhoes, trenchers, cement and mortar mixers, cranes, and excavators during construction. Emissions of GHG would also result from the combustion of fossil fuels from on-road vehicles such as vendor trucks delivering materials, and construction worker vehicles commuting to and from the Project Site. Typically, light-duty and medium-duty automobiles and trucks would be used for worker trips and heavy-duty trucks would be used for vendor trips. The vast majority of motor vehicles used for worker trips rely on gasoline as an energy source while motor vehicles used for vendor trips would primarily rely on diesel as an energy source.

Construction activities would last approximately 6 to 9 months beginning September 2023 and ending May 2024. The total emissions from construction of the Project are shown in **Table 5.5-2: Construction GHG Emissions**. Total GHG emissions from the construction activities would be 239 $MTCO_2e$ across 2023 and 2024 as construction would begin in 2023 and conclude in 2024.

TABLE 5.5-2
CONSTRUCTION GHG EMISSIONS

Construction Phase	$MTCO_2e$/Year
2023	119
2024	120
Overall Total	**239**

*Refer to **Appendix C** for Greenhouse Gas Data.*
Notes: GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent.

Operation

Emissions from increased electricity usage from field lighting use would occur every year after installation of the felid lighting upgrades.

As detailed in **Appendix C,** RMHS would utilize 221.41 kilowatts (kW) for field lighting. It was assumed that the Proposed Project would conservatively operate up to 5 hours per day, 365 days per year. The lighting would thus consume approximately 404,073.25 kilowatt hours per year (kWh/yr.) of electricity. This electricity usage was assumed in CalEEMod and would generate approximately 97.9 MTCO2e per year. Additionally, the Project would not result in the production of GHG emissions from area sources, mobile sources, solid waste emissions, water consumption, or wastewater emissions as the proposed Project would not increase the local population, number of students, or number of faculty on site.

As discussed under **Threshold 5.5-2** below, the proposed Project adheres to regulatory compliance measures that would reduce GHG emissions profile. The analysis below shows that the Project would not conflict with applicable plans including CARB's Climate Change Scoping Plan, SCAG's 2020—2045 RTP/SCS.

The Project would have a less than significant direct or indirect GHG impact on the environment.

Threshold 5.5-2: Would the project conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

The Project's GHG impacts are evaluated by assessing the Project's consistency with applicable Statewide, regional, and local GHG reduction plans and strategies. On a regional level, the SCAG 2020-2045 RTP/SCS and the Climate Change Scoping Plan contain measures to achieve VMT reductions required under SB 375 and reduction of overall carbon emissions as required by AB 32, respectively.

The Project would result in a less than significant impact.

Climate Change Scoping Plan

The Climate change Scoping Plan focuses on major categories of GHG emissions including transportation, building operation, and energy supply. The proposed Project would only upgrade and modernize existing facilities, and would not increase transportation emissions, as discussed in **Section 5.7 Transportation**. Additionally, the operation of the project would only require electricity. In addition, Rancho Mirage receives electricity from Southern California Edison (SCE). SCE is required by the State of California to provide a portion of their power from renewable resources. In 2021, an estimated 43 percent of the power delivered by SCE came from carbon-free sources.[57] SCE goals include reaching 100 percent carbon free by 2045.[58] CARB's Climate Change Scoping Plan, SCAG's 2020—2045 RTP/SCS. and the Climate Change Scoping Plan have been adopted for the purpose of reducing the emissions of greenhouse gases.

---

57 Edison International, 2021 Sustainability Report, https://www.edison.com/sustainability/sustainability-report. Accessed March 2023.

58 Edison International, 2021 Sustainability Report, https://www.edison.com/sustainability/sustainability-report. Accessed March 2023.

Assessing the significance of a project's contribution to cumulative global climate change involves: (1) developing pertinent inventories of GHG emissions, and (2) considering project consistency with applicable emission reduction strategies and goals. As discussed above, the Proposed Project would not increase local population, student capacity, employment opportunities, or housing. As such, the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing greenhouse gas emissions.

Impacts would be less than significant.

CUMULATIVE IMPACTS

To achieve Statewide goals, CARB is continuing its ongoing process of updating, establishing, and implementing regulations to reduce Statewide GHG emissions. Currently, no applicable quantitative significance thresholds or specific reduction targets exist to assist in determining significance at the project or cumulative level. Additionally, currently no generally accepted methodology exists to determine whether GHG emissions associated with a specific project represent new emissions or existing and/or displaced emissions.

The following cumulative impacts are analyzed based on a list of past, present, and probable future projects related to cumulative impacts, described in **Section 4.0: Environmental Setting.**

Related projects would generate both construction and operational GHG emissions during the life of each project. Future development near the proposed Project includes the Section 24 Specific Plan, located less than one mile southeast of the Project Site. Construction from this project would not overlap with the construction of the proposed Project, as it will take place from September 2023 to May 2024. Development of the proposed Section 24 Specific Plan would be required to comply with applicable plans including CARB's Climate Change Scoping Plan, SCAG's 2020—2045 RTP/SCS.

Additionally, other proposed projects described in **Section 4.0** would not have a substantial contribution to greenhouse gas emissions in the area near the proposed Project in that they are a distance away from the existing campus, required to address the impacts of greenhouse gas emissions on a project specific basis, and must be consistent with applicable plans including CARB's Climate Change Scoping Plan, SCAG's 2020—2045 RTP/SCS.

Therefore, consistent with CEQA Guidelines Section 15064(h)(3), the PSUSD as a lead agency, has determined that the Project's contribution to cumulative GHG emissions would not be cumulatively considerable. The construction of the proposed Project would not overlap with construction of any other project within 1 mile of the Project Site; therefore, construction emissions would be less than significant. Operation of the proposed Project would not interfere with other related projects. The cumulative analysis above took into account the potential for the Project to contribute to the cumulative impact of global climate change. As stated above, the Project would not result in a potentially significant impact

because it would not conflict with CARB's Climate Change Scoping Plan, SCAG's 2020—2045 RTP/SCS or any other nearby related project.

The Project's contribution to cumulative impacts is not considered cumulatively considerable.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE OF MITIGATION

Impacts would be less than significant.

5.6 NOISE

INTRODUCTION

This section of the Draft Supplemental Environmental Impact Report (SEIR) evaluates the potential for the proposed Rancho Mirage High School (RMHS) Field Lighting Project (Project) to result in noise impacts within the Project Site and surrounding communities. This evaluation uses procedures and methodologies as specified by the California Department of Transportation (Caltrans), the Federal Transit Administration (FTA), and the Federal Highway Administration (FHWA). Noise monitoring and roadway noise modeling datasheets are included in **Appendix E: Noise Worksheets** of this Draft EIR.

Impacts found to be less than significant are further discussed in **Section 6.1: Effects Not Found to be Significant** of this Draft EIR.

Regulatory Setting

Noise

State

The California Department of Health Services (DHS) has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure; these guidelines have been included in the State of California General Plan Guidelines, which is published and updated by the Governor's Office of Planning and Research.[1] According to the State, an exterior noise environment up to 60 dBA CNEL and 65 dBA CNEL is "normally acceptable" for single- and multifamily residential uses, respectively, without special noise insulation requirements. In addition, noise levels up to 75 dBA CNEL are "conditionally acceptable" with special noise insulation requirements, while noise levels at 75 dBA CNEL and above are "clearly unacceptable" for residential uses. In addition, Section 65302(f) of the California Government Code requires each county and city in the State to prepare and adopt a comprehensive long-range general plan for its physical development, with Section 65302(g) requiring a noise element to be included in the general plan. The noise element must (1) identify and appraise noise problems in the community, (2) recognize Office of Noise Control guidelines, and (3) analyze and quantify current and projected noise levels.

DHS's Office of Noise Control has established guidelines to provide communities with noise environments that it deems to be generally acceptable based on land-use categories. These guidelines serve as a primary tool for a city to use to assess the compatibility between land uses and outdoor noise. Noise exposure for single-family uses is normally acceptable when the CNEL at exterior residential locations is equal to or below 60 dBA, conditionally acceptable when the CNEL is between 55 to 70 dBA, and normally

1 State of California, Governor's Office of Planning and Research. *General Plan Guidelines 2017 (2018)*. Page 374. http://opr.ca.gov/planning/general-plan/guidelines.html. Accessed March 2023.

unacceptable when the CNEL exceeds 70 dBA. Some overlap exists between categories. These guidelines apply to noise sources such as vehicular traffic, aircraft, and rail movements.

State of California Building Code

California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, California Building Code. These noise standards are applied to new construction in California for the purpose of interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dB(A) CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dB(A) CNEL.

California Noise Insulation Standards

The California Noise Insulation Standards[2] require that interior noise levels from exterior sources be 45 dB(A) or less in any habitable room of a multi-residential use facility (e.g., hotels, motels, dormitories, long-term care facilities, and apartment houses, except detached single-family dwellings) with doors and windows closed. Measurements are based on CNEL or Ldn (the day–night average), whichever is consistent with the noise element of the local general plan. Where exterior noise levels exceed 60 dB(A) CNEL, an acoustical analysis for new development may be required to show that the proposed construction will reduce interior noise levels to 45 dB(A) CNEL. If the interior 45 dB(A) CNEL limit can be achieved only with the windows closed, the residence must include mechanical ventilation that meets applicable *Uniform Building Code* (UBC) requirements.

California Department of Health Services

The State of California Department of Health Services, Environmental Health Division, has published recommended guidelines for noise and land use compatibility, referred to as the *State Land Use Compatibility Guidelines for Noise* ("*State Noise Guidelines*"). The *State Noise Guidelines* indicate that residential land uses and other noise-sensitive receptors generally should locate in areas where outdoor ambient noise levels do not exceed 65 to 70 dB(A) CNEL. According to the *State Noise Guidelines*, an exterior noise level of 60 dB(A) CNEL is considered to be "normally acceptable" for single-family, duplex, and mobile homes involving normal, conventional construction, without any special noise insulation requirements. Exterior noise levels up to 65 dB(A) CNEL are typically considered "normally acceptable" for multifamily units and transient lodging without any special noise insulation requirements. Between these values and 70 dB(A) CNEL, exterior noise levels are typically considered "conditionally acceptable," and residential construction should only occur after a detailed analysis of the noise reduction

2 California Code of Regulation, Title 24, sec. 3501 et seq.

requirements and needed noise attenuation features have been included in the Project design. Exterior noise attenuation features include, but are not limited to, setbacks to place structures outside the conditionally acceptable noise contour, orienting structures so no windows open to the noise source, and/or installing noise barriers such as berms and/or solid walls.

Regional and Local

City of Rancho Mirage

Noise Element

The City of Rancho Mirage General Plan Noise Element[3] has established noise/land use compatibility guidelines used as a planning tool to establish criteria for the acceptable total noise levels to which land uses are exposed. **Table 5.6-1 Rancho Mirage Land Use Compatibility for Community Noise Exposure** displays these guidelines, which are based on CNEL. As shown in **Table 5.6-1**, acceptable noise levels increase as the sensitivity of the land use decreases. Once land uses are established, noise levels are regulated through the City's noise ordinance (Chapter 95C of the Municipal Code), which establishes hourly noise level limits and enforcements procedures to restrict noise from individual noise generators.

Municipal Code

The City's Noise Ordinance minimizes noise conflicts between neighboring properties through enforcement of applicable regulations. Section 8.45 of the Rancho Mirage Municipal Code[4] established noise regulations within the City. The Municipal Code establishes interior and exterior noise limits for residential areas within the City which are outlined below in **Table 5.6-2: Rancho Mirage Exterior Noise Limits**.

Section 8.45 of the Municipal Code cites the value and importance given by residents, visitors, and business to the exceptional quality of life and peace and quiet of the community. Pursuant to the City Noise Ordinance, the City restricts noise generated at a property from exceeding certain noise levels for extended periods of time to protect people from objectionable non-transportation noise sources.

According to Section 8.45.050,[5] Special Provisions and Exceptions, of the City's Municipal Code, construction, alternation, repair, grading or improvement of any building, structure, road, or improvement to real property for which a permit has been issued is exempt from the City's noise ordinance so long as construction activities occur within normal business hours (7:00 AM to 7:00 PM, except on Sundays).

---

3 City of Rancho Mirage, General Plan Noise Element, https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/. Accessed March 2023.

4 Rancho Mirage Municipal Code. Title 8. Ch. 8.45. Sec. 8.45.030.

5 Rancho Mirage Municipal Code. Title 8. Ch. 8.45. Sec. 8.45.050.

TABLE 5.6-1
RANCHO MIRAGE LAND USE COMPATIBILITY FOR COMMUNITY NOISE EXPOSURE

Land Use Categories	Community Noise Equivalent Level (CNEL)						
	55	60	65	70	75	80	85
Residential—Low-Density Single-Family, Duplex, Mobile Homes							
Residential—Multi Family							
Transient Lodging - Motel, Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Businesses, Commercial, and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

Normally Acceptable: Specified land use satisfactory based upon the assumption that any buildings are conventionally constructed with no special noise installation requirements.

TABLE 5.6-1
RANCHO MIRAGE LAND USE COMPATIBILITY FOR COMMUNITY NOISE EXPOSURE

Land Use Categories	Community Noise Equivalent Level (CNEL)						
	55	60	65	70	75	80	85
Conditionally Acceptable: New construction or development undertaken only after detailed analysis of the noise reduction requirements is made and necessary noise insultation featured are included in design. Conventional construction, but with closed windows and fresh air supply system or air conditioning with normally suffice. Outdoor environment will seem noisy.							
Normally Unacceptable: New construction or development generally discouraged, but if it does proceed, a detailed analysis of noise reduction requirements must be made with needed noise insulation features included in design and outdoor areas must be shielded.							
Clearly Unacceptable: New construction or development should generally not be undertaken. Construction cost to make indoor environmental acceptable would be prohibitive and outdoor environment would not be usable.							

Source: City of Rancho Mirage, General Plan Noise Element, https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/. Accessed March 2023.

TABLE 5.6-2
RANCHO MIRAGE EXTERIOR NOISE LIMITS

Land Use	Time Periods	Noise Level Standard (dBA)
Residential, Low Density	7:00 AM – 6:00 PM	55
	6:00 PM – 10:00 PM	50
	10:00 PM – 7:00 AM	45
Residential, Medium and High Density	7:00 AM – 6:00 PM	60
	6:00 PM – 10:00 PM	55
	10:00 PM – 7:00 AM	50
Commercial Office, Resort Commercial, Mixed Use, Institutional	7:00 AM – 6:00 PM	65
	6:00 PM – 10:00 PM	60
	10:00 PM – 7:00 AM	55
Commercial Neighborhood, General commercial, Commercial Recreational, Light Industrial	7:00 AM – 6:00 PM	70
	6:00 PM – 10:00 PM	65
	10:00 PM – 7:00 AM	60

Source: Rancho Mirage Municipal Code Section 8.45.030.

Vibration

Federal

Federal Transit Administration

The FTA has published a technical manual, *Transit Noise and Vibration Impacts Assessment*, that provides ground-borne vibration impact criteria with respect to building damage during construction activities.[6]

According to the FTA guidelines, a vibration criterion of 0.20 PPV should be considered as the significant impact level for nonengineered timber and masonry buildings. Structures or buildings constructed of reinforced concrete, steel, or timber have a vibration damage criterion of 0.50 PPV based on the FTA guidelines. Structures amplify ground-borne vibration, and wood-frame buildings, such as typical residential structures, are more affected by ground vibration than are heavier buildings. The level at which ground-borne vibration is strong enough to cause architectural damage has not been determined conclusively. The most conservative estimates are reflected in the FTA standards, shown in **Table 5.6-3: Construction Vibration Damage Criteria**.

TABLE 5.6-3
CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Category	PPV (ips)	Lv (VdB)
I. Reinforced concrete, steel, or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Nonengineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual, September 2018.

Note: For Max Lv (VdB), Lv = the velocity level in decibels as measured in 1/3 octave bands of frequency over the frequency ranges of 8 to 80 Hz; VdB = vibration decibels; Hz = hertz; ips = inches per second.

State

The California Department of Transportation (Caltrans) published its *Transportation and Construction Vibration Guidance Manual* in April 2020.[7] The manual provides practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects.

The guidance and procedures provided in the Caltrans manual should be treated as screening tools for assessing the potential for adverse effects related to human perception and structural damage. General

6 US Department of Transportation, Federal Transit Administration (USDOT, FTA). *Transit Noise and Vibration Impact Assessment, FTA report no. 0123 (September 2018)*. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed March 2023.

7 California Department of Transportation (Caltrans). *Transportation and Construction Vibration Guidance Manual*. April 2020. https://dot.ca.gov/programs/environmental-analysis/noise-vibration/guidance-manuals. Accessed March 2023.

information on the potential effects of vibration on vibration-sensitive research and advanced-technology facilities is also provided, but a discussion of detailed assessment methods in this area is beyond the manual's scope. The document is not an official policy, standard, specification, or regulation.

ENVIRONMENTAL SETTING

Existing Conditions

The 2006 EIR prepared for the RMHS Campus[8] analyzed the impacts of noise during the construction and operation of the project. The EIR concluded that there would be temporary significant impacts associated with the project's construction, however, with mitigation measures these noise levels would be less than significant. The EIR also concluded that offsite roadway noise and onsite rail noise would comply with the noise standards set forth by the City.

The EIR did determine that onsite uses, specifically football games, would violate the City's noise standards, and as such, mitigation measures were implemented to reduce these impacts to less than significant.

Noise Descriptors

Noise levels are measured using a variety of scientific metrics. As a result of extensive research into the characteristics of noise and human response, standard noise descriptors have been developed for noise exposure analyses. All noise levels provided in this Noise Report are for outdoor conditions, unless otherwise stated specifically to be interior noise levels.

A-Weighted Sound Pressure Level (dBA): The decibel (dB) is a unit used to describe sound pressure level. When expressed in dBA, the sound has been filtered to reduce the effect of very low and very high frequency sounds, much as the human ear filters sound frequencies. Without this filtering, calculated and measured sound levels would include events that the human ear cannot hear (e.g., dog whistles and low-frequency sounds, such as the groaning sounds emanating from large buildings with changes in temperature and wind). With A-weighting, calculations and sound-monitoring equipment approximate the sensitivity of the human ear to sounds of different frequencies.

Maximum Noise Level (Lmax): Lmax is the maximum or peak sound level during a noise event. The metric accounts only for the instantaneous peak intensity of the sound, and not for the duration of the event. As a vehicle passes by an observer, the sound level increases to a maximum level and then decreases. Some sound level meters measure and record the maximum or Lmax level.

Sound Exposure Level (SEL): SEL, expressed in dBA, is a time-integrated measure, expressed in decibels, of the sound energy of a single noise event at a reference duration of 1 second. The sound level is integrated over the period that the level exceeds a threshold. Therefore, SEL accounts for both the maximum sound level and the duration of the sound. The standardization of discrete noise events into a

---

8 Palm Springs Unified School District, Draft Environmental Impact Report for the Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School (SCH 2006011095), September 2006., Section 3.2: Air Quality.

1-second duration allows calculation of the cumulative noise exposure of a series of noise events that occur over a period of time. **Equivalent Continuous Noise Level (Leq):** Leq is the sound level, expressed in dBA, of a steady sound that has the same A-weighted sound energy as the time-varying sound over the averaging period. Unlike SEL, Leq is the average sound level for a specified time period (e.g., 24 hours, 8 hours, 1 hour). Leq is calculated by integrating the sound energy from all noise events over a given time period and applying a factor for the number of events. Leq can be expressed for any time interval; for example, the Leq representing an averaged level over an 8-hour period would be expressed as Leq(8).

Community Noise Equivalent Level (CNEL): CNEL, expressed in dBA, is a rating of community noise exposure to all sources of sound that differentiates between daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM) noise exposure. CNEL includes penalties applied to noise events occurring after 7:00 PM and before 7:00 AM, when noise is considered more intrusive. The penalized time period is further subdivided into an evening period with an addition of 5 dBA to measured or forecasted noise levels and a nighttime period with an addition of 10 dB to measured or forecasted noise levels. CNEL has been adopted by the State of California to define the community noise environment in preparing the community noise element of a General Plan.[9]

Day-Night Average Sound Level (L_{dn}): The day-night average sound level is the average noise level over a 24-hour period. The noise level measurements between the hours of 10:00 pm and 7:00 am are artificially increased by 10 dBA before averaging. Nighttime noise is weighted to take into account a decrease in community background noise of 10 dBA during this period. The evening weighting is the only difference between CNEL and day-night average sound level (DNL).

Effects of Noise on Humans

Human response to sound is highly individualized. Annoyance is the most common issue associated with community noise levels. Many factors influence the response to noise including the character of the noise, the variability of the sound level, the presence of tones or impulses, and the time of day of the occurrence. Additionally, non-acoustical factors, such as an individual's opinion of the noise source, the ability to adapt to the noise, the attitude towards the source and those associated with it, and the predictability of the noise, all influence the response to noise. These factors result in the reaction to noise being highly subjective, with the perceived effect of a particular noise varying widely among individuals in a community. The effects of noise can be grouped into three general categories:

- Subjective effects of annoyance, nuisance, dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as starting hearing loss.

9 State of California. *General Plan Guidelines*. 2017. http://calaverascap.com/wp-content/uploads/2017/08/OPR_COMPLETE_7.31.17.pdf. Accessed March 2023.

Noise-induced hearing loss usually takes years to develop. Hearing loss is one of the most obvious and easily quantifiable effects of excessive exposure to noise. While the loss may be temporary at first, it can become permanent after continued exposure. When combined with hearing loss associated with aging, the amount of hearing loss directly due to the environment is difficult to quantify. Although the major cause of noise induced hearing loss is occupational, nonoccupational sources may also be a factor.

