



**SUBJECT: NOTICE OF INTENT TO ADOPT A DRAFT MITIGATED  
NEGATIVE DECLARATION**

**PROJECT TITLE: PROPOSED ELEMENTARY SCHOOL NO. 15, MENIFEE UNION  
SCHOOL DISTRICT**

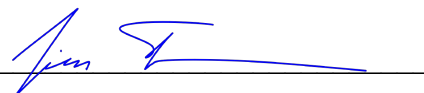
In accordance with the California Environmental Quality Act (CEQA), the Meniffee Union School District is the Lead Agency and has prepared a Draft Mitigated Negative Declaration for the project identified above. The purpose of this Notice of Intent (NOI) is to solicit comments on the environmental analysis contained in the Mitigated Negative Declaration.

The Meniffee Union School District (MUSD) is proposing the construction of a new elementary school on approximately 46 acres at the intersection of Mira Street and Wickerd Road located in the City of Meniffee, between Lindenberger Road and Briggs Road. The proposed project involves the construction of a new K-5 elementary school with an estimated student capacity of 900 students, including 34 classrooms, administration offices, library, kitchen, multipurpose room, playfields/playgrounds, and a 200 stall parking lot with a student pickup/drop off areas. The school will be accessed on Wickerd Road which will be extended from Mira Street to Briggs Road.

This Notice is not a form requiring a response from you. Its purpose is simply to provide information to you on the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary. If you wish to receive the Draft Mitigated Negative Declaration, please call Jim Sellers, Director of Facilities at (951) 672-1851. Comments relative to the environmental analysis should be addressed to Meniffee Union School District, 29775 Haun Road, Meniffee, CA 92586, sent by FAX to (951) 672-1385, or emailed to [jim.sellers@menifeeusd.org](mailto:jim.sellers@menifeeusd.org). Comments must be received no later than 5:00 p.m. on July 27, 2021. Please include the name and phone number of the contact person for your organization. The Mitigated Negative Declaration is expected to be considered by the Meniffee Union School Board at its headquarters located at 29775 Haun Road, Meniffee, CA 92586 on August 10, 2021 at 5:00 p.m.

**Project Applicant:** Meniffee Union School District

**Date:** June 25, 2021

**Signature:** 

**Title:** Director of Facilities

**Telephone:** (951) 672-1851

**MENIFEE UNION SCHOOL DISTRICT  
29775 Haun Road, Menifee, CA 92586**

**NOTICE OF INTENT TO ADOPT A  
DRAFT MITIGATED NEGATIVE DECLARATION**

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**Project Title:**

Draft Mitigated Negative Declaration: Elementary School No. 15, Menifee Union School District

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**Project Location:**

The proposed project site is located in western Riverside County at the intersection of Mira Street and Wickerd Road, Menifee, California, between Lindenberg Road and Briggs Road.

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**Description of Nature, Purpose, and Beneficiaries of Project:**

The Menifee Union School District (MUSD) is proposing the construction of a new elementary school on approximately 46 acres at the intersection of Mira Street and Wickerd Road located in the City of Menifee, between Lindenberg Road and Briggs Road. The proposed project involves the construction of a new K-5 elementary school with an estimated student capacity of 900 students, including 34 classrooms, administration offices, library, kitchen, multipurpose room, playfields/playgrounds, and a 200 stall parking lot with a student pickup/drop off areas. The school will be accessed on Wickerd Road which will be extended from Mira Street to Briggs Road.

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**Lead Agency:**

Menifee Union School District

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**Draft Mitigated Negative Declaration and all Supporting Documentation are Available at:**

Menifee Union School District  
29775 Haun Road  
Menifee, CA 92586

Or by Calling: or by email:  
(951) 672-1851 jim.sellers@menifeeusd.org

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**The Public Notice of Completion is provided through the following:**

☐ Newspaper (Riverside Press Enterprise)

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**Review Period and Public Hearing:**

June 28, 2021 through July 27, 2021

The Mitigated Negative Declaration is expected to be considered by the Menifee Union School Board at its headquarters located at 29775 Haun Road, Menifee, CA 92586 on August 10, 2021 at 5:00 p.m.

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**CEQA Contact Person:**

**Phone Number:**

Jim Sellers

(951) 672-1851

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# **MENIFEE UNION SCHOOL DISTRICT**

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## **Draft Mitigated Negative Declaration for Proposed Elementary School No. 15**

**Menifee Union School District  
29775 Haun Road  
Menifee, CA 92586**

**Contact: Jim Sellers  
(951) 672-1851**

Prepared by:

**ENVIRONMENTAL AUDIT, INC.  
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**June 2021**

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## **CHAPTER 1**

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### **PROJECT DESCRIPTION**

Introduction  
Agency Authority  
Project Location and Background  
Proposed Project Description

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## **1.0 PROJECT DESCRIPTION**

### **1.1 INTRODUCTION**

The Menifee Union School District (MUSD) is proposing the construction of a new elementary school (proposed project) on the northwest corner of Briggs Road and Wickerd Road (site or proposed project site) in Menifee, California 92584 (see Figure 1). The Site is comprised of 46 acres and currently vacant. The proposed project site has been used historically for dry land grain (wheat) farming.

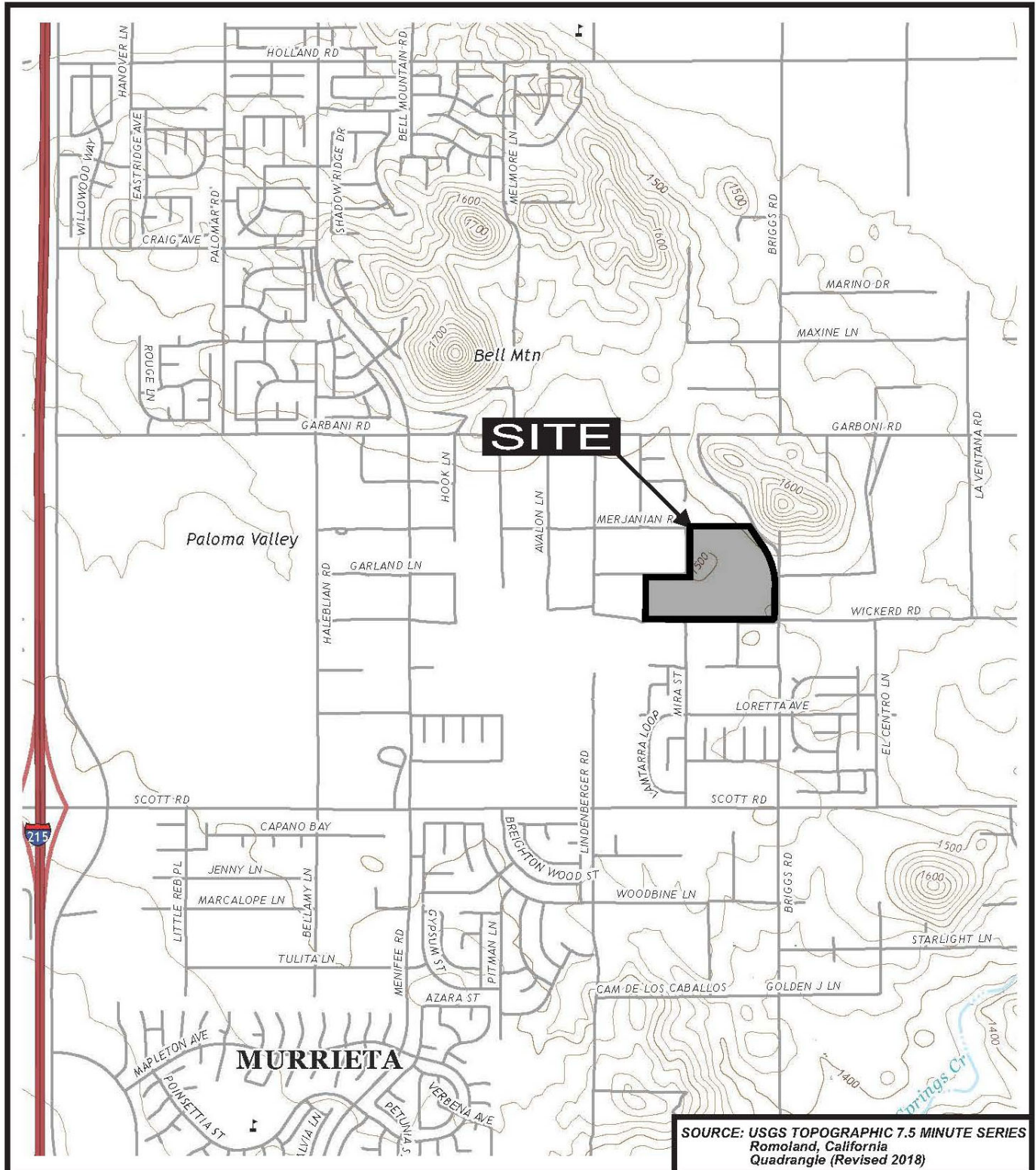
### **1.2 AGENCY AUTHORITY**

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., requires that the environmental impacts of proposed “projects” be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. The proposed construction of the new elementary school constitutes a “project” as defined by CEQA. To fulfill the purpose and intent of CEQA, the Menifee Union School District (MUSD) is the “lead agency” for this project, and has prepared this Mitigated Negative Declaration to address the potential environmental impacts associated with the proposed construction of a new elementary school in Menifee, California.