Noise can mask important sounds and disrupt communication between individuals in a variety of settings. This process can cause anything from a slight irritation to a serious safety hazard, depending on the circumstance. Noise can disrupt face-to-face communication and telephone communication, and the enjoyment of music and television in the home. Interference with communication has proved to be one of the most important components of noise-related annoyance.

Noise-induced sleep interference is one of the critical components of community annoyance. Sound level, frequency distribution, duration, repetition, and variability can make it difficult to fall asleep and may cause momentary shifts in the natural sleep pattern or level of sleep. It can produce short-term effects, with the possibility of more serious effects on health if it continues over long periods.

Annoyance can be defined as the expression of negative feelings resulting from interference with activities, as well as the disruption of one's peace of mind and the enjoyment of one's environment. The consequences of noise-induced annoyance are privately held dissatisfaction, publicly expressed complaints to authorities, and potential adverse health effects, as discussed previously.

Some common sounds on the dBA scale, relative to ordinary conversation, are provided in **Table 5.6-4: Common Sounds on the A-Weighted Decibel Scale**. As shown, the relative perceived loudness of sound doubles for each increase of 10 dBA, although a 10 dBA change corresponds to a factor of 10 in relative sound energy. Generally, sounds with differences of 3 dBA or less are not perceived to be noticeably different by most listeners.

TABLE 5.6-4
COMMON SOUNDS ON THE A-WEIGHTED DECIBEL SCALE

Sound	Sound Level (dBA)	Subjective Evaluations
Near Jet Engine	140	Deafening
Threshold of Pain	130	
Rock music, with amplifier	120	
Thunder, snowmobile (operator)	110	Very Loud
Boiler shop, power mower	100	
Orchestral crescendo at 25 feet, noisy kitchen	90	
Busy street	80	Loud
Interior of department store	70	
Ordinary conversation, 3 feet away	60	Moderate
Quiet automobiles at low speed	50	
Average office	40	Faint
City residence	30	
Quiet country residence	20	Very Faint
Rustle of leaves	10	
Threshold of hearing	0	

Source: U.S. Department of Housing and Urban Development, Aircraft Noise Impact – Planning Guidelines for Local Agencies, 1972

Notes:

[1] Continuous exposure above 85 dB is likely to degrade the hearing of most people (hearing protection recommended).

[2] Range of Speech: 50 – 70 dB

Vibration

Vibration consists of waves transmitted through a solid medium. Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. A vibration may be a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in hertz (Hz). Most environmental vibrations consist of a composite, or "spectrum," of many frequencies, and are generally classified as broadband or random vibrations. The normal frequency range of most groundborne vibration that can be felt starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration is often measured in terms of the peak particle velocity (PPV) in inches per second (in/sec), because it is related to the stresses that are experienced by buildings. Vibration is also measured in vibration decibels (VdB).

The human threshold of perception is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people.

Vibration levels are acceptable at approximately 85 VdB if there are an infrequent number of events per day.[10]

Vibration energy attenuates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source.[11] High frequency vibrations reduce much more rapidly than low frequencies, so that in the far-field from a source, the low frequencies tend to dominate. Soil properties also affect the propagation of vibration. When groundborne vibration interacts with a building, there is usually a ground-to-foundation coupling loss, but the vibration can also be amplified by the structural resonances of the walls and floors.[12] Vibration in buildings is typically perceived as rattling of windows or of items on shelves, or the motion of building surfaces.

Groundborne vibration is generally limited to areas within a few hundred feet of certain types of construction activities, especially pile driving. Road vehicles rarely create enough groundborne vibration to be perceptible to humans unless the road surface is poorly maintained and there are potholes or bumps.[13] If traffic, typically heavy trucks, induces perceptible vibration in buildings, such as window rattling or shaking of small loose items, then it is most likely an effect of low-frequency airborne noise or ground characteristics. As discussed previously, vibration can be amplified by the structural resonances of the walls and floors of buildings. The more the events or the greater the duration, the more annoying it will be to humans.

Existing Conditions

The most significant source of roadway noise is generated by motor vehicles travelling along I-10 located approximately 0.5 miles northeast of the Project Site,[14] and the 60 dBA noise contours surrounding the interstate.[15] Additionally, noise in the community includes occasional aircraft traffic from commercial and general aviation operations at the Palm Springs International Airport. Other sources of noise includes mechanical equipment serving commercial land uses, resorts and major institutions.

Sensitive Receptors in the Surrounding Area

Existing land uses immediately adjacent to Rancho Mirage High School are designated under the City of Rancho Mirage General Plan as Medium Density Residential, undeveloped land designated as Medium

10 Federal Transit Administration. *Transit Noise and Vibration Impact Assessment Manual*. September 2018. Pages 7-8.

11 California Department of Transportation. *Earthborne Vibrations (1990)*. VII-27.

12 Federal Transit Administration. Transit Noise and Vibration Impact Assessment Manual. September 2018. Pages 7-1, 7-2.

13 Federal Transit Administration. Transit Noise and Vibration Impact Assessment Manual. September 2018. Pages 7-9.

14 City of Rancho Mirage, General Plan Noise Element, 2017, https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/. Accessed March 2023.

15 City of Rancho Mirage, General Plan Noise Element, 2017, https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/. Accessed March 2023.

Density Residential and High Density Residential, and undeveloped land designated as Mixed Use (Commercial/Office/Residential).[16]

As shown in **Figure 5.6-1: Sensitive Receptor Map**, the nearest existing noise sensitive receptor to Rancho Mirage High School is the residential community adjacent to the school on west.

It is important to note, the existing residential community located adjacent to the football field along the west is separated from the Project by a block masonry wall along the rear property lines of the homes.

ENVIRONMENTAL IMPACTS

Threshold of Significance

The CEQA Guidelines include thresholds to determine the significance of noise impacts (Appendix G of the CEQA Guidelines). Appendix G provides that a project would have a significant environmental impact if it would result in the:

Threshold 5.6-1: **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**

Based on local noise criteria established by the City, the following would be considered significant:[17]

- Construction activities occurring outside the normal business hours of 7:00 AM and 7:00 PM, except Sundays and holidays.

The City does not specify a numerical noise level limit applicable to construction activities in the General Plan or their Municipal Code.

Threshold 5.6-2: **Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the educational program?**

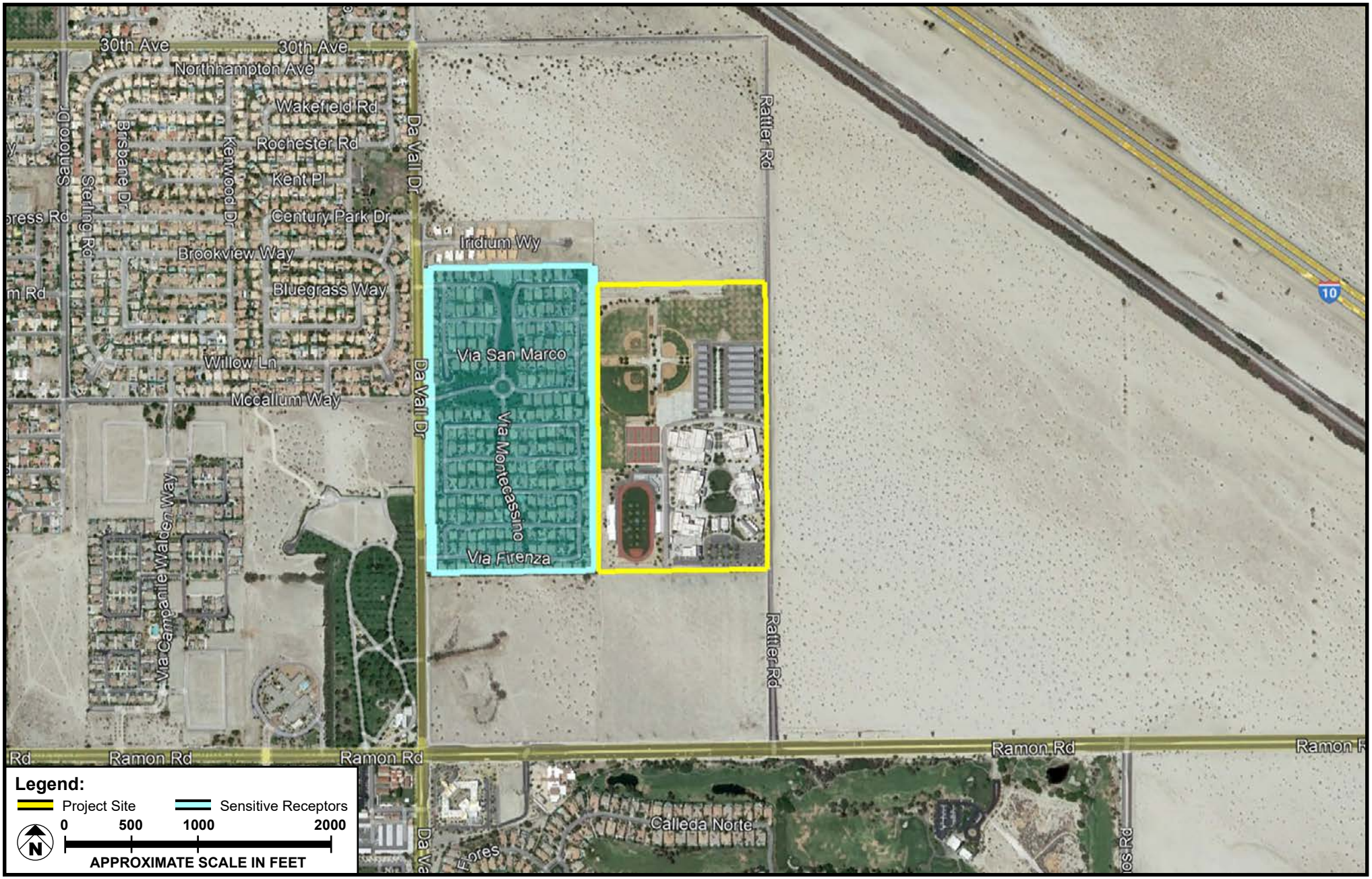
A significant impact would occur if the Project Site is located adjacent to or near a major arterial roadway or freeway which may exceed the exterior noise limits listed in **Table 5.6-2** for institutional land uses. The California Education Code states that a busy traffic corridor is defined as having 50,000 or more average daily trips (ADT) in a rural area or 100,000 or more ADT in an urban area.[18]

---

16 City of Rancho Mirage, General Plan Land Use Element, 2017, https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/. Accessed March 2023.

17 Rancho Mirage Municipal Code. Title 8. Ch. 8.45. Sec. 8.45.030.

18 California Education Code (EDC), Sec. 17213, accessed February 2022. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=17213.#:~:text=17213.%20The%20governing%20board%20of%20a%20school%20district,school%20district%2C%20unless%20all%20of%20the%20following%20occur%3A. March 2022.



SOURCE: Google Earth - 2023;

FIGURE **5.6-1**

Meridian Consultants

Sensitive Receptor Map

049-022-23

Threshold 5.6-3: Generation of excessive groundborne vibration or groundborne noise levels.

Based on vibration criteria established by the Federal Transit Administration, the following would be considered significant:

- Construction equipment would produce levels exceeding 0.5 PPV at the nearest off-site reinforced-concrete, steel, or timber building.
- Construction equipment would produce perceptible levels of vibration (78 VdB) during the daytime at off-site vibration sensitive structures.

Threshold 5.6-4: 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?

The proposed Project would not be located within a private airstrip or airport land use plan, or within two miles of a public airport or public use airport. As such, no people residing or working in the project would be exposed to excessive noise levels from a private airstrip or airport.

Methodology

Construction Noise

Construction would occur over 6 to 9 months beginning in September 2023 through May 2024. The proposed Project includes trenching to install wiring between the poles and electrical control panels and installation of the light fixtures. Construction staging would last the entire 6 to 9 months. Construction would be staggered among the various fields to accommodate ongoing practice and field needs at the campus. The staging area would change for each field and would place the area away from active school areas. A variety of construction equipment would be used including but not limited to tractors, loaders, backhoes, trenchers, cement and mortar mixers, cranes, and excavators.

Construction activities typically generate noise from the operation of a variety of equipment types. Noise impacts from on-site construction activities were evaluated by determining the noise levels generated by different types of construction activity and calculating the construction-related noise level at nearby noise-sensitive receptor locations. The actual noise level would vary, depending upon the equipment type, model, the type of work activity being performed, and the condition of the equipment.

To calculate construction noise levels, hourly activity or utilization factors (i.e., the percentage of normal construction activity that would occur, or construction equipment that would be active, during each hour of the day) are estimated based on the temporal characteristics of other previous and current construction projects. The hourly activity factors express the percentage of time that construction

activities would emit average noise levels. Typical noise levels for each type of construction equipment were obtained from the FHWA Roadway Construction Noise Model.[19]

An inventory of construction equipment, including the number and types of equipment, which would be operating simultaneously on the Project Site is shown in **Table 5.6-6: Anticipated Construction Equipment.** It is unlikely that all pieces of construction equipment identified in **Table 5.6-6** would operate simultaneously in any single location during construction because equipment is generally operated only when needed and space constraints limit the equipment that can be used at any one time in a specific location.

TABLE 5.6-5
PROJECT CONSTRUCTION DIESEL EQUIPMENT INVENTORY

Phase	Off-Road Equipment Type	Amount	Daily Hours	Horsepower [HP] (Load Factor)
Construction	Tractors/Loaders/Backhoes	1	8	84 (0.37)
	Trenchers	1	8	40 (0.50)
	Cement and Mortar Mixers	1	8	10 (0.56)
	Cranes	1	8	367 (0.29)
	Excavators	1	8	36 (0.38)

As nearly all of the proposed Project construction equipment is mobile and will move around the site and the analysis evaluates noise occurring over a one-hour period (Leq), the modeling conservatively assumed that all of the construction equipment operating on-site would be located at the location closest to the applicable sensitive receptor. Therefore, this modeling provides a reasonably conservative calculation of the maximum noise levels generated during construction.

Noise levels generated by on-site construction equipment can be reduced via specific noise control measures including the following: (1) muffler requirements; (2) equipment modifications that reduce noise levels; and (3) maintenance and operational requirements. These noise control measures can be used separately or in combination in order to reduce the noise levels generated by on-site construction equipment.

Construction equipment operates at its noisiest levels for certain percentages of time during operation. As such, equipment would operate at different percentages over the course of an hour.[20] During a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently.

19 USDOT. *FHWA Roadway Construction Noise Model Final Report*. January 2006. https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf. Accessed March 2023.

20 Federal Highway Administration. *Traffic Noise Model (2006)*.

To characterize construction-period noise levels, the (hourly Leq) noise level associated with each construction stage was calculated based on the quantity, type, and usage factors for each type of equipment that would be used during each construction stage. These noise levels are typically associated with multiple pieces of equipment operating simultaneously.

Construction Equipment Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. While ground vibrations from construction activities do not often reach the levels that can damage structures, fragile buildings must receive special consideration.

Impacts due to construction activities were evaluated by identifying vibration sources (i.e., construction equipment), measuring the distance between vibration sources and surrounding structure locations, and making a significance determination.

For quantitative construction vibration assessments related to building damage, vibration source levels for construction equipment is taken from the FTA *Transit Noise and Vibration Impact Assessment Manual*. Building damage would be assessed for each piece of equipment individually and assessed in terms of peak particle velocity.

The vibration source levels for various types of equipment are based on data provided by the FTA.

Project Impacts

Threshold 5.6-1: **Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Construction

On-Site Construction Equipment

Noise from proposed Project construction activities would be affected by the amount of construction equipment, the location of this equipment, the timing and duration of construction activities, and the relative distance to noise-sensitive receptors. Construction activities would generate both steady-state and episodic noise that would be heard both on and off the Project Site.

Construction noise is not considered to be a significant impact if construction is limited to the daytime hours and construction equipment is adequately maintained and muffled.

Extraordinary noise-producing activities (e.g., pile driving) are not anticipated. Construction noise impacts could result in annoyance or sleep disruption for nearby residents if nighttime operations were

to occur or if equipment is not properly muffled or maintained. In this case, all project construction activity will be confined to the daytime hours of 8:00 AM to 5 PM.

The estimated construction noise levels were calculated for the nearest sensitive receptors (adjacent residences to the west) Construction equipment was assumed to be operating simultaneously and with the noise equipment located at the construction area nearest to the affected receptors collectively serve to result in a conservative impact analysis. This is considered a conservative evaluation because construction of the proposed Project would typically use fewer pieces of equipment simultaneously at any given time as well as operating throughout the construction site. As such, the construction would often generate lower noise levels than reported herein.

Table 5.6-6: Construction Maximum Noise Estimates presents the noise impacts that are forecasted to occur at the nearby residences. As discussed, it is unlikely that all pieces of construction equipment would operate simultaneously in any single location during construction because equipment is generally operated only when needed and space constraints limit the number of pieces of equipment that can be used at any one time in a specific location. However, the modeling conservatively assumed that all of the construction equipment operating on-site during construction would be located at the location closest to the nearby sensitive receptor.

As shown in **Table 5.6-6**, noise levels at the edge of the campus adjacent to homes along the boundary during construction would reach up to 87.3 dBA Leq-1hour at the residential area along Da Vall Drive adjacent to the fields on the west of the campus during the construction phase. Noise from construction would exceed 80 dBA Leq at the noise sensitive uses located around the Project Site.

Noise impacts would be temporary as construction would only occur for the 6 to 9 month construction period.

TABLE 5.6-6
CONSTRUCTION MAXIMUM NOISE ESTIMATES

Nearest Off-Site Sensitive Receptors	Distance from Project Site (feet)	Max Leq	Significance Threshold (dBA)	Maximum Noise Increase over Significance Threshold without Regulatory Compliance Measures (dBA)
Residential uses along Da Vall Drive[a]	30	87.3	80.0	+7.3

Source: FHWA, RCNM, version. 1.1.
Refer to Appendix E for Construction noise output sheets

a – Measurement taken from closest light pole placement to edge of property line in backyard

The City does not specify a numerical noise level limit applicable to construction activities in the General Plan or their Municipal Code. As the City does not maintain a construction noise standard, off-site noise impacts would be less than significant on adjacent residences.

The proposed Project would not expose on-site receptors at the RMHS campus during school programming, including students and faculty, to increased ambient exterior noise levels during construction. Construction noise during the construction could reach 72.5 dB when measured at a reference distance of 165 feet from the construction activity, which is the location of the closest school building to a light pole[21] This would noy interfere with educational programming and learning activities when school is in sessions.

Impacts related to on-site construction noise would not be significant.

Off-Site Construction Roadway Noise

Off-site construction noise, as detailed in the methodology section above, has been forecasted using the FHWA TNM and is based on forecasted haul truck activity as well as the delivery of building materials, including concrete. The FHWA TNM was used to calculate the hourly Leq noise levels generated by construction-related trucks, as seen in **Table 5.6-7: Roadway Noise Levels**. Noise impacts were determined by comparing the predicted noise level with that of the existing ambient noise levels along the anticipated truck travel routes. At the maximum, construction would include 84 construction worker trips per day and 33 vendor trips per day.

Based on these trips, roadway noise levels would result in approximately between 31.7 to 50.0 dBA CNEL at 70 feet from the closest receptor depending on the use of medium or heavy-duty trucks. These noise levels would not exceed the FTA daytime threshold of 80 dBA at the nearest sensitive receptor to the roadway. Thus, Proposed Project noise impacts attributable to off-site construction truck travel would be less than significant.

21 Refer to Appendix E for construction noise worksheets

TABLE 5.6-7
ROADWAY NOISE LEVELS

Roadway	Sensitive Receptor	Distance from Receptor (feet)	Min Leq	Max Leq	Significance Threshold (dBA)	Maximum Noise Increase over Significance Threshold without Regulatory Compliance Measures (dBA)
Rattler Road	Rancho Mirage High School	70	33.0	44.7	80.0	N/A
Ramon Road	Open Space Uses	80	42.8	50.0	80.0	N/A
Bob Hope Drive	Hotel	500	31.7	40.1	80.0	N/A

Source: Refer to Appendix E for Construction noise output sheets

Operation

The proposed Project involves the installation of field lighting to comply with recent legislation requiring that public high school classes begin no earlier than 8:30 A.M., causing the times of use for the fields to be later in the day. Noise associated with athletic events would not extend past 10:00 P.M. and would comply with the Rancho Mirage exterior noise limits designated by the City's General Plan and listed in **Table 5.6-1 and Table 5.6-2**. As such, the operational noise levels would not substantially change.

Noise level data was previously collected for a different high school football stadium in Visalia, California. Applying the noise levels measured at the Visalia stadium location, such levels would be in the range of approximately 50-60 dB Leq and 60-70 dB Lmax, at the closest residential land uses. The noise levels associated with activities such as high school athletic events (games and practices), other sporting events and other events held in the stadium cannot be precisely defined due to variables such as the number of attendees, atmospheric conditions and the topographical relationship between the fields and off-site sensitive receptors. The RMHS campus is located at an elevation that is generally approximately 30 feet lower the elevation of the residential land uses to the west, providing topographic acoustic shielding from some of the noise sources. Athletic events at the lighted fields would typically include athletic practices, generally ending at 8:00 P.M. and athletic games, would generally end by 7:00 P.M., and no later than 9:00 P.M. The District's policy on Energy and Waste Management includes the provision that field lighting will be turned off by 10 P.M., unless otherwise established by the District. [22]

The proposed field lighting project is not expected to result in an increase in attendance for the games and other sporting events at the lighted fields. The number of attendees would remain similar to what is currently generated by the events. Given the nature of the type of events that would be scheduled at the fields (baseball, softball, etc.), attendance by spectators would not consist of large crowds. Project-related traffic noise would not result in any overall increase in noise exposure throughout and from the RMHS campus during events, even when the entirety of daily trips are applied to one single roadway/area.