The lead agency is the public agency having the principal responsibility for carrying out or approving a project that may have a significant adverse effect upon the environment (Public Resources Code §21067). Since the MUSD has the greatest responsibility for supervising or approving the project as a whole, it was determined that the MUSD would be the most appropriate public agency to act as lead agency (CEQA Guidelines §15051(b)).

To fulfill the purpose and intent of CEQA, the MUSD has prepared this Mitigated Negative Declaration to address the potential adverse environmental impacts associated with the proposed project. This document, prepared pursuant to the California Environmental Quality Act (CEQA), Public Resources Code 21000 et seq., constitutes a Mitigated Negative Declaration for the MUSD’s Proposed Elementary School No. 15 Project.

**Menfiec Union School District – Proposed Elementary Number 15 Project**



**Environmental Audit, Inc.**

**SITE LOCATION MAP**  
**Proposed Elementary School No. 15**  
**Northwest Corner of Briggs Road and Wickerd Road**  
**Menifee, CA 92584**

0 2,000'



### 1.3 PROJECT LOCATION AND BACKGROUND

The proposed project site of Elementary School No. 15 is located on the northwest corner of Briggs Road and Wickerd Road in Menifee, California (see Figure 2), on approximately 46 acres of land.

Historical uses of the proposed project site consisted of agricultural, i.e., dry land grain farming. The site has never been developed and is currently vacant. The Riverside County identifies the Site by the following Assessor's Parcel Numbers: 372-170-030, 372-180-005, and 372-180-007 (see Figure 2).

Land use around the site is primarily single-family residential south of the site, with low density residential uses primarily northwest of the site. Agricultural land uses are located immediately north and east of the site, adjacent to Wickerd Road, Scott road and La Ventana Road. Commercial land uses are located adjacent to Scott Road near the Interstate 215 and Scott Road interchange. Mira Park is located to the southwest of the site, across Wickerd Road. The former Leon Mine is located northeasterly of the site across Briggs Road (see Figure 2).