Impacts would be less than significant.

---

22 PSUSD. Board Policy Manual. AR 3511: Energy And Water Management. **Appendix B**.

Threshold 5.6-3: Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Construction

On-Site Construction Vibration

Table 5.6-8: Off-Site Construction Vibration Impacts-Building Damage presents the construction vibration impacts associated with on-site construction in terms of building damage, as the residential buildings on Da Vall Road are the closest buildings to the location of the construction. As shown, the forecasted vibration levels resulting from o-site construction activities and the use of equipment such as excavators for caisson drilling and loaded trucks would not exceed the building damage significance threshold for the closest sensitive receptors during construction.

Vibration levels would vary depending on soil conditions, construction methods, and equipment used. **Table 5.6-8: Vibration Source Levels for Construction Equipment**, presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet).[23] The proposed Project would involve the use of caisson drilling and loaded trucks during the construction phase.

Similar to the off-site sensitive receptors, the proposed Project would expose on-site buildings at the RMHS campus to increased vibration levels during construction. As shown in **Table 5.6-8**, the forecasted vibration levels due to on-site construction activities would not exceed the building damage significance threshold at a reference-distance of 30 feet to the nearest sensitive receptor, the residential uses on Da Vall Road.

Construction vibration with regard to building damage on and off site would be less than significant.

---

[23] Federal Transit Administration May 2006b. Transit Noise and Vibration Impact Assessment. Accessed April 2023. https://docs.vcrma.org/images/pdf/planning/ceqa/FTA_Noise_and_Vibration_Manual.pdf

TABLE 5.6-8
VIRBATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment		PPV at 25 feet (in./sec)	Approximate L_V at 25 feet (VdB)
Pile Driver (impact)	Upper Range	1.518	112
	Typical	0.644	104
Pile Driver (sonic)	Upper Range	0.734	105
	Typical	0.170	93
Calm Shovel Drop (slurry wall)		0.202	94
Hydromill (slurry wall)	In soil	0.008	66
	In rock	0.017	75
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large Bulldozer		0 089	87
Caisson Drilling		0.089	87
Loaded Trucks		0.076	86
Jack Hammer		0.035	79
Small bulldozer		0.003	58

Source:
May 2006b. Transit Noise and Vibration Impact Assessment. Accessed April 2023. https://docs.vcrma.org/images/pdf/planning/ceqa/FTA_Noise_and_Vibration_Manual.pdf

TABLE 5.6-9
OFF-SITE CONSTRUCTION VIBRATION IMPACTS – BUILDING DAMAGE

Nearest Off-Site Building Structures	Estimated Vibration Velocity Levels at the Nearest Off-Site Structures from the Project Construction Equipment		Significance Threshold (PPV ips)
	Caisson Drilling	Loaded Trucks	
Residential uses along Da Vall Road (30 feet)[a]	0.068	0.058	0.5

*Refer to **Appendix E** for Construction Noise Worksheets.*

a – Measurement taken from light pole placement to edge of property line in backyard

Off-Site Construction Vibration

Operation of construction equipment can cause ground vibrations that diminish in strength with distance from the source. Buildings founded on the soil in the vicinity of a construction site may be affected by these vibrations, with varying results ranging from no perceptible effects at the lowest levels, low rumbling sounds and perceptible vibrations at moderate levels, and slight damage at the highest levels.

Typically ground vibration does not reach a level where it damages structures unless the structure is extremely fragile.

Maximum ground vibration levels would be associated with the potential use of excavators and boring machines during construction activities, particular during drilling for the 10-footdeep concrete base for the new field lights. According to FTA, vibration levels associated with large drilling are 0.089 in/sec PPV and 87 VdB at 25 feet. Vibration levels from large drilling could exceed Caltrans recommended level of 0.2 in/sec PPV with respect to the structural damage within 15 feet of large drilling activities[24] and could exceed FTA's maximum acceptable level of 80 VdB with respect to human response within 43 feet of large drilling activities.[25]

The nearest existing structures to project construction areas include single-family residences located as close as approximately 30 feet from the west edge of the stadium site along De Vall Drive to the west of the campus. As shown above in Table 5.6-9, estimated vibrations would not exceed the significance threshold. Therefore, ground vibration levels from potential large drilling activities would not result in levels that could damage nearby structures or result in human disturbance.

Project-related increases in traffic noise would not result in any overall increase in noise exposure throughout the project area, even when the entirety of daily trips is applied to one single roadway/area. Vibrations would not exceed Caltrans' recommended vibration level 0f 0.2 in/sec PPV, where the risk of architectural damage could occur to normal dwelling houses.[26]

In addition to on-site construction activities, construction delivery and worker trips would generate ground-borne vibration as they travel to and from the RMHS campus. Based on the FTA data, the vibration generated by a typical heavy-duty truck would be approximately 71 VdB (0.015 PPV) at a distance of 75 feet from the truck.[27] This forecasted vibration level would be well below the most stringent building damage criteria of 0.12 PPV. [28]

Project impacts associated with construction related ground vibration and vibration noise would be less than significant.

---

24 Caltrans, Transportation and construction vibration Guidance Manual, April 2020. https://dot.ca.gov/programs/environmental-analysis/noise-vibration/guidance-manuals. Accessed May 2023.

25 Federal Transit Administration May 2006b. Transit Noise and Vibration Impact Assessment. Accessed April 2023. https://docs.vcrma.org/images/pdf/planning/ceqa/FTA_Noise_and_Vibration_Manual.pdf

26 Caltrans, Transportation and construction vibration Guidance Manual, April 2020. https://dot.ca.gov/programs/environmental-analysis/noise-vibration/guidance-manuals. Accessed May 2023.

27 Federal Transit Administration. "Transit Noise and Vibration Impact Assessment." May 2006. Figure 7-3.

28 Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual, September 2018.

Operation

Similar to existing conditions, the proposed lighting would be stationary and would not generate substantial groundborne vibration or noise levels.

Operational vibration impacts would be less than significant.

CUMULATIVE IMPACTS

Construction

Noise

Noise impacts are localized in nature and decrease with distance. Cumulative construction noise impacts have the potential to occur temporarily when multiple construction projects in the local area generate noise within the same time frame and contribute to the local ambient noise environment.

The following cumulative impacts are analyzed based on a list of past, present, and probable future projects producing related cumulative impacts, described in **Section 4.0: Environmental Setting**.

Nearby development includes the Section 24 Specific Plan which is less than one mile southeast of the Project Site. However, there will be no construction of the Section 24 project during the construction phase of the proposed Project. Based on noise levels generated by construction activities associated with the Project and the proximity of both on- and off-site receptors, construction noise from the Project would contribute to the cumulative noise environment. It is expected that, as with the Project, the related projects would implement Best Management Practices (BMPs), which would minimize any noise-related nuisances during construction.

Combined construction noise impact of the related projects and the Project's contribution would not be considered cumulatively considerable with the implementation of mitigation measures.

Vibration

As discussed above, vibration impacts are generally less than significant when the receptor is more than 25 feet from the vibration source. Additionally, vibration levels would vary depending on soil conditions, construction methods, and equipment used.

There are no identified projects anticipating construction concurrently with the Project and within 25 feet of the sensitive receptors that could be affected by construction. Construction of the Section 24 Specific Plan would not occur during the construction of the proposed Project. As such, there would be no cumulative sources of construction vibration and no cumulatively considerable impacts.

Impacts would not be cumulatively considerable.

Operational

The proposed lighting of the fields would be stationary and would not generate substantial groundborne vibration or groundborne noise levels during operation. Operational vibration impacts would be less than significant.

The Project's contribution to cumulative impacts is not considered cumulatively considerable.

MITIGATION MEASURES

The following mitigation measures have been identified to mitigate noise impacts:

MM NOI-1 The District shall direct construction activities that result in noise above 60 dBA to correspond with the school's schedules to minimize noise and vibration impacts when classes are in session, and to avoid critical (testing) periods. Intensive construction activities such as demolition and grading shall be scheduled to occur after 2:30 PM Monday through Friday.

MM NOI-2 The District's construction contractor shall ensure that construction equipment is properly muffled according to industry standards and is in good working condition.

MM NOI-3 The District's construction contractor shall utilize diesel generators and compressors that are listed as "quiet units" by the manufacturer.

MM NOI-4 For all noise- and vibration-generating construction activity on the Project Site, the District's construction contractor shall employ additional noise and vibration attenuation techniques to reduce noise and vibration levels. Such techniques may include, but are not limited to, the use of sound blankets on noise-generating equipment and the construction of temporary sound barriers between construction sites and nearby sensitive receptors.

MM NOI-5 The District's construction contractor shall turn off all idling equipment when not in use for more than 5 minutes.

MM NOI-6 The District's construction contractor shall disconnect backup alarms on vehicles that require them.

MM NOI-7 The District's construction contractor shall utilize temporary noise deflector walls during construction, where feasible.

MM NOI-8 The District's construction contractor shall place noise- and vibration-generating construction equipment, as well as locating construction staging areas, away from sensitive uses, including operating classrooms, where feasible.

MM NOI-9 The District's construction contractor shall coordinate the reduction of construction activities with nearby classrooms during exam periods to minimize noise and vibration. The District's construction contractor shall provide construction activity schedules to try to minimize noisy activities when construction is taking place to the fullest extent practicable.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure will reduce noise related to construction equipment both on and off site. Impacts would be less than significant with mitigation.

5.7 TRANSPORTATION AND TRAFFIC

INTRODUCTION

This section of the Draft Supplemental Environmental Impact Report (SEIR) evaluates the potential for the proposed Rancho Mirage High School (RMHS) Field Lighting EIR (Project) to result in transportation and traffic impacts within the City of Rancho Mirage (City), and surrounding communities.

Impacts found to be less than significant are further discussed in **Section 6.1: Effects Not Found to be Significant** of this Draft SEIR.

REGULATORY SETTING

State

SB 743

Transportation analyses for development projects being evaluated under CEQA traditionally used vehicle delay and congestion on the roadway system as the primary metric for identifying traffic impacts. In 2013, the State of California passed Senate Bill (SB) 743,[1] which requires jurisdictions to end the practice of using congestion and delay metrics, such as level of service, as the metric for evaluating impacts of new development in Transit Priority Areas. As a result of SB 743, the new recommended metric in the CEQA guidelines for transportation impacts is VMT per capita. This guideline was established by the California Office of Planning and Research (OPR) in order to encourage the reduction of GHG emissions, development of intricate transportation systems, and diversify land use.

The legislative intent of SB 743 is to balance the needs of congestion management with statewide goals for infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

City of Rancho Mirage

General Plan 2017 Update

The City's most recent General Plan 2017 Update includes provisions for safely and efficiently managing traffic within the City. Chapter 3 Circulation Element includes guidance to enhance and improve upon the traffic circulation of Rancho Mirage.[2] By managing and improving the circulation of the City, the safety of all residence increases. These resources provide a constant reminder of the close-knit

[1] State of California, Senate Bill 743 (SB 743) (Steinberg). 2013.

[2] City of Rancho Mirage, General Plan 2017 Update, Chapter 3 Circulation, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter_3_Circulation.pdf. Accessed March 2023.

community Rancho Mirage provides to its residents. The proposed Project does not entail development on or along a pedestrian, bicycle, or vehicular path. Provisions established in the City's General Plan relate to development which affects roadways/paths directly, which the proposed Project does not. There are no applicable provisions relating to the Project in the Rancho Mirage General Plan 2017 Update.

Existing Conditions

The 2006 EIR for RMHS includes a project specific *Traffic Study for Palm Springs Unified School District Comprehensive School #4, City of Rancho Mirage* was prepared by Katz, Okitsu & Associates (KOA 2006). The traffic issues were evaluated in the context of CEQA and the requirements of the cities of Rancho Mirage and Cathedral City, and the County of Riverside.

The 2006 Traffic Study evaluated trip distribution as the process of identifying the probable destinations, directions or traffic routes that would be utilized by project traffic. The potential interaction between the proposed schools and surrounding regional access routes were considered to identify the route where the project traffic would be distributed. The trip distribution pattern for the school site is shaped by the proposed high school student attendance boundary. The anticipated trip distribution for the proportion of project traffic that would use the street segments in the surrounding area. The distribution was developed based on the proposed High School No. 4 (now RMHS) attendance boundary, surrounding land uses, and likely travel patterns by school faculty, and staff, as well as parents who drop off their children and head to work.

The 2006 Traffic Study also noted that the high school portion of the site contains approximately 430 spaces for students, 220 spaces for staff and 200 undesignated spaces. The total number of paved, marked parking spaces in the high school area would be approximately 850 spaces. The City of Rancho Mirage Zoning Ordinance standard for high school parking is five spaces for each classroom, plus one space for each five fixed seats or 35 square feet of assemble area in the auditorium. The number of parking spaces delineated on the current site plan for the project would appear to meet this standard.

Regional Access

The Project Site is located within the Coachella Valley, which is separated from the Greater Los Angeles Area to the northwest by the San Gorgonio Pass, through which Interstate 10 (I-10) and the Union Pacific Railroad are the major transportation corridors. The Project Site is situated within the City of Rancho Mirage's area of influence.

Regional access in the Coachella Valley is provided by the Interstate 10 (I-10) Freeway, which provides access through the valley from the northwest to the southeast. I-10 extends from western Los Angeles County, through San Bernardino County and Riverside County to the east across Arizona.

Regional access to the Project Site is currently available from I-10 via Exit 130, Bob Hope Drive, east of the Project Site.

Highways and Local Streets

Highways

Interstate 10 (I-10) is the southernmost cross-country federal highway that traverses the states of California, Arizona, New Mexico, Texas, Louisiana, Mississippi, Alabama, and Florida. I-10 runs through the northern portion of the City, south of the Project Site. In the Project study area, I-10 has three mixed-flow lanes in each direction.

Local Streets

Local access to the site is provided by 30th Avenue to the north, Ramon Road to the south, Rattler Road to the East, and Da Vall Drive to the west. 30th Avenue is another major collector roadway which runs west to east, the east end turning south into the northern end of Rattler Road.[3] This road is outside of the City's limits, but within its sphere of influence. Motorists on 30th Avenue generally experience below average or fair operating conditions with only minor delays.

Ramon Road is a major arterial roadway in Rancho Mirage with a six-lane divided roadway with a typical right-of-way width of 120 feet and a curb-to-curb pavement width of approximately 106 feet.[4] It is one of the main thoroughfares in the City. Motorists on Ramon Road generally experience below average or fair operating conditions with only minor delays.

Rattler Road is a major collector roadway with a four-lane divided roadway with an approximate right-of-way width of 100 feet and a curb-to-curb pavement width of approximately 76 feet. The function of a major collector roadway, like Rattler Road, is to distribute traffic between local streets and arterials.[5] Rattler Road is the only road that reaches RMHS, making it the Project Site's primary traffic route. Motorists on Rattler Road generally experience below average or fair operating conditions with only minor delays.

Da Vall Drive is a north-south roadway located west of the Project Site that intersects with both 30th Avenue to the north of the Project Site, and Ramon Road to the south, which is considered a critical intersection in the City. Da Vall Drive is a minor arterial road according to the Circulation Element of the Rancho Mirage General Plan.[6]

---

3 City of Rancho Mirage General Plan (2017) Update, Circulation Element, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter3Circulation.pdf. Accessed April 2023.

4 City of Rancho Mirage General Plan (2017) Update, Circulation Element, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter3Circulation.pdf. Accessed April 2023.

5 City of Rancho Mirage General Plan (2017) Update, Circulation Element, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter3_Circulation.pdf. Accessed April 2023.

6 City of Rancho Mirage General Plan (2017) Update, Circulation Element, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter3Circulation.pdf. Accessed April 2023.

The nearest critical intersections are Ramon Road and Da Valle Drive, southwest of the Project Site, as well as Ramon Road and Los Alamos Drive southeast of RMHS.

Campus Parking Facilities

There are five separate parking facilities at RMHS: two parking lots are accessible from Rattler Road, adjacent to the schools' athletic facilities, and three parking lots are accessible from Ramon Road. The parking lot accessible from Ramon Road is the main lot used by the school's administrators and non-sporting related guests. These parking lots have the capacity to accommodate students with vehicles, staff, faculty, and additional guest spots.

Existing Traffic Conditions

The weekday morning peak hour in the Project area is generally 7:30 A.M. to 8:30 A.M. and the evening peak hour is generally 3:30 P.M. to 4:30 P.M. coinciding with the pick-up/drop-off period at RMHS.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant impact to traffic and transportation if it would:

Threshold 5.14-1: **Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**
Threshold 5.14-2: **Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).**

Project Impacts

Threshold 5.14-1: **Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

Under CEQA, a project is considered consistent with an applicable plan if it is consistent with the overall intent of the plan and would not preclude the attainment of its primary goals. A project does not need to be in perfect conformity with each and every policy. Finally, any inconsistency with an applicable plan, ordinance or policy is only a significant impact under CEQA if the plan, ordinance, or policy was adopted for the purpose of avoiding or mitigating an environmental effect and if the inconsistency itself would result in a direct physical impact on the environment.

As further described in **Section 3.0: Project Description** of this Draft EIR, the proposed Project does not include any construction or operational activities outside of RMHS grounds.

Rattler Road lies adjacent to the eastern perimeter of the high school campus and is the only road with access to RMHS. There are three vehicular entrances off Rattler Road: one entrance located along the

southern perimeter of the high school, one entrance located directly north of the classrooms and administrative offices, and a third entrance located on the northern end of the high school leading directly to the fields on campus. Construction workers would primarily, if not only, use the third and northern most entrance to the high school, to be in close proximity to the Project Site.

Construction

Construction workers typically arrive and leave work sites between 7:30 A.M. and 4:30 P.M., and not during peak school hours (8:30 A.M. to 3:30 P.M.), thus minimizing any traffic increases for students, parents, and faculty. This would not affect student drop off and pick up but may result in a shortage of parking during the construction period, if the workers were to park within the schools' main lot. Pedestrian, bicycle, and vehicles lanes would not be affected or disrupted by the proposed Project.

Construction-related traffic would be short-term and would cause a nominal increase in vehicle trips associated with workers commuting to and from the site and trucks delivering material or equipment. After construction of the proposed Project, daily traffic associated with the athletic fields is not expected to materially increase, although some trips may occur later in the day as a result of being able to hold practices or games after dark (which is not feasible currently).

The proposed Project would not make any changes to the circulation system, would not decrease roadway capacity, would not generate appreciable additional traffic or change traffic patterns that could cause an impact to the circulation system including transit, roadway, bicycle, and pedestrian facilities.

Operation

The proposed Project would not make any changes to the circulation systems, would not decrease roadway capacity, would not generate appreciable additional traffic or change traffic patterns that could cause an impact to the circulation system including transit, roadway, bicycle, and pedestrian facilities. There would be no changes to parking under the proposed Project.

Once the construction of the proposed Project is complete, traffic operations would return to their previous normal operations at RMHS. However, with the addition of the lighting fixtures around the fields, activities that previously occurred earlier in the day (prior to the installation of lights) would occur at later hours. This would not result in an increase in programs or activities, or residual traffic, but it may shift normal traffic patterns back a few hours. Otherwise, operations would not conflict with the City of Rancho Mirage circulation plans, ordinances, policies, or the performance of the surrounding roadways.

Implementation of the Project would not require the construction, re-design, or alteration of any public roadways. Therefore, the Project would not conflict with a program, plan, ordinance, or policy addressing transit, bicycle, and pedestrian facilities.

Impacts would be considered less than significant.

Threshold 5.14-2: Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3 was developed in response to Senate Bill 743, which eliminated auto delay, LOS, and similar measures of vehicular capacity or traffic congestion. CEQA Guidelines Section 15064.3 is a basis for determining impacts. The new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (PRC Section 21099(b)(1)).[7] Vehicle miles traveled (VMT) is the new indicator of the travel levels on the roadway system by motor vehicles.

As discussed previously, the proposed Project would include installation of exterior lighting at existing fields at the RMHS campuses and would not expand the existing enrollment-capacity.

Construction of the proposed Project would result in a nominal increase in local traffic as a result of construction-related worker traffic, material and equipment deliveries, and construction activities. VMT generated from construction-related traffic would cease once construction is completed, and VMT levels would return to pre-Project conditions. Therefore, vehicle miles generated from construction traffic would be temporary and short term. The proposed Project would not result in an increase in VMT.

Implementation of the Project would not conflict with CEQA Guidelines section 10564.3, subdivision (b), as the proposed improvements would not result in increased VMT during operations. There would be a minimal increase of VMT during the construction, but this would be temporary and minimal.

Impacts would be less than significant.

CUMULATIVE ANALYSIS

As mentioned above, implementation of the Project would not substantially impact transportation or circulation in Rancho Mirage.

The following cumulative impacts are analyzed based on a list of past, present, and probable future projects producing related cumulative impacts, described in **Section 4.0: Environmental Setting**.

Past and existing cumulative development within the immediate vicinity of the Project Site has been relatively limited. Circulation in the City continues to be defined by its coordination with local and State agencies such as the Coachella Valley Association of Governments and Caltrans, to create a safe and efficient roadway system within its communities.

---

7 Public Resources Code (PRC), Division 13. Environmental Quality, Chapter 2.7. Modernization of Transportation Analysis for Transit-Oriented Infill Projects, Section 21099, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=21099.&lawCode=PRC. Accessed March 2023.