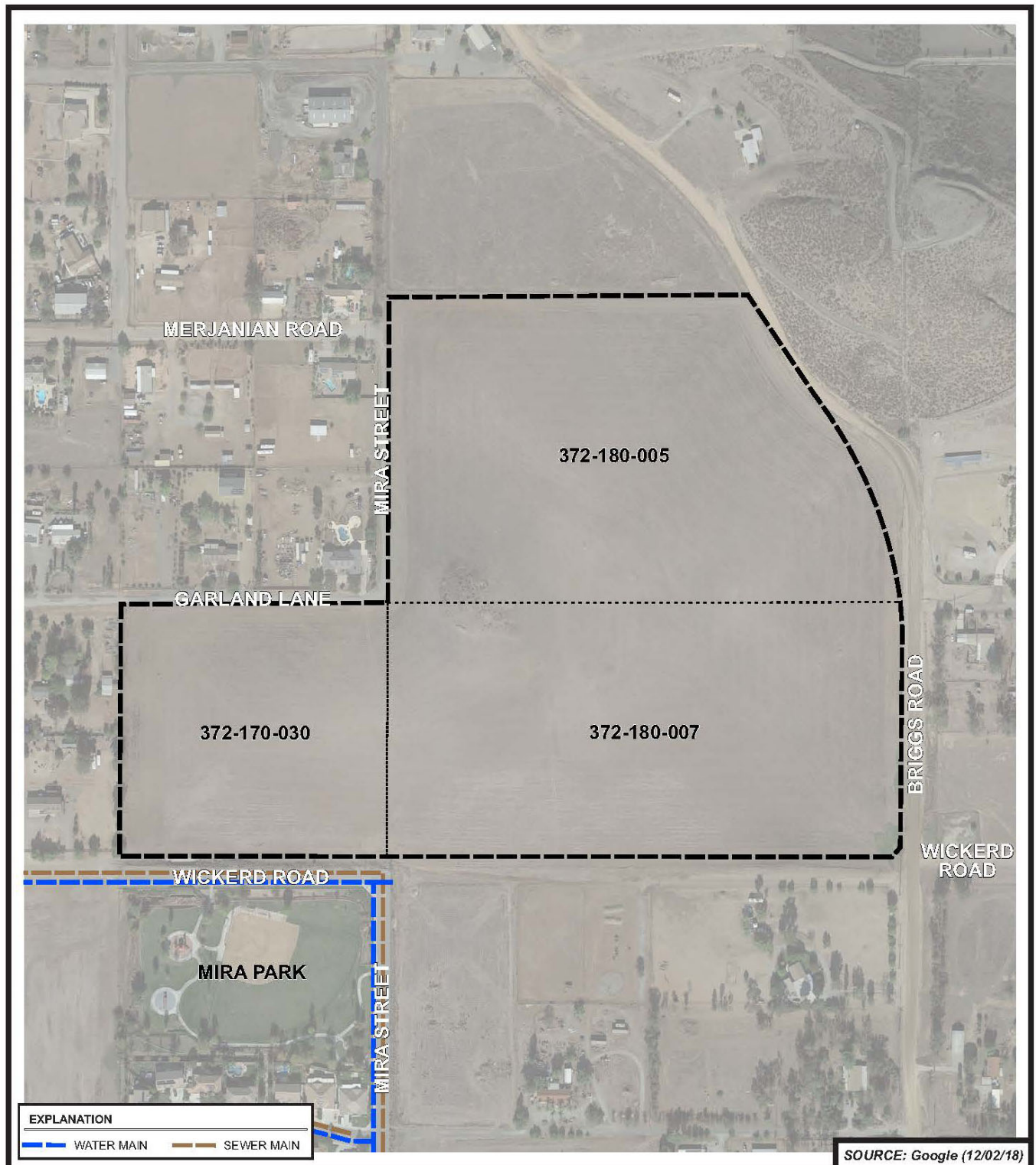
### 1.4 PROPOSED PROJECT DESCRIPTION

The design of Elementary School No. 15 is still being refined, but the school is expected to be used for Kindergarten (K) through fifth grades, with a maximum student capacity of up to 900 students and 50 employees. The proposed school district boundaries are Interstate 215 to the west, Domenigoni Parkway to the north, Winchester Road to the east, and Scoot Road to the south. The indoor designed school campus will include up to 34 classrooms, as well as administration offices, a library, a kitchen, and a multipurpose room. The combined building area for the school will be approximately 69,000 square feet. The proposed school site includes the construction of a 200-stall parking lot on the south side the site that includes a student drop-off/pickup area, playfields north and east of the school building, and a retention basin on the western side of the site. The school frontage will be on Wickerd Road, with the parking and student drop-off/pickup entry and exits on Wickerd Road (see Figure 3).

#### 1.4.1 Construction Schedule

Grading for construction is expected to begin in 2022 and will take about one month. Building construction is expected to take approximately 16 months, paving will take approximately 1 month, and architectural coating will take approximately 1 month. Thus, construction is expected to take approximately 18 months total from grading to project completion.