Future development includes the Section 24 Specific Plan which is proposed less than one mile southeast of the Project Site. This project will affect traffic of the area considering the existing site is vacant, and the Project would include new residential, hotel, and commercial properties which would attract new groups of people, thus increase the number of VMT. However, development would be required to comply with applicable federal and state laws and regulations that concern the traffic and circulation, including the California Public Resources Code, the City of Rancho Mirage General Plan 2017 Update, and CEQA,[8] as well as implement appropriate mitigation measures. Section 24 Specific Plan development would include similar elements to the existing development and create consistency within that area.

Other proposed projects described in **Section 4.0** may have a substantial bearing on the circulation of the area near the proposed Project, as they would attract additional residents and visitors to the area. While these projects would each increase traffic during operations and/or partially-disrupt circulation during construction, to accommodate the construction staff, each would be required to comply with the City's conditions of maintain circulation, which would reduce this potential impact. Further, the City of Rancho Mirage is a relatively built out city with extensive roads and paths; new developments would not result in an incremental decrease in efficiency of circulation but may increase peak-hour traffic and would not be considered cumulatively considerable with the appropriate mitigation measures.

As the Project's impacts would be considered less than significant, the Project would not result in a cumulatively considerable contribution.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project does not increase or decrease, or in any way affect traffic in the area. Therefore, no significant unavoidable adverse impacts relating to traffic and transportation have been identified.

[8] City of Rancho Mirage, General Plan 2017 Update, Chapter 3 Circulation, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter_3_Circulation.pdf. Accessed March 2023.

5.8 TRIBAL CULTURAL RESOURCES

INTRODUCTION

This section of the Draft Supplemental Environmental Impact Report (SEIR) addresses the potential impacts of the proposed Rancho Mirage High School (RMHS) Field Lighting Project (Project) to impact tribal cultural resources within the Project Site and in the immediate surrounding area within the City of Rancho Mirage (City). Tribal cultural resources include landscapes, sacred places, or objects with cultural value to a California Native American Tribe. Impacts to cultural resources (e.g., historic, archaeological, etc.) are discussed in **Section 5.4: Cultural Resources**.

REGULATORY SETTING

Federal

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979[1] (ARPA) regulates the protection of archaeological resources and sites that are on federal lands and Indian lands. ARPA mandates consultation procedures before initiation of archaeological research on Indian lands or research involving Indian archaeological resources. Indian tribes are required to be notified of possible harm to or destruction of sites having religious or cultural significance to that group. Permits to excavate or remove archaeological resources from Indian lands require consent of the Indian or Indian tribe owning or having jurisdiction over the lands. The permit must include terms and conditions as may be requested by the affected Native Americans. ARPA stipulates that any exchange or ultimate disposition of archaeological resources excavated or removed from Indian lands must be subject to the consent of the Indian or Indian tribe owning or having jurisdiction over such lands.

National Historic Preservation Act

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

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as

1 United States Code, tit. 16, sec. 470aa–470mm, Archaeological Resources Protection Act of 1979, Public Law 96-95, as amended.

human remains, funerary objects, sacred objects, or objects of cultural patrimony to lineal descendants and culturally affiliated Indian tribes.[2]

State

Assembly Bill 52 (AB 52)

As of July 1, 2015, California Assembly Bill 52 (AB 52) expands CEQA by defining a new resource category: "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code [PRC] Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

a. 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

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

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Discovery of Sacred Lands and Human Remains

Health and Safety Code (Section 7050.5)

California Health and Safety Code Section 7050.5 identifies protocols if human remains are encountered unexpectedly. In such circumstance, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98.[3]

---

2 United States Code: Title 15, Chapter 32: Native Americans Graves Protection and Repatriation Act of 1990. https://uscode.house.gov/view.xhtml?path=/prelim@title25/chapter32&edition=prelim. Accessed May 2023.

3 California Code, Health and Safety Code, Section 7050.5

Public Resources Code (Section 5097.9 to 5097.991)

Public Resources Code Sections 5097.9 to 5097.991 stipulate that whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, those persons believed to be most likely descended from the deceased Native American must be notified. The descendants may, with the permission of the owner of the land, or their authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the NAHC. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.[4]

Regional and Local

City of Rancho Mirage

General Plan 2017 Update

The City's most recent General Plan 2017 Update includes provisions for protecting tribal resources within the City. Chapter 5 Conservation and Open Space Element includes guidance to enhance and protect cultural, paleontological, and historic resources.[5] Two tribes are located within the vicinity of Rancho Mirage, the Agua Caliente Band of Cahuilla Indians and the Torres-Martinez Desert Cahuilla Indians. The City engages with these tribes when planning development that may affect Native American cultural resources or sacred sites.

ENVIRONMENTAL SETTING

Existing Conditions

As part of the 2006 EIR for the RMHS Campus, a cultural resource survey was completed entitled Phase I Cultural Resources Inventory of 120 Acres prepared by the Keith Companies in October 2004.[6] That report is available as Appendix D of the 2006 EIR. As part of that report, a cultural resource records search was conducted at the Eastern Information Center of the California Historical Resources Information System, University of California, Riverside and Agua Caliente Tribal Office in Palm Springs for the two parcels. The search indicated that no previously recorded archaeological or historical sites had been recorded within the two parcels or anywhere within Section 14 (the 640-acre land area including and surrounding the

4 California Code, Public Resources Code, Section 5097.9-5097.991.

5 City of Rancho Mirage, General Plan 2017 Update, Chapter 5: Conservation and Open Space, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter_5_Conservation_and_Open_Space.pdf. Accessed May 2023.

6 Palm Springs Unified School District, Draft Environmental Impact Report for the Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School (SCH 2006011095), Appendix D: Phase I Cultural Resources Inventory, September 2006.

property). Subsequent to the prior cultural resource report completion, the RMHS was built, and no tribal resources were discovered during site development.

Regional and Local Setting

California is divided into geomorphic provinces which are distinctive, generally easy-to-recognize natural regions in which the geologic record, types of landforms, pattern of landscape features, and climate in all parts are similar.

The Project Site is located in the Coachella Valley in the northern part of the Colorado Desert Geomorphic Province, which is a low-lying barren desert basin. More specifically, the Project Site is located in the City of Rancho Mirage within Riverside County. The Project Site is located in the center of the Coachella Valley, a low valley sandwiched between the Santa Rosa Mountains to the south and southeast and the Little San Bernardino Mountains to the north. The Coachella Valley consists of alternating lacustrine and fluvial sediments, termed the Lake Cahuilla beds, which have previously yielded fossil remains representing diverse freshwater diatoms, land plants, sponges, ostracods, mollusks, fish, and small terrestrial vertebrates.[7] Topographically, the elevation of the Project Site is approximately 300 feet above mean sea level (AMSL). The Project Site is relatively flat with no areas of significant topographic relief.

The approximately 60-acre Project Site includes an existing and developed high school campus that has been operational since 2013. The Project Site is located in a portion of the Coachella Valley identified as having low to moderate prehistoric/ethnohistoric cultural resource sensitivity.

Ethnographic Setting

The aboriginal group that occupied the northern Coachella Valley during the historical period was the Desert Cahuilla, who, along with the Mountain and Pass Cahuilla, constituted the ethnographic Cahuilla.[8] The Cahuilla spoke a language of the Takic branch of Northern Uto-Aztecan and the Desert Cahuilla spoke a distinct dialect of Cahuilla.

In 1876, the Agua Caliente Indian Reservation was founded by an Executive Order of President Ulysses S. Grant which was expanded in 1877 and 1907. The Reservation covers roughly 31,500 acres and consists of all even-numbered sections and all unsurveyed portions of Township 4 South, Ranges 4 and 5 East, and Township 5 South, Range 4 East, on the San Bernardino Meridian, with the exception of sections already given out by the United States (US) government. The odd-numbered sections had already been given to railroads as an incentive to develop cross-country rail lines, and as such, the Reservation appears as a

7 United states Bureau of Reclamation. Lower Colorado Basin- Interior Region 8, Coachella Canal Area Resource Management Plan/ Environmental Assessment, Cultural Resources, https://www.usbr.gov/lc/yuma/environmental_docs/Coachella/coachella-chap5-5.pdf. Accessed April 2023.

8 The Cahuilla People, Augustine Band of Cahuilla Indians, https://augustinetribe-nsn.gov/cahuilla-people/. Accessed April 2023.

checkerboard pattern on maps. In 1891, Congress passed the Mission Indian Relief Act, which authorized allotments of Reservation land to be given to individuals. The allotment elections were finally approved by the Secretary of the Interior as part of the Equalization Act in 1959, which finalized the individual Indian allotments and set aside certain lands for Agua Caliente Tribal use and cemeteries. The Agua Caliente Tribe has a land-exchange agreement with the U.S. Department of the Interior (USDI) Bureau of Land Management (BLM) and is actively acquiring other non-reservation land.

Tribal Notification and Consultation

A number of California Native American tribes have been historically associated with the broader Coachella Valley and Project area, as identified by the Native American Heritage Commission. The Project Site has been developed and there are no known historical resources within the Project Site.

Pursuant PRC Section 21080.3.1 (Assembly Bill [AB] 52), the District has actively engaged with tribes historically associated with the Project area. Comments were received from the two tribes: the Agua Caliente Band of Cahuilla Indians and the Torres-Martinez Desert Cahuilla Indians. Notification letters sent to both tribes are provided in **Appendix F**.

On March 27, 2023, a response has been received from only the Agua Caliente Band of Cahuilla Indians.[9] The full letter is available in **Appendix F: Tribal Consultation Responses**. The Agua Caliente Band of Cahuilla Indians requests the following:

The presence of an approved Agua Caliente Native American Cultural Resource Monitor(s) during any ground disturbing activities (including archaeological testing and surveys). Should buried cultural deposits be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a Qualified Archaeologist (Secretary of the Interior's Standards and Guidelines) to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Officer and the Agua Caliente Tribal Historic Preservation Office.

ENVIRONMENTAL IMPACT ANALYSIS

Thresholds of Significance

The CEQA Guidelines include thresholds to determine whether a project would have a significant effect on the environment (Appendix G of the CEQA Guidelines). The potential for the Project to result in impacts associated with tribal and cultural resources is based on the following:

Threshold TCR-1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural

value to a California Native American tribe, and that is 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)?

Threshold TCR-2: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Project Impacts

Threshold TCR-1: **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 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)?**

"Tribal cultural resources," as defined in PRC Section 21074, are: sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe.[10] Additionally, PRC section 5020.1(k) defines "local register of historical resources" as a list of properties officially designated or recognized as historically important by a local government pursuant to a local ordinance or resolution.[11]

As discussed in **Section 5.4: Cultural Resources**, the Project Site is not identified on a local historic landmark list, the California Historical Landmarks register, or the California Points of Historical Interest register. Additionally, the proposed Project would not impact the permanent classrooms on site as only the fields would be altered during construction.

As previously noted, as part of the 2006 EIR for the RMHS Campus, a cultural resource survey was completed entitled Phase I Cultural Resources Inventory of 120 Acres prepared by the Keith Companies

10 Public Resources Code (PRC), Division 13. Environmental Quality, Chapter 2.5 Definitions, Section 21074, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=21074. Accessed March 2023.

11 Public Resources Code (PRC), Division 5. Parks and Monuments, Chapter 1. State Parks and Monuments, Article 2. Historic Resources, Section 5020.1, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=5020.1.&lawCode=PRC . Accessed March 2023.

in October 2004.[12] That report is available as Appendix D of the 2006 EIR. As part of that report, a cultural resource records search was conducted on the two parcels. The search indicated that no previously recorded archaeological or historical sites had been recorded within the two parcels or anywhere within Section 14 (the 640-acre land area including and surrounding the property). Subsequent to the prior cultural resource report completion, the RMHS was built, and no tribal resources were discovered during site development.

The proposed Project involves installing lights at the athletic fields at RMHS. Additionally, the proposed Project would not impact the permanent classrooms on each site as only the high school fields would be altered during construction. As the Project Site and RMHS campus are not identified on any historical registers or landmark lists, they are not recognized as historically important.

Impacts would be less than significant.

Threshold TCR-2: **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

Public Resource Code Section 5024.1(c) includes criteria to be used for listing a resource in the California Register. As discussed above, the Project Sites are not listed or not eligible for listing as a historic resource.

As the proposed Project's construction and demolition activities would involve limited earthmoving work, and the site is previously graded and developed portions of the campus, it is unlikely that subsurface items would be discovered during construction.

Assembly Bill (AB 52) establishes a formal consultation process for California Native American tribes on development projects. AB 52 notification letters were sent by the District to the Agua Caliente band of Cahuilla Indians (ACBCI) and Torres Martinez Desert Cahuilla tribes on March 22, 2023. Only the Agua Caliente Tribe responded.

The Tribe requested the presence of an approved Agua Caliente Native American Cultural Resource Monitor(s) during any ground disturbing activities as the Project takes place within the Tribe's Traditional Use Area. Should buried cultural deposits be encountered, the Monitor(s) may request that destructive

12 Palm Springs Unified School District, Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School, Draft Environmental Impact Report, Appendix D: Phase I Cultural Resources Inventory, 2006.

construction halt and the Monitor(s) shall notify a Qualified Archaeologist (Secretary of the Interior's Standards and Guidelines) to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Officer and the Agua Caliente Tribal Historic Preservation Office. Copies of the AB 52 notification letters and response are provided in **Appendix** F.

While no tribal cultural resources were identified in the records search, construction activities associated with the proposed Project could have the potential to unearth undocumented tribal cultural resources beneath the Project Sites during ground disturbing activities (such as drilling and trenching).

Impacts are potentially significant.

CUMULATIVE IMPACTS

As mentioned above, implementation of the Project would not substantially impact tribal cultural resources with the implementation of the proposed mitigation measures.

The following cumulative impacts are analyzed based on a list of past, present, and probable future projects producing related cumulative impacts, described in **Section 4.0: Environmental Setting**.

Past and existing cumulative development within the immediate vicinity of the Project Site has been relatively limited. Tribal cultural resources in Rancho Mirage continue to be defined as ethnographic Cahuilla historic artifacts and sacred lands.

Future development includes the Section 24 Specific Plan which is proposed less than one mile southeast of the Project Site. This project may affect tribal characteristics of the area considering the existing site is vacant and consists of sand dunes and desert flat land, which have not been previously graded or excavated. However, development would be required to comply with applicable federal and state laws and regulations that concern the preservation of tribal resources, including the California Public Resources Code, AB 52, the National Historic Preservation Act, and CEQA.[13] Section 24 Specific Plan development would include similar elements to the existing development and create consistency within that area. Any potentially significant tribal cultural resources discovered would be appropriately dealt with, per the City's and State's regulations.

Other proposed projects described in **Section 4.0** would not have a substantial bearing on the ethnohistoric Cahuilla character of the area near the proposed Project, in that the appropriate tribes would be contacted prior to development, per AB 52, and mitigation measures will be implemented to reduce any potential impacts to tribal cultural resources. While each project would increase the probability of encountering and disrupting tribal cultural resources, each would be required to comply with the City's and local tribal (AB 52) conditions of approval for new developments, which would reduce

13 City of Rancho Mirage, General Plan Update (2017), Conservation and Open Space Element, https://ranchomirageca.gov/wp-content/uploads/2019/01/rm-general-plan-17.pdf. Accessed April 2023.

this potentially impacts. Further, the City of Rancho Mirage is a relatively built out city with extensive ground-disturbances. New developments would not result in an incremental decrease in tribal cultural resources and would not be considered cumulatively considerable.

As the Project's impacts would be considered less than significant, the Project would not result in a cumulatively considerable contribution.

MITIGATION MEASURES

The prior 2006 EIR for RMHS identified mitigation measures for tribal resources that were implemented at the time of the construction of the campus.[14]

The following mitigation measures have been identified that would reduce tribal resources potentially significant impacts during construction of the Project:

MM TCR-1 The District will notify the tribes two weeks prior to the stary of construction activities when ground disturbing work will begin.

The District will allow access for tribal monitors (at no cost to the District) during any ground disturbing activities (including archaeological testing and surveys). Should buried cultural deposits be encountered, the tribal monitor may request that construction activities in the immediate area of the discovery be halted, and the monitor shall investigate to assess if the discovery includes tribal cultural resources, or human remains that nay be of tribal decent. If the tribal monitor determines that the discovery does include tribal cultural resources or human remains that may be of tribal decent, then the monitor shall notify the District and plan for recovery of the remains be prepared. If Native American resources are discovered or are suspected, each of the consulting tribes for the Project will be notified and as dictated by California Health and Safety Code Section 7050.5, PRC Section 5097.98, and the California Code of Regulations (CCR) Section 15064.5(e).

If human remains are discovered, the District shall also notify the Riverside County coroner's office to remove the remains.

No further work in the immediate area may resume until the tribal cultural resources or human remains are removed.

14 Palm Springs Unified School District, Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School, Draft Environmental Impact Report, Appendix D: Phase I Cultural Resources Inventory, 2006.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of **MM TCR-1**, **MM CUL-1**, **MM CUL-2**, and **MM CUL-3** impacts associated with tribal cultural resources would be less than significant. Therefore, no significant unavoidable adverse impacts relating to tribal cultural resources have been identified. Cumulative impacts would also result in less than significant impacts to tribal cultural resources.

6.0 OTHER ENVIRONMENTAL IMPACTS

This section of the Draft Environmental Impact Report (Draft EIR) provides a brief discussion of the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the Draft EIR. In compliance with the provisions of the California Environmental Quality Act (CEQA) Guidelines,[1] this section also discusses the significant irreversible environmental changes that would be caused by the proposed Desert Retreat Specific Plan Project ("Desert Retreat Specific Plan" or "Project"), including the use of nonrenewable resources, and primary and secondary impacts which generally commit future generations to similar uses. Please see **Section 7.0: Terms, Definitions, and Acronyms** for a glossary of terms, definitions, and acronyms used in this Draft EIR.

1 California Code of Regulations. Title 14. Section 15000 et seq. *CEQA Guidelines*. Section 15127 and 15128.

6.1 EFFECTS NOT FOUND TO BE SIGNIFICANT

INTRODUCTION

The Palm Springs United School District (District) is acting as the Lead Agency for the planning and environmental review of the proposed Rancho Mirage Field Lighting Project (Project), is preparing this Draft Supplemental Environmental Impact Report (SEIR) in compliance with the California Environmental Quality Act (CEQA), including the *CEQA Guidelines*. Section 15128 of the *CEQA Guidelines* requires a brief description of any possible significant effects that were determined not to be significant and were not analyzed in detail within the environmental analysis.

The following discussion presents the analysis of the effects related to, agriculture and forestry, , energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, utilities and service systems, and wildfire determined to have no potential to impact the environment, per the CEQA Guidelines.

These topics were evaluated in the original for the Rancho Mirage High Campus completed in 2006.[1] On January 9, 2007, the District certified the EIR, adopted a statement of overriding considerations and a mitigation monitoring program, and approved the final EIR.

The 2006 EIR considered an 80-acre project site is of adequate size to support the development and operation of a comprehensive high school and an elementary school.[2] The northwest portion of the site is being reserved for the future elementary school. As analyzed, the high school would provide educational facilities for grades 9-12 and would serve up to 3,000 students and employ approximately 135-140 teachers, administrators, and other staff members. The 2006 EIR's Project Description for the high school included 30.6 acres of athletic fields. This included football, baseball, softball, tennis courts, outdoor basketball, soccer and practice fields.

Any items not addressed in this section are addressed in **Section 5.0: Environmental Impact Analysis** of this Draft SEIR.

1 Palm Springs Unified School District, Draft Environmental Impact Report for the Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School (SCH 2006011095), Appendix D: Phase I Cultural Resources Inventory, September 2006.

2 Palm Springs Unified School District, Draft Environmental Impact Report for the Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School (SCH 2006011095), Appendix D: Phase I Cultural Resources Inventory, September 2006.

AESTHETICS

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

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

The Project Site is located on the northern side of campus which contains the practice field South, practice field North, the JV and varsity baseball fields, JV and varsity softball fields, as well as soccer fields 1 and 2. As previously noted, the proposed lighting fixtures would be placed around the perimeter of the existing athletic fields.

No scenic resources, such as trees, rock outcrops, or historic buildings, are currently within the Project Site. As stated in the City's General Plan, scenic resources such as hillside and mountain vistas shall be preserved.[3] Consequently, views of the San Jacinto, Santa Rosa, and Little San Bernardino Mountains would not be altered. The Project would, therefore, not substantially damage scenic resources within the Project Site nor would it conflict with existing surrounding land uses.

Impacts would be less than significant.

The 2006 EIR determined that stadium lights and the rooflines of the taller school buildings would also be visible from the adjacent residential neighborhood.[4] The surrounding viewshed of the distant mountains would not be adversely affected, because the campus buildings would be clustered on the east side of the site approximately 500 feet from the closest residences. The immediate easterly views of the open desert from the adjacent residences impacted; however, this view is already limited by block walls enclosing these residences and the visual impact would not be significant since the campus near the residences would be mostly open playing fields.

Impacts would be less than significant.

Threshold 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?

Implementation of the Project would be compatible with the existing visual character that currently exists on site. The Project Site is located on an existing and operational high school campus and the proposed lighting fixtures would be located on the athletic fields to the north of the site. Although the

3 The City of Rancho Mirage, General Plan (2017) Update, Conservation and Open Space Element, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter_5_Conservation_and_Open_Space.pdf. Accessed April 2023.