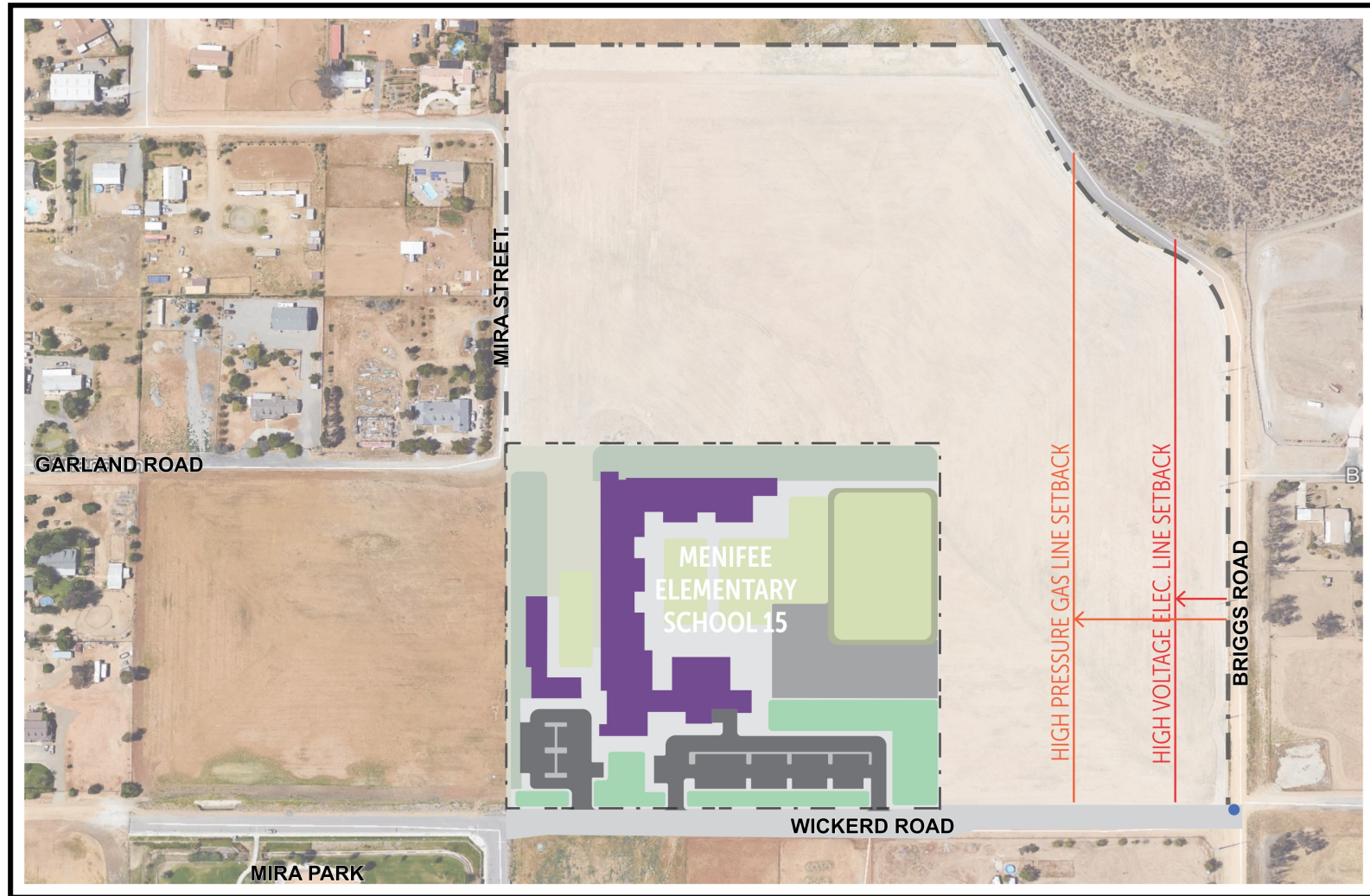
Environmental Audit, Inc.

**AERIAL SITE LOCATION**  
Proposed Elementary School No. 15  
Northwest Corner of Briggs Road and Wickerd Road  
Menfief, CA 92584

0 350'







Environmental Audit, Inc.