4 Palm Springs Unified School District, Draft Environmental Impact Report for the Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School (SCH 2006011095), Appendix D: Phase I Cultural Resources Inventory, September 2006.

proposed lighting fixtures would be up to 100 feet tall at their highest point, it would not limit background views of the San Jacinto and Santa Rosa Mountains to the south and west. Therefore, the Project would not negatively impact the aesthetic appearance of the Project Site or surrounding area.

Impacts would be less than significant.

AGRICULTURE AND FORESTRY RESOURCES

Would the project:

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

The Project Site contains an already existing and developed high school and is surrounded by "Urban and Built-Up Land" and "Other Land" as designated by the California Important Farmland Finder.[5] The Project Site and surrounding development are not currently used for agriculture and the proposed Project would not convert farmland to nonagricultural use.

No impact would occur.

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

The Project Site General Plan land use designation is School with surrounding uses designated as residential or mixed use.[6] The Project Site is not subject to a Williamson Act contract; it is designated as Non-Enrolled by the California Department of Conservation, Conservation Program Support.[7] The land around the site is developed, and none of it is zoned for agriculture or subject to a Williamson Act Contract.

No impact would occur.

Threshold 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**

5 California Department of Conservation, California Important Farmland Finder, https://maps.conservation.ca.gov/dlrp/ciff/, Accessed April 2023.

6 City of Rancho Mirage, General Plan, Land Use Element, https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/. Accessed April 2023.

Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

As defined by the Public Resources Code Section 12220(g),[8] forestland is land that can support 10 percent native tree cover of any species under natural conditions and that allows for management of one or more forest resources. Given that there is minimal vegetative cover on the Project Site and the site is not zoned as forestland, the Project would not affect any forestlands as defined by the Public Resources Code.

A Timberland Production Zone is defined by the Government Code Section 51104(g) as an area that is zoned for the sole purpose of growing and harvesting timber. Because the Project Site does not contain any timber resources, nor is it zoned as timberland or timberland zoned Timberland Production, the Project would not conflict with timberland or Timberland Production areas.

No impact would occur.

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

As previously discussed, the Project Site is not defined as having forestland as defined in Public Resources Code Section 12220(g). Additionally, there is no forestland located in or near the Project Site. The Project would not result in the loss of forestland or result in the conversion of forestland to nonforest uses.

No impact would occur.

Threshold e): Involve other changes in the existing environment which, due to their location or nature could result in conversion of Farmland, to nonagricultural use or conversion of forestland to nonforest use?

The Project Site are not zoned for agriculture or forestland. The proposed Project would not result in conversion of farmland to nonagricultural use, or forestland to nonforest use.

No impact would occur.

AIR QUALITY

Would the project:

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

The Project Site is a school and construction would only include the installation of new pole mounted lighting fixtures around the perimeter of the sport fields within the Rancho Mirage High School campus. The proposed Project would not expose a substantial number of people to other emissions including discernable odors from typical construction activities such as paint application or the pouring of asphalt as these activities would not take place during the proposed Project.

Impacts would be less than significant.

Threshold e): Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the School?

The Project Site is not located within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor. The nearest freeway is Interstate 10 (I-10) located approximately 0.5 miles (2,547 feet) away.

EDC Section 17213 states that a busy traffic corridor is defined as having 50,000 or more average daily trips (ADT) in a rural area, or 100,000 or more ADT in an urban area.[9] The nearest roads to the Project Site include Ramon Road with an ADT of 28,126 and Da Vall Drive with an ADT of 8,704.[10]

There would be no air quality risks to the school.

Impacts would be less than significant.

9 California Education Code (EDC), Sec. 17213, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=17213.#:~:text=17213.%20The%20governing%20board%20of%20a%20school%20district,school%20district%2C%20unless%20all%20of%20the%20following%20occur%3A. Accessed February 2022.

10 Coachella Valley Association of Governments, Coachella Valley Traffic Counts, https://www.arcgis.com/apps/View/index.html?appid=fb9489b188e74be3b599afb52741849d. Accessed March 2023.

BIOLOGICAL RESOURCES

Would the project:

Threshold 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 Game or US Fish and Wildlife Service?**

The Project site and the surrounding urban area are fully developed, and no riparian or other sensitive natural community is located on or adjacent to the Project site.[11] [12] Implementation of the Project would not result in any adverse impacts to riparian habitat or other sensitive natural communities.

No impact would occur.

Threshold c): **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

The mowed lawn area of the existing athletic fields do not provide habitat for sensitive or special status wildlife species, and thus no direct impacts are anticipated from the proposed Project upon wildlife.

No impact would occur.

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

The Proposed project would not conflict with any local policies or ordinances protecting biological resources, such as tree preservation. No trees would be removed from any of the school campuses.

No trees would be removed as part of the proposed Project.

No impact would occur.

11 United States Department of Fish and Wildlife, National Wetlands Inventory, Wetlands Mapper, https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/. Accessed April 2023.

12 City of Rancho Mirage, General Plan (2017) Update, Conservation and Open Element, Biological Resources, https://ranchomirageca.gov/wp-content/uploads/2019/01/rm-general-plan-17.pdf. Accessed April 2023.

Threshold f): Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

The Coachella Valley Multiple Species Conservation Plan and Habitat Conservation Plan/Natural Community Conservation Plan (CVMSHCP) addresses numerous species in the Coachella Valley.[13]

The goal of the Coachella Valley MSHCP is to preserve the natural ecosystems and biological diversity on a regional scale in Coachella Valley. Local developments must pay a local development mitigation fee prior to the issuance of a building permit. The fee is used to mitigate the impacts of new development, for the purchase of land, and perpetual conservation.

The Project Site is located within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP); however, it is not located within any individual Conservation Area as established by the CVMSHCP. The Project would not involve habitat modifications that would impact special-status species, nor does the Project Site does contain any critical habitat or support any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or US Fish and Wildlife Service (USFWS).

In addition to the CVMSHCP, the Agua Caliente band of Cahuilla Indians maintain and implement the Tribal Habitat Conservation Plan (HCP).[14] The Tribal HCP protects and manages natural resources and habitat within the Tribe's jurisdictional territory. Its primary conservation mechanisms include creation of a Habitat Preserve; adoption of avoidance, minimization, and mitigation measures to enhance the habitats and survivability of Covered species; and payment of a mitigation fee that funds Tribal acquisition and management of replacement habitat. It has not yet been approved by the USFWS.

The District is not a participant in either the Coachella Valley MSHCP or Tribal HCP programs.

No impact would occur.

CULTURAL RESOURCES

Would the project:

Threshold a): Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

The CRHR is an authoritative guide to California's significant archaeological and historical resources, and it serves to identify, evaluate, register, and protect those resources. For the purposes of CEQA, a

13 Southern California Association of Governments. SCAG GIS Open Data Portal. Natural Community Conservation Plan and Habitat Conservation Plan (NCCP & HCP). https://gisdata-scag.opendata.arcgis.com/datasets/natural-community-conservation-plan-nccp/explore?location=34.320967%2C-116.670397%2C8.71. Accessed March 2023.

14 Agua Caliente band of Cahuilla Indians, Tribal Habitat Conservation Plan, https://www.aguacaliente.org/documents/planning-department/THCPAugust2010.pdf. Accessed March 2023.

historical resource is any building, site, structure, object, or historic district listed in or eligible for listing in the CRHR (PRC 21084.1). A resource is consid-ered eligible for listing in the CRHR if it meets any of the following criteria:

a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
b. Is associated with the lives of people important in our past.
c. 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.
d. Has yielded, or may be likely to yield, information important in prehistory or history [PRC 5024.1(c)].

The fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources or is not included in a local register of historical resources, does not preclude a lead agency from determining that the resource may be a historical resource.

The Project Site includes an existing and operational high school campus with associated athletic fields. The proposed Project involved installing lighting fixtures along the perimeter of existing athletic fields on the north-northwestern portion of the main campus.

The installation of the lighting fixtures does not involve any major construction or any alterations to the layout of the high school. RMHS was opened on August 29, 2013. The age of the campus is not over 50 years old, thus it does not meet the criteria to be investigated as a historical resource under criteria consideration "g" of the National Register Criteria for Evaluation, of the National Register of Historic Places.

The California Historical Landmarks database, within the California State Parks Office of Historic Preservation, does not list RMHS or any nearby properties as a historical resource, as the school and nearby properties do not exceed 50 years of age, as required to be listed as a historical resource.[15] As the high school is not a historic resource, and no large-scale construction would occur, the proposed Project would not have a significant impact on historical resources.

Impacts would be less than significant.

15 City of Rancho Mirage, General Plan Update (2017), Conservation and Open Space Element, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter_5_Conservation_and_Open_Space.pdf. Accessed April 2023.

ENERGY

Would the project:

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

During construction, energy would be directly consumed on a limited basis to power lights and electronic equipment. Construction activities typically do not involve the consumption of natural gas. Construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment within the Project Site, construction worker travel, haul trips, and delivery trips. Due to the short duration of the construction process, and the fact that the extent of fuel consumption is inherent to construction projects of this size and nature, fuel consumption impacts would not be considered excessive or substantial with respect to regional fuel supplies. The energy demands during construction would be typical of construction projects of this size and would not necessitate additional energy facilities or distribution infrastructure.

The operation of the proposed Project would require electricity consumption. The proposed Project would account for a negligible portion of total energy consumed in Southern California Edison's planning area.[16] No other energy sources would be used at the proposed Project would not increase the number of students attending the school, and all other conditions would remain the same.

The proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy, and thus would not generate impacts with regard to energy use and consumption.

Impacts would be less than significant.

Threshold b): Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

The proposed Project would comply with applicable regulatory requirements for the design of new electricity related infrastructure, including the provisions set forth in the CALGreen Code and California's Building Energy Efficiency Standards. Therefore, the proposed Project would be consistent with adopted energy efficiency plans.

No impact would occur.

16 CEC, Demand Analysis Office, California Energy Demand 2020-2030 Revised Forecast, https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2019-integrated-energy-policy-report/2019-iepr. Accessed April 2023.

GEOLOGY AND SOILS

Would the project:

Threshold a): **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

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

The Project Site is not considered to be within an Alquist-Priolo Earthquake Fault Rupture Zone, as delineated by the California Geologic Survey.17 The closest fault is the Coachella Valley segment of the San Andreas Fault - South Branch (Banning Strand), approximately 3.26 miles north of PSHS. The Project site is not within a known earthquake fault or fault zone, nor does the Project involve activities which would induce rupture. The proposed Project would be implemented in accordance with the 2022 California Building Code (CBC),[18] which contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards.

No impact would occur.

ii. Does the site contain an active earthquake fault or fault trace, or is the site located within the boundaries of any special studies zone or within an area designated as geologically hazardous in the safety element of the local general plan?

As with most of southern California, Rancho Mirage High School is subject to ground shaking and potential damage in the event of earthquakes. The Project Site is located approximately 3.3 miles away from the nearest fault. The California Building Standards Commission regulates development in California through a variety of tools that reduce hazards from earthquakes to other geologic hazards. The proposed Project would be required to adhere to the provisions of the 2022 California Building Code (CBC) which contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards.[19] Compliance with the requirements of the 2022 CBC for structural safety would reduce hazards from strong seismic ground shaking.

No impact would occur.

iii. Involve the construction, reconstruction, or relation of any school building on the trace of a geological fault along which surface rupture

17 California Department of Conservation, California Geological Survey, Regional Geological and Mapping Program, ttps://maps.conservation.ca.gov/cgs/EQZApp/. Accessed March 2023.

18 California Building Code of Regulations, Title 24, Part 2, http://www.bsc.ca.gov/codes.aspx. Accessed March 2023.

19 California Building Code of Regulations, Title 24, Part 2. Accessed February 2022.

can reasonably be expected to occur within the life of the school building?

The proposed Project would not involve construction of any school buildings. Further, none of the Project Sites are located along the track of a geological fault. As such, surface rupture is not expected to occur.

No impact would occur.

iv. Involve the construction, reconstruction, or relocation of any school building on a site subject to moderate-to-high liquefaction?

According to the California Department of Conservation, the Project Site does not lie on or close to liquefaction zones.[20] The proposed Project does not involve the construction, reconstruction, or relocation of any school buildings.

No impact would occur.

v. Involve the construction, reconstruction, or relocation of any school building on a site subject to landslides?

The proposed Project does not include the construction, reconstruction, or relocation of any school buildings. Additionally, RMHS has been evaluated with a California Geological Survey by the California Department of Conservation pursuant to the requirements of the California department of Education for school sites and is not suspected of having a significant landslide risk due to its regional location and the campus being previously developed.[21] Thus, the campus is not subject to landslides.

No impact would occur.

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

Erosion is the movement of rock fragments and soil from one place to another. Precipitation, running water, waves, and wind are all agents of erosion. Erosion typically occurs on steep slopes where storm water and high winds can carry topsoil down the hillsides.

The proposed Project is located within previously developed or disturbed areas and existing school campuses, consisting of planted turf for the athletic fields. Construction activities including minor excavation for light standard foundations and open trenching for electrical conduit would produce exposed soils that could be susceptible to erosion as a result of rain, windy conditions, and/or construction vehicles traveling over exposed soils.

20 California Department of Conservation, EQ Zapp: California Earthquake Hazards Zone Application, https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed March 2023.

21 California Department of Conservation, EQ Zapp: California Earthquake Hazards Zone Application, https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed March 2023.

During construction, dust control measures required by SCAQMD would be implemented. SCAQMD Rule 403,[22] which requires pre-watering, prompt revegetation, and use of soil binders, all of which would reduce impacts associated with soil blowing and wind erosion during construction activities. Compliance with these erosion-control regulations would reduce soil erosion from the proposed Projects.

Impacts would be less than significant

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

Subsidence typically occurs where groundwater or natural gas is extracted. The phenomenon of liquefaction generally occurs when loose, unconsolidated, saturated, sandy soils are subjected to ground vibrations during a seismic event. The boundaries of the campus and associated athletic fields have a moderate possibility of being affected by liquefaction and lateral spreading.[23] However, the approximate depth to groundwater is greater than 50 feet and the depth of excavation will only be about 10 feet into the ground.[24]

The Whitewater River is located south of the Project site, which is a Federal Emergency Management Agency (FEMA) designated regulatory floodway, flowing along the base of the Santa Rosa Mountains. However, based on the soil composition of the area, the deep groundwater levels, the distance of the channel to the site, and the low potential for liquefaction, the potential for lateral spreading is low.[25] With the lack of presence of shallow groundwater, the potential for ground collapse and other adverse effects due to subsidence to occur on the Project site is low. Thus, there is low possibility that structures and people within the site would be affected by liquefaction, lateral spreading, subsidence, and or/collapse.[26]

The proposed Project would also be required to adhere to the 2022 CBC[27], which includes provisions that mandate structural foundations on compacted, competent soils, as well as measures to prevent soil collapse of saturated sediments (e.g., temporary shoring).

22 South Coast Air Quality Management District (SCAQMD), Compliance, Rule 403 Dust Control Information. www.aqmd.gov/home/rules-compliance/compliance/rule-403-dust-control-information#:~:text=Rule%20403%20requires%20the%20implementation%20of%20best%20available,the%20South%20Coast%20AQMD%20by%20submitting%20specific%20forms.

23 City of Rancho Mirage. General Plan, Safety Element. https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/ Accessed April 2023.

24 City of Rancho Mirage. General Plan, Safety Element. https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/ Accessed April 2023.

25 City of Rancho Mirage. General Plan, Safety Element. https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/ Accessed April 2023.

26 City of Rancho Mirage. General Plan, Safety Element. https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/ Accessed April 2023.

27 California Building Code of Regulations, Title 24, Part 2. Accessed March 2023.

The risk of landslides, liquefication, and subsidence are considered to be very low. Additionally, Project Site and associated athletic fields and surrounding areas are relatively flat.

Impacts would be less than significant.

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

Expansive soils are characterized as fine-grained, such as silts and clays, or soils with variable amounts of expansive clay minerals that can change in volume due to changes in water content. Collapsible soils typically occur in recently deposited soils that tend to be drier and more granular.

The Project site is developed and soils underlying the area are considered to have a low expansion. Expansive soils are not considered a hazard for the Project Site.[28] The proposed Project would also be required to adhere to the 2022 CBC, which contains provisions for soil preparation to minimize hazards from liquefaction and other seismic-related ground failures.

Impacts would be less than significant.

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

Development of the proposed Project would not require the installation of a septic tank or any alternative wastewater disposal system.

No impact would occur.

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

The Project Site has been previously disturbed during the construction and operation of the high school campus. Ground-disturbing activities would occur in areas that have previously been disturbed, which would include site preparation and construction activities.[29] There would be no direct destruction of a unique paleontological resource, site, or geological feature, as a result of the proposed Project. Indirect impacts may occur; indirect impacts are discussed further in **Section 5.4 Cultural Resources.**

No impact would occur.

28 United States Department of Agriculture, Natural Resource Conservation Service, Web Soil Survey, https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed March 2023.

29 City of Rancho Mirage, Historic Resources Survey, 2003,

HAZARDS AND HAZARDOUS MATERIALS

Would the project:

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

The project does not include any transportation, use or disposal of hazardous materials.

Compliance with applicable laws and regulations governing hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner which would minimize the potential for safety impacts to occur. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable State and local regulations regarding the cleanup and disposal of the contaminant released. All contaminated waste encountered would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility.

Strict adherence to all emergency response plan requirements set forth by Rancho Mirage and Riverside County Department of Environmental Health (RCDEH) would be required throughout the duration of the project construction. Operational hazards would not differ from ones that exist on the high school campuses currently.

Impacts related to the routine transport, use, or disposal of hazardous materials would not occur during construction or operation.

Impacts would be less than significant.

Threshold 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?

The proposed Project would require earthwork (e.g., vegetation removal, grading, and site minimal excavation), site preparation (cement bases), and placement of large light fixtures. No hazardous materials would be released into the environment as a result of this Project.

Impacts would be less than significant.

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

The Project Site itself is located within an existing school. Construction would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school because the Project would only involve the installation and operation of lighting fixtures.

During the operation of the proposed Project, no hazardous materials would be used. Emissions generated during operation of the school include electricity to power the lighting fixtures.

As analyzed in Section 5.2 (c), emission sources would not result in impacts to the local environment, including school occupants.

Impacts would be less than significant.

Threshold 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?

A search of environmental records was conducted by Environmental Data Resources, Inc (EDR).[30] The EDR records search includes hazardous materials sites compiled pursuant to Government Code Section 65962.5.[31]

Th Project Site contains one hazardous material site, the Rancho Mirage High School Cooling Towers, that is active and listed on CERS HAZ WASTE, ENF, HAZNET, CIWQS, CERS, and HWTS as a hazardous waste generator. The proposed Project would not interfere with this site. The two remaining sites within one quarter mile of the Project site are ither closed or are considered very small quantity generators (VSQGs) that generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month and would not be considered substantial.

Further, the proposed Project is not listed by Cortese,[32] Envirostor,[33] or GeoTracker[34] as a site that has required any state response or clean up. No action is required according to these sources.

The proposed Project would not be affected by any prior hazardous materials site. As such, implementation of the proposed Project would not expose the public or environment to hazards.

Impacts would be less than significant.

Threshold 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

30 Environmental Data Resources, EDR Radius Map Report, February 2023, https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:2f54eb41-d50a-3edb-b51d-3f13d0cec4bf

31 Government Code, Title 7. Planning and Land Use, Division 1. Planning and Zoning, Chapter 4.5. Review and Approval of Development Projects, Article 6. Development Permits for Classes of Projects, Section 65962.5, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=65962.5&lawCode=GOV. Accessed March 2022

32 California Department of Toxic Substances Control (DTSC), Hazardous Waste and Substances Site List (CORTESE), https://dtsc.ca.gov/dtscs-cortese-list/, accessed November 2022.

33 California Department of Toxic Substances Control (DTSC), EnviroStor, https://www.envirostor.dtsc.ca.gov/public/, accessed November 2022.

34 California State Water Resources Control Board, GeoTracker, https://geotracker.waterboards.ca.gov/, accessed August 2022.

airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

There are no private airports, airstrips, or heliport stations within the vicinity of the Project Site. According to the Riverside County Airport Land Use Compatibility Plan (RCALUCP) and the Riverside County Airport Land Use Commission (RCALUC), RMHS is located outside of any designated airport safety zones.[35] As such, the Project would not have the potential to create a safety hazard for people residing or working in the project area.

Impacts would be less than significant.

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

The proposed Project consists of the installation and operation of lighting within an existing athletic field at the RMHS campus; no off-site improvements, construction or physical alterations are proposed, and the lighting standards would not be located within an area of the campuses that supports vehicle access. there would be no potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impacts would be less than significant.

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

The school campus and surrounding areas are within a Local Responsibility Area (LRA).[36]The campus and associated athletic fields are surrounded by primarily urban development; these areas are zoned residential, open space, or commercial/mixed-use. The General Plan Safety Element designates the area of the campus as a moderate fire threat.[37]

The proposed Project involves installing lights at the athletic fields of the high school located in a residential community and does not propose improvements that would exacerbate fire risk. Therefore, the proposed Project would not expose people or structures to wildland fires.

35 Riverside County Airport Land Use Commission, Land Use Compatibility Plan, Palm Springs International Airport, https://rcaluc.org/Portals/13/PDFGeneral/plan/newplan/18-%20Vol.%201%20Palm%20Springs%20International.pdf. Accessed April 2023.

36 California Department of Forestry and Fire Protection, Fire Hazard Safety Zone Viewer, https://egis.fire.ca.gov/FHSZ/. Accessed April 2023.

37 City of Rancho Mirage, General Plan, Safety Element, https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/. Accessed April 2023.

No impact would occur.

Threshold h): **If a response action is necessary and proposed as part of this project, has it been developed to be protective of children's health, with an ample margin of safety?**

The land uses surrounding each of the campuses include residential and mixed uses, which would not be affected during the construction and operation of the proposed Project. As these sensitive receptors could house or contain children for periods of the day, impacts from construction activities could have an impact on children's health. The Project Sites, which include existing and developed schools, are the nearest sensitive receptors to the Project Sites.

The proposed Project involves installing lights at the athletic fields at RMHS. As shown in Section 5.2: Air Quality, the proposed Project would not have an impact on human health. The Project must comply with CDE standards and the requirements of the Division of the State Architect (DSA) for schools.

Impacts would be less than significant.

Threshold i): **Does the proposed school site contain one or more pipelines, situated underground or aboveground, which carry hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood?**

There are no known underground or aboveground pipelines that carry hazardous substances or hazardous wastes to RMHS or the surrounding neighborhoods.[38]

No impact would occur.

Threshold j): **Is the proposed school site located near an aboveground water or fuel storage tank or within 1,500 feet of an easement of an aboveground or underground pipeline that can pose a safety hazard to the site?**

There are no known above-ground water or fuel storage tanks, nor underground or aboveground pipelines existing within 1,500 feet that pose a safety hazard to the Project Sites located at RMHS.[39]

No impact would occur.

Threshold k): **Would the project create an air quality hazard due to the placement of a school within one-quarter mile of: (a) permitted and nonpermitted facilities identified by the jurisdictional air quality control board or air pollution control district; (b) freeways and other busy traffic corridors; (c) large agricultural operations; and/or (d) a rail yard, which might reasonably be**

38 US Department of Transportation, Pipeline Hazardous Materials Safety Administration, National Pipeline Mapping System Public Viewer, access February 2022. https://pvnpms.phmsa.dot.gov/PublicViewer/. Accessed April 2023.

39 California State Water Resources Control Board, Geotracker, https://geotracker.waterboards.ca.gov/. Accessed April 2023.

anticipated to emit hazardous air emissions, or handle hazardous or acutely hazardous material, substances, or waste?

(a) Permitted and nonpermitted facilities identified by the jurisdictional air quality control board or air pollution board.

A project would expose sensitive receptors to elevated pollutant concentrations if it were to place the school in an area with pollutant concentrations above ambient concentration in the SCAQMD area. The Facility Information Detail (FIND) database shows all the facilities that are required to have a permit to operate equipment that releases pollutants into the air within the SCAQMD boundary.[40] The campus does not show up on the FIND database.

The proposed Project would not expose sensitive receptors to substantial pollutant concentrations as the emissions would be below SCAQMD localized thresholds, as shown in Section 5.2: Air Quality.

Maximum construction emissions associated with the proposed Project would be less than significant, as shown in Section 5.3: Air Quality, **Table 5.3-7**. The SCAQMD Mass Daily Threshold ranges from 55-550 pounds/day, depending on the specific emission particulate. The maximum emissions from construction would not exceed 17 pounds/day, and cumulative emissions do not exceed 115 pounds/day. Neither the maximum/day for one school nor the cumulative emissions exceed the SCAQMD Mass Daily Threshold.

The Proposed Project would not result in long-term air quality emissions during operations as the Proposed Project would not increase the local population, number of students, or number of faculty on site. As such, the Proposed Project would not generate additional air quality emissions during operation.

Furthermore, there are no known hazardous air emission generated from mobile and stationary sources within a quarter-mile radius of the Project Sites identified within the FIND database and would not pose an actual or potential endangerment to students or staff at the school.

Impacts would be less than significant.

(b) Freeways and other busy traffic corridors.

The proposed Project is located at existing school campuses and would implement additional lighting fixtures around the perimeter of the sports fields. The proposed Project would not generate an increase

40 SCAQMD, Facility Information Detail (F.I.N.D.), Accessed April 2023. https://www.aqmd.gov/nav/FIND/facility-information-detail

of daily vehicle trips, as analyzed in Section 5.7: Transportation. The proposed Project is not within one-quarter mile of a freeway, or any other busy traffic corridor as defined by California Education Code.[41]

Impacts would be less than significant.

(c) Large agricultural operations.

There are no large agricultural operations located within a quarter mile of the Project Sites. Surrounding land uses include residential uses and mixed use.

No impact would occur.

(d) Rail yard.

There are no rail yards located within one-quarter mile of the Project Sites. Surrounding land uses include residential uses and mixed use.

No impact would occur.

Threshold l): Is the school site in an area designated in a city, county, or city and county general plan for agricultural use and zoned for agricultural production, and if so, do neighboring agricultural uses have the potential to result in any public health and safety issues that may affect the pupils and employees at the school site? (Does not apply to school sites approved by CDE prior to January 1, 1997.)

The General Plan land use designation for the Project Site is "P/S" for school.[42] As such, the Project Site is not designated by the General Plan or zoning for agricultural use.

No impact would occur.

Threshold m): Is the property line of the proposed school site less than the following distances from the edge of respective power line easements: (1) 100 feet of a 50-133 kV line; (2) 150 feet of a 220-230 kV line; or (3) 350 feet of a 500-550 kV line?

The Project Sites are not within 100 feet of a 50 to 133 kilovolt (kV) line, 150 feet of a 220 to 230 kV line, or 350 feet of a 500 to 550 kV line. The closest lines of this type are located approximately 1.4 miles southeast of the Project site along Ramon road and Bob Hope Drive.

41 Education Code (EDC) Title 1. General Education Code Provisions, Division 1. General Education Code Provisions, Par1 10.5. School Facilities, Chapter 1. School Sites, Article 1. General Provisions, Section 17213, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=17213.&lawCode=EDC#:~:text=17213.%20The%20governing%20board%20of%20a%20school%20district,school%20district%2C%20unless%20all%20of%20the%20following%20occur%3A. Access March 2022.

42 City of Rancho Mirage, General Plan, Lane Use Element, https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/. Accessed April 2023.

No impact would occur.

Threshold n): Is the Project Site a hazardous substance release site identified by the state Department of Health Services in a current list adopted pursuant to §25356 for removal or remedial action pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code?

Where a proposed school site is listed by DTSC under Health and Safety Code (HSC) Section 25356, the project would, through the CEQA processes and under DTSC's oversight, undertake all required removal and/or remedial actions; ensure that DTSC removes the site from this listing; determine that the site as remediated poses no health risk to students, faculty, and staff; and secure DTSC's certification that all school buildings may be occupied and used for their intended purpose.[43] The public would then have the opportunity to review the site-specific investigations through the public review process. Compliance with the process and steps outlined would ensure that impacts from any site used for a school project that DTSC formerly listed under HSC Section 25356 would not be a hazard to people on or near the site.

There is no listing pursuant to DTSC under HSC Section 25356 on the Project Sites based on the EDR Report's comprehensive lists of contaminated sites including the DTSC EnviroStor database.[44] The proposed Projects would involve the placement of lighting fixtures into the ground surrounding the RMHS athletic fields.

Impacts would be less than significant.

Threshold o): Does the Project Site contain a current or former hazardous waste disposal site or solid waste disposal site and, if so, have the wastes been removed?

Under EDC Section 17213(a)(1), a school district is prohibited from acquiring any of the following: current or former hazardous waste disposal site, or solid waste disposal site unless the site is a former solid waste disposal site and the wastes have been removed.[45] No current or former hazardous waste disposal sites exist in the Project Site based on the EDR Report's comprehensive lists of contaminated sites including the DTSC EnviroStor and SWRCB Geotracker databases.

Construction would involve the use and handling of hazardous materials, including fuels, lubricants, coatings, grease, and PCBs containing materials. The use and handling of these hazardous materials

43 Health and Safety Code (HSC), Division 20. Miscellaneous Health and Safety Provisions, Chapter 6.8 Hazardous Substance Account, Article 5. Use of the State Account, Section 25356, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=25356.&nodeTreePath=23.20.5&lawCode=HSC, Accessed March 2023.

44 Environmental Data Resources, EDR Radius Map Report, February 2023, https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:2f54eb41-d50a-3edb-b51d-3f13d0cec4bf

45 California Education Code (EDC), Sec. 17213, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=17213.#:~:text=17213.%20The%20governing%20board%20of%20a%20school%20district,school%20district%2C%20unless%20all%20of%20the%20following%20occur%3A. Accessed March 2023.

would be in accordance with regulatory standards and protocols and would not be in such quantities or stored in such a manner as to pose significant safety hazards.

Emissions from construction activities associated with the proposed Project, including exhaust and dust, would be generated from the operation of equipment and vehicles. As analyzed in Section 5.2(c), these emissions generated during construction would not result in impacts the local environment, including school occupants (students, faculty, and staff) at any of the campuses.

No hazardous materials would be used during the operation of the proposed Project.

Emissions generated during operation of the lights would be minimal. As analyzed in Section 5.2(c), these emission sources would not result in impacts to the local environment, including school occupants.

Impacts would be less than significant.

Threshold p): If prepared, has the risk assessment been performed with a focus on children's health posed by a hazardous materials release or threatened release, or the presence of naturally occurring hazardous materials on the school site?

Sensitive receptors include students, staff, and faculty at the existing campus for periods of the day; impacts from construction activities could result in health impact.

As shown in Section 5.2: Air Quality, the proposed Project would not result in impacts on human health. Additionally, prior to the issuance of a building permit, the District must comply with DTSC or other regulatory agencies that oversee health-related issues.

As noted previously, there are no known hazardous materials that would affect the health of site occupants.

Impacts would be less than significant.

Threshold q): Is the proposed school site situated within 2,000 feet of a significant disposal of hazardous waste?

There were no recorded hazardous waste disposal t hazardous waste disposal sites within 2,000 feet of Rancho Mirage High School.

No impact would occur.

Threshold r): Is the proposed school site within two miles, measured by air line, of that point on an airport runway or potential runway included in an airport master plan that is nearest to the site? (Does not apply to school sites acquired prior to January 1, 1997.)

The closest airport is Palm Springs International Airport, which is located approximately 3.4 miles west from RMHS.

No impact would occur.

HYDROLOGY AND WATER QUALITY

Would the project:

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

New construction can result in two types of water quality impacts: (1) short-term impacts due to the discharge of eroded soil and other pollutants during construction, and (2) long-term impacts due to the creation of impervious surfaces (buildings, roads, parking lots, and walkways) that prevent the percolation of water into the ground, thereby increasing the rate and volume of stormwater runoff. Impervious surfaces can also increase the concentration of pollutants in stormwater runoff, such as oil, fertilizers, pesticides, trash, soil, and animal waste. Runoff from short-term construction and long-term operation can flow directly into nearby receiving waters such as streams, lakes, and man-made drains and channels.

The Project Site is in the jurisdiction of the Colorado River Basin Regional Water Quality Control Board (CRBRWQCB).

Construction

The proposed Project would not expose large areas of pervious surfaces or increase runoff that would violate water quality standards. Additionally, the proposed Project does not propose any activities that would result in direct impacts to water quality.

Given that the construction areas are not greater than one acre nor would they result in a total disturbance of one or more acres of soil, the District's construction contractor would not be required to obtain a Stormwater Pollution Prevention Plan (SWPPP) from the CRBRWQCB.[46]

The District would comply with applicable local, State, and federal regulations to prevent any indirect construction impacts on stormwater runoff in order to ensure that water quality is uncompromised during construction.

Impacts would be less than significant.

46 U.S. Environmental Protection Agency, Water: Permitting (NPDES), https://www.epa.gov/npdes. Accessed March 2023.

Operation

Operation of the proposed Projects would include additional field lighting implemented on the athletic fields of RMHS. The proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operation.

The proposed Project would not violate any water quality standards or waste discharge requirements, as the construction areas are less than one acre, which means a SWPPP is not required. The proposed Project will also not degrade surface or groundwater quality, as there are no actions that directly affect water.

Impacts would be less than significant.

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

The proposed Project would not involve changes to groundwater supplies. No groundwater removal is proposed and the amount of new impervious surface (associated with the standard foundations for the lighting fixtures) would be negligible as a result of the Project implementation.

No impact would occur.

Threshold 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 substantial erosion or siltation on or off-site?

The closest river is Whitewater Channel, which is approximately 2.5 miles west of RMHS.[47]

As noted above, construction of the proposed Project would comply with applicable local, State, and federal regulations to prevent any indirect construction impacts on stormwater runoff in order to ensure that water quality is uncompromised during construction. Following completion of the ground-disturbance during construction of the Project, the existing grass turf groundcover would be replaced and no long-term impacts due to erosion and siltation would occur as a result of the proposed Project.

Impacts would be less than significant.

47 USFWS, National Wild and Scenic Rivers System, https://www.fws.gov/wetlands/data/mapper.html. Accessed April 2023.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

No streams or rivers are located within the boundaries of or adjacent to the campuses for each of the Project Sites.

The proposed Project would result in temporary ground disturbance, but would not alter the local topography and only negligible changes would occur in total impervious surfaces from implementation. There would be no alteration to the existing drainage pattern of the sites, including the course of a stream or river. Moreover, there would also be no substantial increase in the rate or amount of surface runoff in a manner that would result in flooding on or off site.

Impacts would be less than significant.

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

Impervious areas would be minimal and would only occur where concrete would be added to hold the light fixtures in place. Runoff water would drain around these structures and follow its natural drainage system.

The proposed Project would not create or contribute to runoff that would exceed the capacity of existing or planned stormwater drainage systems.

Impacts would be less than significant.

iv. Impede or redirect flood flows?

The Project Sites do not intersect with, nor is it within the vicinity of, any streams or rivers. Stormwater collected on the Project Sites would be released into existing drains.

No impact would occur.

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

The Project Sites is designated as "Area of Minimal Flood Hazard" Zone X within the Federal Emergency Management Agency.[48] Additionally, the campuses are not located near the ocean or any large enclosed, or semi-enclosed, bodies of water. Therefore, the Project Sites are not within designated tsunami or seiche zones.

48 FEMA, "National Flood Hazard Layer (NFHL)," https://msc.fema.gov/. Accessed April 2023.

No impact would occur

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

Under the California Water Code, the State of California is divided into nine regional water quality control boards (RWQCBs), which govern the implementation and enforcement of the California Water Code and the Clean Water Act. The Project Site is located within the Colorado River Basin Regional Water Quality Control Board (CRBRWQCB) region.

The CRBRWQCB implements the Water Quality Control Plan for the Colorado River Basin (Basin Plan). The Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan (i) designates beneficial uses for surface and ground waters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's antidegradation policy, and (iii) describes implementation programs to protect all waters in the Region.[49] In addition, the Basin Plan incorporates all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations.

As previously discussed, the District would comply with applicable federal, State, and local regulations pertaining to water quality. Construction and operation of the Project would adhere to the Basin Plan and would not conflict with or obstruct the implementation of the plan.

Impacts would be less than significant.

LAND USE AND PLANNING

Would the project:

Threshold a): Physically divide an established community?

The proposed Project would not divide any established residential communities as development would occur within a developed campus. No new roadways or infrastructure would be constructed that would bisect or transect the surrounding neighborhoods.

No impact would occur.

Threshold b): Conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan,

49 State of California CRBRWQCB, Water Quality Control Plan for the Colorado River Basin Region, https://www.waterboards.ca.gov/coloradoriver/water_issues/programs/basin_planning/. Accessed March 2023.

specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The Project Site is situated in the city of Rancho Mirage which follows the city of Rancho Mirage General Plan Land Use Map. The General Plan designates RMHS as P/S for School use. The proposed Project is an allowed use under the P/S land use designation.

No impact would occur.

Threshold c): Would the proposed school conflict with any existing or proposed land uses, such that a potential health or safety risk to students would be created?

There are no existing or proposed land uses surrounding RMHS that would pose a health or safety risk to students or faculty. Land use designation surrounding PSHS includes mixed-use.

No impact would occur.

MINERAL RESOURCES

Would the project:

Threshold 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?

Rancho Mirage is zoned as a Mineral Resource Zone (MRZ)-3 as designated by the County of Riverside General Plan. MRZ-3 is defined as an area where it has been determined mineral deposits are likely to exist; however, the significance of these deposits is undetermined.[50] Additionally, the City of Rancho Mirage General Plan Open space and Conservation Element indicates that there are no significant mineral resources within the City.[51] Therefore, implementation of the Project would not result in the loss of locally important mineral resource recovery sites.

No impact would occur.

Threshold 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?

The existing school campus and associated athletic fields are within MRZ-3 and include the RMHS developed school campus. There are no known mineral resource recovery sites in the vicinity (within 0.5 mile). The Project Site is also not designated as mineral resource recovery site.

No impact would occur.

50 County of Riverside, General Plan, Multipurpose Open Space Element, https://planning.rctlma.org/General-Plan-Zoning/General-Plan. Accessed April 2023.

51 City of Rancho Mirage, General Plan, Open Space and Conservation Element, https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/. Accessed April 2023.

NOISE

Would the project:

Threshold b): Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the educational program?

EDC Section 17213 states that a busy traffic corridor is defined as having 50,000 or more average daily trips (ADT) in a rural area or 100,000 or more ADT in an urban area.[52] Traffic counts surrounding Rancho Mirage High School indicate that Da Vall Road north of Ramon Road has a traffic count of 8,300 and on Ramon Road east of Da Vall Road, the traffic count is 24,751.[53]

The closest freeway to the Project Site is I-10, located approximately 0.5 miles northeast. As shown in the City's General Plan Noise Element,[54] the school exists withing the 60 dBA noise contour and would not be exposed to roadway noise that exceeds the exterior noise limits set by the City's Municipal Code as listed in **Table 5.6-2**.

Additionally, the Proposed Project would not generate an increase of daily vehicle trips, as analyzed in **Section 5.7: Transportation**. The Project Site is not within one-quarter mile of a freeway or other busy traffic corridor as defined by EDC Section 17213.[55]

Impacts would be less than significant.

52 California Education Code (EDC), Sec. 17213, accessed February 2022. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=17213.#:~:text=17213.%20The%20governing%20board%20of%20a%20school%20district,school%20district%2C%20unless%20all%20of%20the%20following%20occur%3A. March 2022.

53 Coachella Valley Association of Governments, Coachella Valley Traffic Counts, https://www.arcgis.com/apps/View/index.html?appid=fb9489b188e74be3b599afb52741849d. Accessed March 2023.

54 City of Rancho Mirage, General Plan Noise Element, Exhibit 18, https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/. Accessed March 2023.

55 California Education Code (EDC), Sec. 17213, accessed February 2022. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=17213.#:~:text=17213.%20The%20governing%20board%20of%20a%20school%20district,school%20district%2C%20unless%20all%20of%20the%20following%20occur%3A. March 2022.

POPULATION AND HOUSING

Would the project:

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

The proposed Project involves installing lights at the athletic fields at RMHS. This would not increase enrollment capacity at the school or nearby businesses, thus not introducing new populations to the areas around RMHS.

No impact would occur.

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

No housing exists on the Project Site since the site is within an existing school campus. The proposed Project would not demolish any existing housing. The existing campus would not expand into the surrounding development and would not require the movement of already-established housing. Therefore, the proposed Project would not displace any existing people or housing.

No impact would occur.

Threshold c): Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The Project Site is developed as athletic fields on an existing school campus and would not displace existing housing or people. The number of jobs and types of jobs provided by the campus would also remain the same. Construction of the small-scale improvements would be able to draw upon a locally available workforce. Due to the limited scale and duration of the construction effort, even if a non-local contractor were retained, long-term construction employment opportunities would not result from the Project. Therefore, the proposed Project would not displace any people, jobs, or housing.

No impact would occur.

PUBLIC SERVICES

Would the project:

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

i. Fire protection?

Fire protection and emergency medical services are provided in Palm Springs primarily by the Riverside County Fire Department (RCFD), but the Cathedral City Fire Department (CCFD) is the nearest station to the Project Site. Fire Station 412 (Cathedral City) is located at 32100 Desert Vista Rd, approximately 1.5 miles southwest from Rancho Mirage High School. Fire Department staff includes 43 sworn fire personnel (42 firefighters and 1 Fire Chief), including 14 on-duty, 2 administrative personnel and 1 full-time fire inspector.[56]

During construction and subsequent operation, the proposed Project would not interfere with any of the daily operations of the Emergency Plans within the respective cities, nor would it require additional staff from the RCFD, or CCFD. All construction activities, including staging, would occur on Project Site and be performed per the District's, City's, and fire department's standards and regulations. Construction activities would not cause any road closures and in effect would not decrease the fire department's accessibility to the high schools or the surrounding developments.

Impacts would be less than significant.

ii. Police protection?

Police Protection in Rancho Mirage is provided on a service contract basis by the Riverside County Sheriff's Department, located at 73705 Gerald Ford Drive, approximately 3.9 miles southeast of the Project Site.

Resident population in this region of the County would not be increased by the proposed Project, and the lighting equipment would not be expected to represent a target for vandalism. The local law enforcement agencies would continue to provide police protection to the PSUSD staff and students at each campus and the proposed Project would not result in any increase in the demand for police protection services. The proposed Project would not require the construction of new or expanded police facilities.

Impacts would be less than significant.

56 Cathedral City, General Plan (2040 Update). "Public Services and Facilities Element." https://www.cathedralcity.gov/home/showpublisheddocument/8159/636989460828370000. Accessed March 2023.

iii. Schools?

The addition of lighting to the existing athletic fields would not introduce new students or resident population to any of the schools as the new lighting is intended to serve the exiting school population and student activities and sports programs. There would be no effect upon enrollment capacity of the school or participation capacity of athletic programs. Therefore, the proposed Project would not increase the demand for school resources.