**SITE PLAN**  
Proposed Elementary School No. 15  
Northwest Corner of Briggs Road and Wickerd Road  
Meniffee, Riverside, CA 92584



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## **CHAPTER 2**

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### **ENVIRONMENTAL CHECKLIST FORM**

Introduction  
General Information  
Potentially Significant Impact Areas  
Determination  
Environmental Checklist and Discussion  
    Aesthetics  
    Agriculture and Forestry Resources  
    Air Quality  
    Biological Resources  
    Cultural Resources  
    Energy  
    Geology / Soils  
    Greenhouse Gas Emissions  
    Hazards & Hazardous Materials  
    Hydrology / Water Quality  
    Land Use / Planning  
    Mineral Resources  
    Noise  
    Population / Housing  
    Public Services  
    Recreation  
    Transportation  
    Tribal Cultural Resources  
    Utilities / Service Systems  
    Wildfires  
Mandatory Findings of Significance  
References

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### INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

### GENERAL INFORMATION

Project Title:	Proposed Elementary School Number 15
Lead Agency Name:	Menifee Union School District
Lead Agency Address:	29775 Haun Road, Menifee, CA 92586
Contact Person:	Jim Sellers
Contact Phone Number:	(951) 672-1851
Project Location:	Northwest corner of Briggs Road and Wickerd Road in Menifee, California
Project Sponsor's Name:	Menifee Union School District
Project Sponsor's Address:	29775 Haun Road, Menifee, CA 92586
General Plan Designation:	Low Density Residential
Zoning:	Rural Residential (RR2) (2 acre minimum).
Description of Project:	MUSD is proposing the construction of a new elementary school. The site is comprised of 46 acres and currently vacant. The Site has been used historically for dry land grain (wheat) farming. The design of the school is expected to be used for kindergarten (K) through eighth grades, with a maximum student capacity of up to 900 students and 50 employees. The new school site is designed with up to 34 classrooms, as well as administration offices, library, kitchen, multipurpose room, parking lot, and playfields. The proposed school site includes a 200-stall parking lot on the southeast corner of the site that includes a student drop-off/pickup area and playfields (see Figure 3).
Surrounding Land Uses and Setting:	Land uses south and west of the school site are primarily rural residential. Land uses to the north and east of the site include open space, agricultural, and residential.
Other Public Agencies Whose Approval is Required:	State of California Department of Education, School Facilities Planning Division California Division of the State Architect

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

The Pechanga Band of Luiseno Indians requested consultation and consultation was implemented. Mitigation measures have been developed that include tribal monitoring of the site during grading in native soils.

### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

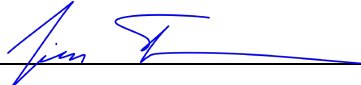
The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

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

## DETERMINATION

On the basis of this initial evaluation:

- ☐ I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: 

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Jim Sellers, Director of Facilities

June 22, 2021

Printed Name:

Date:



**EVALUATION OF ENVIRONMENTAL IMPACTS:**

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document to the extent to which they address site-specific conditions for the project.

- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

**ENVIRONMENTAL CHECKLIST AND DISCUSSION**

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>I. AESTHETICS.</b>				
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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**1.1 Significance Criteria**

The proposed project impacts on aesthetics will be considered significant if:

The project will block views from a scenic highway or corridor.

The project will adversely affect the visual continuity of the surrounding area.

The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

## **1.2 Setting and Impacts**

**1. a and b)** The proposed project site is located on the northwest corner of Briggs Road and Wickerd Road in Menifee, California. Land use around the site is primarily residential, with scattered open space, agricultural, and commercial development. Mira Park is located to the southwest of the proposed site across Wickerd Road. There are no scenic vistas, scenic resources or scenic highways located adjacent to the proposed project site or within the city of Menifee. The proposed project site is about 2 miles away from Interstate 215 and about 3 miles away from Highway 79, which are both listed by Caltrans as eligible scenic highways that are not yet officially designated (California Dept. of Transportation, 2021). As such, the proposed project site would not be visible from any scenic highways due to distance separation and intervening topography (e.g., hills).

**1. c)** The proposed project site has been graded and is mostly flat, except for a small knoll near the center of the site. The development area of the site has been cleared and is almost entirely bare, except a sparse amount of small bushes and other desert vegetation in the western-northwestern portion of the site. The existing visual character or quality of the site would change from an undeveloped landscape to a new school site. No significant adverse aesthetic impacts are expected from the development of the proposed project site as no unique visual resources will be disturbed. Further, the proposed project would not substantially degrade the existing visual environment.