Impacts would be less than significant.

iv. Parks?

Demand for parks and recreational facilities are usually determined by an area's population.

The addition of lighting to the existing athletic fields would not introduce new resident population to the vicinity. Therefore, the proposed Project would not result in an increase in demand for park resources or the need for more parks.

No impact would occur.

v. Other public facilities?

No off-campus construction would occur, and the vicinity residential population would not be increased by the Project; therefore, no public facilities would be impacted.

No impact would occur.

vi. Does the site promote joint use of parks, libraries, museums, and other public services?

The proposed Project would not result in an increase in school enrollment or population and would not construct any dwelling units. The District recognizes that its' facilities and grounds are a community resource and can authorize their use by community groups for purposes provided for in the Civic Center Act, only when such use does not interfere with school activities.[57] Pursuant to District policies, facilities available for use as follows:

- Subject to district policies and regulations (BP/AR1330), school facilities and grounds are available to citizens and community groups as a civic center as specified in Education Code 32282, 38131.

57 Palm Springs Unified School District (PSUSD) Policies. Section 1330. Available at: http://www.gamutonline.net/district/palmsprings/displayPolicy/436513/. Accessed March 2023.

- All school-related activities shall be given priority in the use of facilities and grounds under the Civic Center Act and take precedence over a non-school group. The District reserves the right to revoke a use of facilities permit at any time.

No off-campus construction would occur, and the vicinity residential population would not be increased or decreased by the proposed Project. Evening athletic games and evening athletic practices would be limited to only school-sanctioned sports teams.

Use of school facilities would adhere to District policy. Therefore, no joint use of school facilities would be impacted.

No impact would occur.

RECEREATION

Would the project:

Threshold a): Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The City of Rancho Mirage has six existing parks, totaling approximately 22 acres.[58] The closest local park to the RMHS campus is the Rancho Mirage Dog Park located 2.45 southeast, and I slightly more than 4 acres.

Demand for parks and recreational facilities are usually determined by the area's population.

The proposed Project would include the installation and operation of exterior lighting at existing athletic fields at RMHS. Resident population in the city of Rancho Mirage would not be increased as a result of the proposed Project. There would be no increase in the use of existing neighborhood and regional parks or other recreational facilities, and no project-resultant physical deterioration of these existing recreation facilities would occur or be accelerated.

Implementation of the proposed Project would only upgrade and modernize existing facilities without increasing local population, student capacity, employment opportunities, or housing. Therefore, demand for recreational facilities would remain the same, and no substantial physical deterioration of the existing facilities would occur due to implementation of the proposed Project. There may be possible short-term impacts to recreational facilities on school property if recreational facilities are open to the public during non-school hours or for local programs. These would be temporarily unavailable during construction.

During the construction of the proposed Project, workers would typically commute to work on site and leave the local area after the workday. Any use of either park would be negligible. Additionally, the

58 City of Rancho Mirage, General Plan ,Open Space and Conservation Element, https://ranchomirageca.gov/our-city/city-departments/planning/general-plan/. Accessed April 2023.

recreational facilities in the vicinity of the Project Site would continue to be operational during construction so there would be no overcrowding of other nearby parks. Therefore, demand for recreational services on a short-term and long-term basis would remain the same, and deterioration to recreational facilities would not occur. Other local recreational facilities available during construction are noted for the campus.

Impacts would be less than significant.

Threshold b): Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Development of the proposed Project would implement additional field lighting on the existing athletic fields at RMHS, providing lighting at the field would increase spectator opportunities in the evening, raising the recreational value of the facility. No new recreational facilities would be constructed in the community.

No impact would occur.

TRANSPORTATION

Would the project:

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

The proposed Project involves installing lighting fixtures along the perimeter of the athletic fields at RMHS. The proposed Project would not include any off-site construction or improvements; the Project would therefore not result in new roadway design features, new geometric design features, new sharp curves, or new dangerous intersections. Therefore, the proposed Project would not increase hazards due to a roadway design feature or incompatible uses.

Impacts would be less than significant.

Threshold d): Result in inadequate emergency access?

Factors such as the number of access points, roadway width, and proximity to fire stations determine whether a project provides enough emergency access. The fire station most likely to serve the site is Cathedral City Fire Department, located at 32100 Desert Vista Road in Cathedral City, which is 2.1 miles from the Project Site. Emergency vehicles would remain as it currently is and access to Rattler Road and emergency access to the Project Site would be via 30th Avenue or Ramon Road. Emergency access would not be inhibited by vehicles on campus.

Impact would be less than significant.

Threshold e): **Are traffic and pedestrian hazards mitigated per Caltrans' School Area Pedestrian Safety Manual?**

The Project would not affect existing transportation as no improvements are proposed. As such, the proposed Project would not increase the exposure of students to traffic and pedestrian hazards. Surrounding roadways are already marked with appropriate school zone signs and crosswalks. The proposed Project would comply with Caltrans traffic control requirements for school areas.[59]

No impact would occur.

Threshold f): **Is the site easily accessible from arterials and is the minimum peripheral visibility maintained for driveways per Caltrans' Highway Design Manual?**

The Project Site is located within the RMHS athletics fields. Construction access would be located along Rattler Road on the east side of the campus. Rattler Road is a City-designated truck route, and would provide access to the Project Site for construction activities.[60]

Project construction may temporarily affect traffic along this road since it is the only connecting road from major arterials to the RMHS campus. No changes are proposed to the surrounding road system or on-site vehicular circulation system and driveways. No buildings, structures, or landscaping would be introduced near any of the existing driveways, which would impair visibility. Clear and uninterrupted access to the campus would continue to be provided through existing driveways.

Impacts would be less than significant.

Threshold g): **Is the proposed school site within 1,500 feet of a railroad track easement?**

The Union Pacific Railroad (UPRR) is the nearest railroad and is located approximately 0.3 miles north of the Project Site. As such, the Project Site is not within 1,500 feet of a railroad track easement.

No impact would occur.

59 California Department of Transportation (Caltrans), 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD), Revision 6, https://dot.ca.gov/programs/safety-programs/camutcd/camutcd-files. Accessed April 2023.

60 City of Rancho Mirage, General Plan (2017), Circulation Element, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter_3_Circulation.pdf. Accessed April 2023.

UTILITIES AND SERVICE SYSTEMS

Would the project:

Threshold 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?**

The proposed Project would include the installation and operation of exterior lighting at existing athletic fields at existing the RMHS campus. The campus is currently connected to basic utilities, including electricity, natural gas, telecommunications, water, and sewage.

Operation of the lighting system during practices or games would not result in direct or indirect increases in the demand for potable water, wastewater treatment, stormwater conveyance, natural gas, or telecommunications. The operation of the lighting system would result in modest electrical consumption below all applicable thresholds and would not lead to the need for construction of new electrical generation facilities.

As previously noted, the proposed Project would not increase the number of students and faculty, nor would it require the construction or expansion of wastewater treatment facilities.

The proposed Project would not increase the demand for additional utility systems, and the existing utilities would be sufficient. The proposed Project would not trigger the need for new or expanded utility systems. The proposed Project would be constructed to meet Title 24 and CalGreen requirements,[61,62] and would not require or result in the relocation or construction of new utilities.

Impacts would be less than significant.

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

The Coachella Valley Water District (CVWD) provides water to the Project Site.

The proposed Project would include the installation and operation of lighting systems at existing athletic fields for RMHS. The lighting system would not have direct or indirect effects upon water supplies or demands.

Impacts would be less than significant.

61 California Code of Regulations, California Building Standards Code, Title 24, https://www.dgs.ca.gov/BSC/Codes, Accessed March 2023.

62 California Code of Regulations, California Green Building Standards Code, Part 11, Title 24, https://www.dgs.ca.gov/BSC/CALGreen#codes. Accessed March 2023.

Threshold c): Result in a determination by the wastewater 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?

The proposed Project would not generate industrial wastewater or new point sources of wastewater that would require permits from the Colorado River Basin Regional Water Quality Control Board.

No alterations to existing restrooms or locker rooms are proposed, and the existing spectator capacity at any of the athletic fields or campuses would not be increased. Therefore, the lighting system project would not have direct or indirect effects upon wastewater generation or treatment demand capacity.

No impact would occur.

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

The proposed Project would include the installation and operation of lighting systems at existing athletic fields.

No demolition is required in order to install the lighting and the lighting fixtures would be prefabricated. Therefore, construction-related wastes are not anticipated. Spectator capacity at the athletic fields would not be increased and therefore no increases in solid waste generation associated with campuses are anticipated.

Impacts would be less than significant.

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

The proposed Project would include the installation and operation of lighting systems at existing athletic fields.

No increases in solid waste generation associated with the campuses are anticipated as a result of the proposed Project. Consequently, the Project would be in compliance with solid waste regulations.

Impacts would be less than significant.

WILDFIRE

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

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

The proposed Project would include the installation and operation of lighting systems at existing athletic fields at the RMHS campus.

No off-site improvements, construction or physical alterations are proposed, and the lighting standards would not be located within an area of the campus that supports vehicle access. No increase in spectator capacity is proposed under the Project that could result in an increase in the demand for emergency response or evacuation. The Project would therefore not result in impairment of adopted emergency response or evacuation plans.

Impacts would be less than significant.

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

The RMHS campus is located in an area designated as Non-VHFHSZ (Very High Fire Hazard Severity Zone), as it is in a heavily developed area.[63] Therefore, project implementation would not exacerbate wildlife risks due to wildfire.

Due to the location of the proposed Project in a school /residential neighborhood setting, and the absence of combustible components, the proposed Project will not exacerbate wildfire risks or the uncontrolled spread of wildfire.

Impacts would be less than significant.

Threshold 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?

The proposed Project would include the installation of a lighting system within existing athletic fields. No additional infrastructure will be constructed in association with the Project, nor would improvements be necessary to any existing infrastructure system to serve the demands of the Project. The Project would not include the installation or maintenance of associated infrastructure that may exacerbate fire risk, or result in ongoing impacts to the environment.

No impact would occur.

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

The proposed Project Site is located at an existing high school campus and is not located near a potential flooding area that would result in potential drainage changes.

63 CalFire, Dept. of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP), https://egis.fire.ca.gov/FHSZ/. Accessed April 2023.

No structures are proposed with the proposed Project. Further, no increase in spectator capacity is proposed that could result in exposure of a greater number of people to existing wildfire risks, or risk that would result from the aftereffects of wildfire such as downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. It would not expose more people or structures to significant risk of flooding or landslides, as the existing high school campuses are not located near a potential flooding area.

Impacts would be less than significant.

6.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The CEQA Guidelines state that "[u]ses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely."[1] Primary impacts and secondary impacts generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with a project. Irretrievable commitments of resources should be evaluated to ensure that such current consumption is justified. Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of Project implementation that cannot be avoided.

Implementation of the proposed Rancho Mirage High School Field Lighting Project (Project) would include the installation of 39 new pole mounted lighting fixtures around the perimeter of the sports fields within Rancho Mirage High School. The irreversible environmental changes due to the lighting installation includes light and glare impacts to nearby residents, disturbances to migratory birds during construction activities, potential impacts tribal and cultural resources during construction grading, and additional noise created during construction. However, no significant unavoidable adverse environmental effects would result from the proposed Project. Implementation of all feasible mitigation measures, conditions of approval, project design guidelines, and local, State, and federal regulations would reduce all potential impacts to less than significant.

Primary impacts would result from the consumption of nonrenewable resources during construction and operation of the Project. Nonrenewable resources such as sand, gravel, and steel would be consumed during Project construction. Energy, fossil fuels, oils, and natural gas would be irreversibly committed during construction. These same resources are used for vehicles and heating/cooling equipment during operations. The continued use of these resources associated with Project operations represents a long-term obligation.

Construction of the Project would consume limited amounts of certain types of raw materials in steel; metals such as copper and lead; petroleum-based construction materials; and other similar slowly renewable or nonrenewable resources. Additionally, fossil fuels for construction vehicles and equipment would be consumed. In terms of Project operations, electricity would be required. The California Administrative Code regulates the amount of energy consumed by new development for heating, cooling, ventilation, and lighting purposes. Nevertheless, the consumption of such resources would represent a long-term commitment of those resources.[2]

The commitment of resources required for the construction and operation of the Project would limit the availability of such resources for future generations or for other uses during the life of the Project.

1 California Public Resources Code. Title 14. Division 6. "Chapter 3." *California Environmental Quality Act Guidelines*. Section 15126(c).

2 California Administrative Code. Title 24.

However, continued use of such resources is consistent with the anticipated growth and planned changes on the Project Site and within the general vicinity.

Development of the Project would result in the creation of nighttime light and glare. However, as indicated **in Section 5.1: Aesthetics**, the Project would be required to adhere to strict design standards outlined in the City's General Plan and Municipal Code. Additionally, the lighting and glare would be localized to the athletic fields and confined to the area within the school campus. Mitigation measure AES-1 would also be implemented. Impacts to aesthetics would be less than significant with mitigation.

The Project would have the potential to encounter unknown tribal or cultural resources during ground disturbing activities. As such, the Project would implement mitigation measures to reduce potential impacts to tribal and/or cultural resources to a less than significant level.

In addition, the construction of the Project would contribute to noise levels that could expose off-site sensitive receptors to noise above the 80 dBA threshold. However, the Project's noise analysis concluded that impacts would be less than significant with mitigation. Construction noise would also be temporary as it would only last 6 to 9 months.

7.0 TERMS, DEFINITIONS, AND ACRONYMS

2016-2040 RTP/SCS	2016-2040 Regional Transportation Plan/Sustainable Communities Strategy
2017 Scoping Plan	California's 2017 Change Scoping Plan
2022 Scoping Plan	California's 2022 Climate Change Scoping Plan
A.D.	Anno Domini
AB	Assembly Bill
ac	acre
ACC II	Advanced Clean Cars II Program
AFY	acre-feet per year
Alternative 1	No Project/No Development Alternative
Alternative 2	Existing General Plan Alternative
Alternative 3	Existing General Plan Alternative/Prior Zoning-Commercial Component
Alternative 4	Residential Project with Golf Course Alternative
Alternative 5	Reduced Density Alternative
ALUC	Airport Land Use Commission
AMR	American Medical Response
amsl	above mean sea level
AP	Alquist Priolo
APN	Assessor's Parcel Number
APS	Alternative Planning Strategy
AQMP	Air Quality Management Plan
B.P.	Before the Present
BLM	Bureau of Land Management
BMP	Best Management Practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
CalFire	California Department of Forestry and Fire Protection
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code

CCR	California Code of Regulations
CCUS	carbon capture, utilization, and storage
CDFW	California Department of Fish and Wildlife
CDR	Carbon Dioxide Removal
CEQA	California Environmental Quality Act
CERT	Community Emergency Response Team
CESA	California Endangered Species Act
CFC	Chlorofluorocarbon
CFR	Federal Code of Regulations
cfs	cubic feet per second
CGS	California Geological Survey
CH_4	Methane
CHBC	California Historic Building Code
CHP	California Highway Patrol
City	City of Indio
CN	Neighborhood Commercial
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalency Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CpA	Coachella Fine Sand
CRHR	California Register for Historical Resources
CRMTP	Cultural Resource Monitoring and Treatment Plan
CUP	Condition Use Permit
CUPA	Certified Unified Program Agencies
CVAG	Coachella Valley Association of Governments
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVUSD	Coachella Valley Unified School District
CVWD	Coachella Valley Water District
CWA	Clean Water Act
dB	decibel
dBA	A-weighted Decibel
DEH	Department of Environmental Health

DEIR	Draft Environmental Impact Report
DOF	Department of Finance
DPF	diesel particulate filter
DPM	Diesel Particulate Matter
DRMC	Desert Regional Medical Center
DSUSD	Desert Sands Unified School District
DTSC	Department of Toxic Substances Control
du	dwelling units
EIR	Environmental Impact Report
EMC	Eisenhower Medical Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EPO	Environmental Protection and Oversight Division
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FED	Functional Equivalent Document
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
ft	foot
GbA	Gilman fine sandy loam
GHG	Greenhouse Gas
GLO	United States General Land Office
gpcd	gallons per capita per day
GWP	Global Warming Potential
HAP	Hazardous Air Pollutants
HCP	Habitat Conservation Plan
HFC	Hydrofluorocarbons
HHW	Hazardous Household Waste
HMBEP	Hazardous Materials Business Emergency Plan
HMRT	Hazardous Materials Response Team
hp	horsepower
HRA	Health Risk Assessment
HSC	California Health and Safety Code
HWMP	Hazardous Waste Management Plan

I	Interstate
IID	Imperial Irrigation District
IMC	Indio Municipal Code
Ip	Indio fine sandy loam
IPCC	Intergovernmental Panel on Climate Change
Is	Indio very fine sandy loam
ISO	Insurance Service Office
JV	Junior Varsity
LEV	Low-Emission Vehicle
Library	Indio Public Library
LOS	Level of Service
LPG	Liquid Propane Gas
LST	Localized Significant Threshold
MaB	Myoma fine sand
MC	Major Community Facilities
mgd	million gallons per day
MLD	Most Likely Descendent
MM	Mitigation Measure
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
mph	miles per hour
MPO	Metropolitan Planning Organization
MRR	Mandator y Reporting Rule
MTBA	Migratory Bird Treaty Act
N2O	Nitrous Oxide
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEV	Neighborhood Electric Vehicle
NF_3	nitrogen trifluoride
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOC	Notice of Completion
NOP	Notice of Preparation
NOx	Nitrogen Oxides

NPDES	National Pollution Discharge Elimination System
NPS	National Parks Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
O3	Ozone
OES	Governor's Office of Emergency Services
OHMS	Office of Hazardous Materials Safety
OPR	Office of Planning and Research
PDF	Project Design Feature
PFC	Perflourocarbon
PFC	Perfluorinated Chemicals
PHEV	Plug-in Hybrid Electric Vehicle
PM10	particulate matter equal to or less than 10 microns in diameter
PM2.5	particulate matter equal to or less than 2.5 microns in diameter
ppb	parts per billion
ppm	parts per million
PR	Parks and Recreation
Project Site	Desert Retreat Specific Plan Area
Project	Desert Retreat Specific Plan; proposed Project
psf	pounds per square foot
Qa	Alluvial deposits
Ql	Interbedded lacustrine
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
RCB	reinforced catch basins
RCFC	Riverside County Flood Control
RCFD	Riverside County Fire Department
RCRA	Resource Conservation and Recovery Act of 1976
REC	Renewable Energy Credit
RHNA	Regional Housing Needs Assessment
ROG	Reactive Organic Compound
ROW	right-of-way
RPS	Renewables Portfolio Standards

RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Community Strategy
SF6	Sulfur Hexaflouride
SF_6	Sulfur Hexafluoride
Sheriff's Department	Riverside County Sheriff's Department
SHMA	Seismic Hazards Mapping Act
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SLTA	SunLine Transit Agency
SO2	Sulfur Dioxide
SP	Service Population
SPCC	Spill Prevention Counter-measure Contingency Plan
SRA	Source Receptor Area
SSAB	Salton Seas Air Basin
State	State of California
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TCP	Traditional Cultural Resource or Property
TDM	Transportation Demand Management
TIA	Traffic Impact Analysis
TUMF	Transportation Uniform Mitigation Fee
UBC	Uniform Building Code
UNFCCC	United Nations' Framework Convention on Climate Change
UPRR	Union Pacific Railroad
US	United States
USACOE	United States Army Corps of Engineers
USDI	United States Department of the Interior

USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United State Geological Survey
UWMP	Urban Water Management Plan
VC	Village Commercial
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WCD	Water Conservation District
WDID	Waste Discharge Identification Number
WEAP	Worker Environmental Awareness Program
WGCEP	Working Group on California Earthquake Probabilities
WQMP	Water Quality Management Plan
WSA	Water Supply Assessment
WSS	Water Supply Study
WSV	Water Supply Verification
yr	year
ZEV	Zero Emission Vehicle

8.0 ORGANIZATIONS AND PERSONS CONSULTED

This Draft Environmental Impact Report (Draft EIR) was prepared by the City of Indio (City) with the assistance of Meridian Consultants LLC. Report preparers and consultants are identified as follows, along with agencies and individuals that provided information used to prepare this Draft EIR.

LEAD AGENCY

The City of Indio is the Lead Agency for this Draft EIR.

City of Indio Planning Division

100 Civic Center Mall
Indio, CA 92201
(760) 391-4120

Kevin Snyder, AICP, Community Development Director
Kendra Reif, Principal Planner

EIR PREPARERS

The following participated in the preparation of this document.

Meridian Consultants LLC

920 Hampshire Road, Suite A5
Westlake Village, CA 91361

Tony Locacciato, AICP, Partner, Principal-in-Charge
Michelle Fleishman, Project Planner
Sebastian Shetty, Staff Planner
Holly Galbreath, Senior Environmental Scientist/Air Quality
Christ Kirikian, Principal, Air Quality and Acoustics Group Leader
Melanie Dow, Publications Coordinator
Lisa Maturkanic, Senior Administrative Operations Manager
Tom Brauer, Graphics Specialist

MSA Consulting, Inc.

34200 Bob Hope Drive
Rancho Mirage, CA 92270
(760) 320-9811

Paul DePalatis, AICP, Vice President / Director of Planning Services
Marco T. Celedón, PE, Vice President / Director of Public Works
Nicole Vann, Planner, Project Manager
Jake Whitney, Assistant Planner

ELMT Consulting, Inc.

2201 N. Grand Avenue #10098
Santa Ana, CA 92711
(714) 716-5050

Travis J. McGill, Director/Biologist

Fehr & Peers

101 Pacific, Suite 300
Irvine, CA 92618
(949) 308-6300

Paul Herrmann, Professional Engineer (P.E.), Senior Associate
Diwu Zhou, PE, RSP1, Senior Transportation Engineer

Statistical Research, Inc.

617 Texas Street
Redlands, CA 92374
(909) 674-1472

Patrick Stanton, M.A., RPA, Principal Investigator

LEGAL COUNSEL

Stowell, Zeilenga, Ruth, Vaughn & Treiger LLP

4590 E. Thousand Oaks Boulevard, Suite 100
Westlake Village, CA 91362
(805) 446-1496

James Vaughn, Esq.

9.0 REFERENCES

14 Cal. Code Regs. § 15064.4(b).

42 U.S.C § 7401, et seq. https://www.law.cornell.edu/uscode/text/42/7401. Accessed March 2023.

Agua Caliente band of Cahuilla Indians, Tribal Habitat Conservation Plan, https://www.aguacaliente.org/documents/planning-department/THCPAugust2010.pdf. Accessed March 2023.

Blake, William P. *Reports of Explorations in California for Railroad Routes to Connect with Routes near the 35th and 32nd Parallels of North Latitude.* 1857.

California Air Resources Board (CARB). "California Ambient Air Quality Standards." https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed March 2023.

California Buildings Standards Commission. "California Green Building Standards Code (Cal. Code Regs., Title 24, Part 11)." https://www.dgs.ca.gov/BSC/CALGreen. Accessed March 2023.

California Code of Regulation (CCR), Title 24, Section 3501 et seq.

California Code of Regulation. Title 14, Section 15000 et seq.

California Code of Regulations. Title 14. Section 4852 (c).

California Code of Regulations 17, Section 95811(b).

California Code of Regulations 17, Section 95812.

California Code of Regulations 17, Sections 95100–95158.

California Code of Regulations 17, Sections 95811, 95812(d).

California Code of Regulations 17, Sections 95811, 95812.

California Code, Fish and Game Code, Section 3503, 2021.

California Code, Fish and Game Code, Section 3503.5, 2020.

California Code, Fish and Game Code, Section 3511, through 2012 legislative session.

California Code, Fish and Game Code, Section 3513, 2018.

California Code, Fish and Game Code, Sections 1900-1913, 2018.

California Code, Health and Safety Code, Section 7050.5

California Code, Public Resources Code, Section 5097.9-5097.991.

California Department of Fish and Wildlife, California Natural Diversity Database, March 2023.

California Department of Fish and Wildlife. *Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan*. https://www.wildlife.ca.gov/regions/5/newhall. Accessed March 2023.

California Department of Transportation (Caltrans). *Transportation and Construction Vibration Guidance Manual*. April 2020. https://dot.ca.gov/programs/environmental-analysis/noise-vibration/guidance-manuals. Accessed March 2023.

California Department of Transportation. *Earthborne Vibrations (1990)*. VII-27.

California Education Code (EDC), Sec. 17213, accessed February 2022. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=17213.#:~:text=17213.%20The%20governing%20board%20of%20a%20school%20district,school%20district%2C%20unless%20all%20of%20the%20following%20occur%3A. March 2022.

California Education Code, Sections 17280-17316.

California Endangered Species Act (CESA), State of California, 1970.

California Energy Commission (CEC). "2022 Building Energy Efficiency Standards." https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency Accessed March 2023.

California Energy Commission (CEC). *Enforcement Procedures for the Renewables Portfolio Standards for Local Publicly Owned Electric Utilities: Amended Regulations*. April 12, 2016. https://www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard/rps-enforcement-regulations-publicly. Accessed March 2023.

California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the Legislature (March 2006), 58.

California Environmental Quality Act (CEQA), State of California, Title 14, Section 15380.

California Environmental Quality Act Guidelines (CEQA Guidelines), California Public Resources Code [PRC].

California Health and Safety Code. Division 26. Air Resources, PART 3. Air Pollution Control Districts. "Chapter 5.5. South Coast Air Quality Management District." ARTICLE 5. Plan, Section 40460(b). https://law.justia.com/codes/california/2014/code-hsc/division-26/part-3/chapter-5.5. Accessed March 2023.

California Legislative Information. *Assembly Bill No. 1279*. September 16, 2022. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279. Accessed March 2023.

California Legislative Information. *Assembly Bill No. 197*. September 8, 2016. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB197. Accessed March 2023.

California Legislative Information. *Senate Bill No. 350*. October 7, 2015. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed March 2023.

California Legislative Information. *Senate Bill No. 375*. September 30, 2008. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080SB375. Accessed March 2023.

California Legislative Information. *Senate Bill No. 905*. September 16, 2022. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB905. Accessed March 2023.

California Public Resources Code (PRC). Section 21083.2 (g).

California Public Resources Code, sec. 21001(b).

California Streets and Highways Code, sec. 260–284.

Caltrans, Transportation and construction vibration Guidance Manual, April 2020. https://dot.ca.gov/programs/environmental-analysis/noise-vibration/guidance-manuals. Accessed May 2023.

CARB. "AB 25188 Air Toxics 'Hot Spots' Program." https://www.arb.ca.gov/ab2588/ab2588.htm. Accessed March 2023.

CARB. "Airborne Toxic control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling." https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling Accessed March 2023.

CARB. "California State Implementation Plans" https://ww2.arb.ca.gov/our-work/programs/california-state-implementation-plans. Accessed March 2023.

CARB. "California's Advanced Clean Cars Program." https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program. Accessed March 2023.

CARB. "CARB Approves Amendments to Off-Road Regulations to Further Reduce Emissions." https://ww2.arb.ca.gov/news/carb-approves-amendments-road-regulation-further-reduce-emissions. Accessed March 2023.

CARB. "General Information About 'Hot Spots.'" https://www.arb.ca.gov/ab2588/general.htm. Accessed March 2023.

CARB. "Hot Spots Inventory Guidelines," https://ww2.arb.ca.gov/our-work/programs/ab-2588-air-toxics-hot-spots/hot-spots-inventory-guidelines. Accessed March 2023.

CARB. "Inhalable Particulate Matter and Health (PM2.5 and PM10)." https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health. Accessed March 2023.

CARB. "Lead & Health." https://ww2.arb.ca.gov/resources/lead-and-health. Accessed March 2023.

CARB. "News Release: CARB finds vehicle standards are achievable and cost-effective." https://ww2.arb.ca.gov/news/carb-finds-vehicle-standards-are-achievable-and-cost-effective. Accessed March 2023.

CARB. "Nitrogen Dioxide & Health." https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health. Accessed March 023.

CARB. "Overview: Diesel Exhaust & Health." https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed March 2023.

CARB. "Sulfur Dioxide & Health." https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health. Accessed March 2023.

CARB. "Visibility Reducing Particles and Health." https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed March 2023.

CARB. *AB 32 Scoping Plan (November 16, 2022).* https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed March 2023.

CARB. *California's 2017 Climate Change Scoping Plan.* November 2017. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed March 2023.

CARB. *California's 2022 Climate Change Scoping Plan.* November 2022. https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf. Accessed March 2023.California Code of Regulations 17, Sections 95800–96023.

CARB. *California's Advanced Clean Cars Midterm Review: Summary Report for the Technical Analysis of the Light Duty Vehicle Standards*, pp. ES-17, C-9. January 18, 2017https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:ba413172-1428-3c1f-ba9f-4975761871ab Accessed March 2023.

CARB. *Climate Change Scoping Plan: A Framework for Change*. December 2008. https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed March 2023.

CARB. *Final Regulation Order: Amendments to the Airborne Toxic Control Measure For Stationary Compression Ignition Engines*. May 19, 2011. https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/finalreg2011.pdf. Accessed March 2023.

CARB. *Final Regulation Order: Regulation For In-Use Off-Road Diesel-Fueled Fleets.* https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation. Accessed March 2023.

CARB. *First Update to the Climate Change Scoping Plan: Building on the Framework Pursuant to AB 32, The California Global Warming Solutions Act of 2006.* May 2014. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed March 2023.

California Energy Commission (CEC). "Renewable Portfolio." http://www.energy.ca.gov/portfolio. Accessed March 2023.

CEC. *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, Staff Final Report, CEC-600-2006-013-SF.* December 2006.

Center for Biological Diversity et al. v. California Department of Fish and Wildlife (2015) (62 Cal.4th 204, 195 Cal.Rptr.3d 247, 361 P.3d 342).

Centers for Disease Control and Prevention, NIOSH Chemical Carcinogen Policy. Accessed March 2023.

Child Care Programs, California Education Code, Section 38131, 2019.

City of Rancho Mirage General Plan (2017) Update, https://ranchomirageca.gov/wp-content/uploads/2019/01/Chapter3Circulation.pdf. Accessed April 2023.

Civic Center Act, California Education Code 38130, 2012.

Comprehensive School Safety Plan, California Education Code, Section 32282, 2017.

Division of Sate Architects, Sustainability Plan Review, https://www.dgs.ca.gov/DSA/Resources/Page-Content/Resources-List-Folder/Sustainability-Plan-Review?search=sustainbility%20plan. Accessed April 2023.

Division of State Architects, Resources , https://www.dgs.ca.gov/DSA/Resources. Accessed April 2023.

Edison International, 2021 Sustainability Report, https://www.edison.com/sustainability/sustainability-report. Accessed March 2023.

Energy+Environmental Economics (E3). *Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board*. October 2020. https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:85bd16aa-f670-3fa2-813f-eedd14dd9f82. Accessed March 2023.

Federal Register. "Corporate Average Fuel Economy Standards for Model Years 2024–2026 Passenger Cars and Light Trucks." May 2, 2022. https://www.govinfo.gov/content/pkg/FR-2022-05-02/pdf/2022-07200.pdf. Accessed March 2023.

Federal Register. "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act" (December 15, 2009). https://www.federalregister.gov/documents/2009/12/15/E9-29537/endangerment-and-cause-or-contribute-findings-for-greenhouse-gases-under-section-202a-of-the-clean. Accessed March 2023.

Federal Register. "Mandatory Reporting of Greenhouse Gases." October 30, 2009. https://www.federalregister.gov/documents/2009/10/30/E9-23315/mandatory-reporting-of-greenhouse-gases. Accessed March 2023.

Federal Transit Administration May 2006b. Transit Noise and Vibration Impact Assessment. Accessed April 2023. https://docs.vcrma.org/images/pdf/planning/ceqa/FTA_Noise_and_Vibration_Manual.pdf

Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual, September 2018.

Federal Transit Administration. *Transit Noise and Vibration Impact Assessment Manual*. September 2018.

Kremkau, S.H. and A. Hill. Statistical Research, Inc. Section 31 Specific Plan Cultural Resource Study, Rancho Mirage, Riverside County, California. The Archaic Period (8000-1500 B.P.). https://ranchomirageca.gov/wp-content/uploads/2019/07/eApx_E_Cultural.pdf. Accessed April 2023.

Lowell J. Bean and William Mason. *Diaries & Accounts of the Romero Expeditions in Arizona and California, 1823-1826.* Palm Springs, CA: Palm Springs Desert Museum. 1962.

Massachusetts v. Environmental Protection Agency, 127 S.Ct. 1438 (2007).

National Historic Preservation Act (NHPA), Section 106: National Register of Historic Places (NRHP). 1966.

Office of the Governor. "Governor Brown Established Most Ambitious Greenhouse Gas Reduction Target in North America." April 29, 2015. https://www.ca.gov/archive/gov39/2015/04/29/news18938/index.html. Accessed March 2023.

Office of the Governor. *Executive Order S-01-07.* January 18, 2007. http://climateactionnetwork.ca/wp-content/uploads/2011/06/eos0107.pdf. Accessed March 2023.

Palm Springs Unified School District (PSUSD) Policies. Section 1330. Available at: http://www.gamutonline.net/district/palmsprings/displayPolicy/436513/. Accessed March 2023.

Palm Springs Unified School District, AR 3511 Business and Noninstructional Operations, Energy and Water Management, 2019.

Palm Springs Unified School District, Terms and Conditions: Use of School Facilities and Grounds https://www.psusd.us/site/handlers/filedownload.ashx?moduleinstanceid=615&dataid=2495&FileName=UOF%20Terms%20and%20Conditions%20072820_.pdf#:~:text=All%20school-related%20activitiesandprogramsshallbegivenpriorityintheuseoffacilitiesandgroundsundertheCivicCenter%20Act.%20Thereafter%2C%20the%20use%20shall,Center%20activities%20shall%20be%20scheduled%20during%20non-school%20hours. Accessed May 2023.

Palm Springs Unified School District, Draft Environmental Impact Report for the Palm Springs Unified School District Comprehensive High School No. 4 and Elementary School (SCH 2006011095), September 2006.

Panich, L. M. and M. Wilken-Robertson. Paipai Pottery Past and Present: Evolution of an Indigenous Ceramic Tradition. Pacific Coast Archaeological Society. https://www.pcas.org/documents/V481and2Panich.pdf. Accessed April 2023.

Perry W. Payne and Sara Rosenbaum. "Massachusetts et al. v Environmental Protection Agency: Implications for Public Health Policy and Practice." *Public Health Reports 122 No. 6 (2007)*: 817–819. https://doi.org/10.1177/003335490712200614. Accessed March2023.

Public Resources Code (PRC), Division 13. Environmental Quality, Chapter 2.7. Modernization of Transportation Analysis for Transit-Oriented Infill Projects, Section 21099, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=21099.&lawCode=PRC. Accessed March 2023.

Public Resources Code (PRC), Division 5. Parks and Monuments, Chapter 1. State Parks and Monuments, Article 2. Historic Resources, Section 5020.1, https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=5020.1.&lawCode=PRC . Accessed March 2023.

Ralph Propper, Patrick Wong, Son Bui, Jeff Austin, William Vance, Alvaro Alvarado, Bart Croes, and Dongmin Luo. *Ambient and Emission Trends of Toxic Air Contaminants in California, American Chemical Society: Environmental Science & Technology*. 2015.

Rancho Mirage Municipal Code. Title 8. Ch. 8.45. Sec. 8.45.030.

SCAG. *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies Final Plan*. https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx. Accessed November 2022.

SCAQMD. "Air Quality Analysis Guidance Handbook." 2010. http://www.aqmd.gov/CEQA/hdbk.html. Accessed MArch2023.

SCAQMD. "Appendix A: Calculation Details for CalEEMod (May 2021)." http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-a2020-4-0.pdf?sfvrsn=6. Accessed March 2023.

SCAQMD. "Frequently Asked CEQA Questions." http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/frequently-asked-questions. Accessed March 2023.

SCAQMD. "General Forecast Areas and Air Monitoring Areas." Map. http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf. Accessed March 2023.

SCAQMD. "Greenhouse Gases CEQA Significance Thresholds." http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds. Accessed March 2023.

SCAQMD. "SCAQMD's Historical Activity on Climate Change." http://www.aqmd.gov/nav/about/initiatives/climate-change. Accessed March 2023.

SCAQMD. "Site Survey Report for Palm Springs, AQS ID 060655001." https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:7df3369d-c7b8-30db-9a2e-e26276a87845 Accessed March 2023.

SCAQMD. Board meeting, Agenda No. 29. "White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions." September 5, 2003. Appendix D, p. D-3.

SCAQMD. *CEQA Air Quality Handbook*. April 1993. p. 12-3.

SCAQMD. *Final 2003 Coachella Valley PM10 State Implementation Plan.* August 1, 2003. https://www.aqmd.gov/docs/default-source/clean-air-plans/pm10-plans/final-2003-coachella-valley-pm10-state-implementation-plan.pdf?sfvrsn=2. Accessed March 2023.

SCAQMD. *Final 2022 Air Quality Management* Plan http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan. Accessed March 2023.

SCAQMD. *Final Localized Significance Threshold (LST) Methodology*. June 2003, rev. July 2008.

SCAQMD. *Final Localized Significance Threshold Methodology*. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf. Accessed March 2023.

SCAQMD. *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES V) Final Report*. https://www.aqmd.gov/docs/default-source/planning/mates-v/mates-v-final-report-9-24-21.pdf?sfvrsn=6. Accessed March 2032.

SCAQMD. Rule 1113 Architectural Coating (amended February 5, 6, 2016).

South Coast Air Quality Management District. *Greenhouse Gas (GHG) Inventories for the Coachella Valley, prepared for the Coachella Valley Association of Governments*. June 2011.

Southern California Association of Governments (SCAG). "Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies Draft." https://www.connectsocal.org/Pages/Connect-SoCal-Draft-Plan.aspx. Accessed March 2023.

Southern California Association of Governments. SCAG GIS Open Data Portal. Natural Community Conservation Plan and Habitat Conservation Plan (NCCP & HCP). https://gisdata-scag.opendata.arcgis.com/datasets/natural-community-conservation-plan-nccp/explore?location=34.320967%2C-116.670397%2C8.71. Accessed March 2023.

StandiumPro, https://stadiumlightspro.com/baseball-field-lighting-standards-and-regulations/ Accessed: May 2, 2023.

State of California, California Environmental Quality Act (CEQA), Title 14, 1970.

State of California, Governor's Office of Planning and Research. *General Plan Guidelines 2017 (2018)*. Page 374. http://opr.ca.gov/planning/general-plan/guidelines.html. Accessed March 2023.

State of California, Senate Bill 743 (SB 743) (Steinberg). 2013.

State of California. *General Plan Guidelines*. 2017. http://calaverascap.com/wp-content/uploads/2017/08/OPR_COMPLETE_7.31.17.pdf. Accessed March 2023.

The Cahuilla People, Augustine Band of Cahuilla Indians, https://augustinetribe-nsn.gov/cahuilla-people/. Accessed April 2023.

The Cahuilla People, Augustine Band of Cahuilla Indians, https://augustinetribe-nsn.gov/cahuilla-people/. Accessed April 2023.

U.S. Fish & Wildlife Service, National Wetlands Inventory, surface waters and wetlands, https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/. Accessed April 2023.

United states Bureau of Reclamation. Lower Colorado Basin- Interior Region 8, Coachella Canal Area Resource Management Plan/ Environmental Assessment, Cultural Resources, https://www.usbr.gov/lc/yuma/environmental_docs/Coachella/coachella-chap5-5.pdf. Accessed April 2023.

United States Code, Title 16, sec. 470aa–470mm, Archaeological Resources Protection Act of 1979, Public Law 96-95, as amended.

United States Code: Title 15, Chapter 32: Native Americans Graves Protection and Repatriation Act of 1990. https://uscode.house.gov/view.xhtml?path=/prelim@title25/chapter32&edition=prelim. Accessed May 2023.

United States Environmental Protection Agency (USEPA). "Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Section 202(a) of the Clean Air Act." https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a. Accessed March 2023.

United States, Endangered Species Act as amended by Public Law, Section 10(a)(1)(B), 1982.

United States, Endangered Species Act, 93rd United States Congress, 16 U.S.C., 1973.

United States, The Migratory Bird Treaty Act, United States Code, 16 U.S.C., Chapter 7, Subchapter II, 1916.

University of California, Riverside, The EDGE Institute, Lake Cahuilla Research Coalition, https://edge.ucr.edu/research/lake-cahuilla-research-coalition. Accessed April 2023.

US Department of Energy. "Laying the Foundation for Solar America: The Million Solar Roofs Initiative." October 2016. https://www.nrel.gov/docs/fy07osti/40483.pdf. Accessed March 2023.

US Department of Transportation Federal Highway Administration. *Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents*.

US Department of Transportation, Federal Transit Administration (USDOT, FTA). *Transit Noise and Vibration Impact Assessment, FTA report no. 0123 (September 2018)*. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed March 2023.

US Environmental Protection Agency (USEPA). "Health Effects of Ozone Pollution." https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed March 2023.

US Government Publishing Office, Administration of George W. Bush. *Executive Order 13432—Cooperation Among Agencies in Protecting the Environment With Respect to Greenhouse Gas Emissions From Motor Vehicles, Nonroad Vehicles, and Nonroad Engines, 631.* May 14, 2007. https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:bad1942b-aebc-3416-b8c0-5115a5c50227. Accessed March 2023.

USDOT. *FHWA Roadway Construction Noise Model Final Report*. January 2006. https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf. Accessed March 2023.

Use of School Facilities, Education Code 32282/38131, Community Relations, BP/AR 1330.

USEPA. "Carbon Monoxide (CO) Pollution in Outdoor Air." https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution. Accessed March 2023.

USEPA. "Health Effects of Ozone Pollution." https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution. Accessed March 2023.

USEPA. "Presidential Announcements and Letters of Support related to Greenhouse Gas Emissions." August 28, 2017. https://www.epa.gov/regulations-emissions-vehicles-and-engines/presidential-announcements-and-letters-support-relatedAccessed March 2023.

USEPA. "Regulations for Greenhouse Gas Emissions from Commercial Trucks & Buses." December 27, 2017. https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucksAccessed March 2023.

USEPA. "Summary of the Energy Independence and Security Act." https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act. accessed March 2023.

USEPA. "What is SO_2 and how does it get in the air?" https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#what%20is%20so2. Accessed March 2023.

USEPA. *Air Toxics Risk Assessment Reference Library, Volume 1 Technical Resource Manual*. April 2004.

USEPA. *USEPA and NHTSA Adopt Standards to Reduce GHG and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles for Model Year 2018 and Beyond*. August 2016. https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100P7NL.txt. accessed March 2023.

Western Regional Climate Center. "Palm Springs Station: Period of Record Monthly Climate Summary" (period of record 03/01/1906-06/10/2016). https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6635. Accessed March 2023.

Wildlife and Fisheries, Code of Federal Regulations, Title 50, 2014.