**1. d)** No light sources are currently located at the proposed project site. The nearest light sources to the site are residences that surround the site. The proposed project site will include additional lighting for the new school facilities. Lighting will be provided for security and safety purposes to light buildings, parking lots, walkways, play areas, etc.

Chapter 6.01 of the Menifee Municipal Code (Dark Sky; Light Pollution) indicates that low-pressure sodium lamps are the preferred illuminating source, and all non-exempt outdoor light fixtures shall be shielded. A maximum of 8,100 total lumens per acre or parcel if less than one acre shall be allowed. When lighting is “allowed”, it must be fully shielded if feasible and partially shielded in all other cases and must be focused to minimize spill light into the night sky and onto adjacent properties (Section 6.01.040). The proposed project is expected to comply with Chapter 6.01 of the Municipal Code, as applicable, and will include the use of directional lighting so that areas within the proposed project site are illuminated and areas outside of the site are not. Thus, impacts due to light or glare are expected to be less than significant.

## **1.3 Mitigation Measures**

No further mitigation measures are required since no significant adverse aesthetic impacts associated with the proposed project were identified.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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## II. AGRICULTURE and FOREST RESOURCES.

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

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use?  |                          |                          |                          |                                     |
| e) Involve other changes in the existing environment which, due to their location or  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

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## **2.1 Significance Criteria**

Project-related impacts on agricultural and forest resources will be considered significant if any of the following conditions are met:

The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.

The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.

The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural uses or forest to non-forest uses.

## **2.2 Environmental Setting and Impacts**

**2. a and b)** The proposed project would be located on unoccupied land that is surrounded by residential and open space uses. Historical land use of the proposed project site, and property surrounding the site, has been vacant or dry land agricultural grain farming. However, the site has been graded, is vacant, and currently contains no agricultural uses. The proposed project is not located within an area mapped by the County General Plan or California Farmland Mapping and Monitoring Program (FMMP) as containing Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The proposed project site is not in an Agricultural Preserve, is not under a Williamson Act contract, and is not located within 300 feet of agriculturally zoned property. Therefore, the proposed project would not result in potentially significant direct or indirect impacts to agricultural lands. Since the proposed project site is not zoned for agriculture use, and zoned agricultural land is not located in close proximity to the site, development of the proposed project site would not create changes in the environment which could potentially convert other farmlands to non-agricultural use.

**2. c and d)** The proposed project would be located on unoccupied land that is surrounded by residential and open space uses. Historical land use of the proposed project site, and property surrounding the site, has been vacant or dry land agricultural grain farming. However, the site has been graded, is vacant, and currently does not contain forestland. Therefore, the proposed project would not result in any direct or indirect impacts to forestland resources.

**2. e)** As described above, the proposed project would be located on unoccupied, vacant land that was formerly used for dry agricultural grain farming. However, the site has been graded, is vacant, and currently contains no agricultural uses or forestland uses. Therefore, the proposed project would not result in any direct or indirect impacts to agricultural or forest land resources.

### **2.3 Mitigation Measures**

No further mitigation measures are required since no significant adverse agricultural or forest resource impacts associated with the proposed project were identified.

---

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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### III. AIR QUALITY.

When available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Expose sensitive receptors to substantial pollutant concentrations?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Result in other emissions (such as those leading to odors adversely affecting substantial number of people?)  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
- 

#### 3.1 Significance Criteria

Impacts will be evaluated and compared to the South Coast Air Quality Management District (SCAQMD) significance criteria in Table 2-1. If impacts equal or exceed any of the criteria in Table 2-1, they will be considered significant.



TABLE 2-1

## Air Quality Significance Thresholds

Mass Daily Thresholds		
Pollutant	Construction	Operation
NO <sub>x</sub>	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM <sub>10</sub>	150 lbs/day	150 lbs/day
SO <sub>x</sub>	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
TAC, AHM, and Odor Thresholds		
Toxic Air Contaminants (TACs)	Maximum Incremental Cancer Risk $\geq 10$ in 1 million Hazard Index $\geq 1.0$ (project increment) Hazard Index $\geq 3.0$ (facility-wide)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	

PM<sub>10</sub> = particulate matter less than 10 microns in size, TAC = toxic air contaminant; AHM = Acutely Hazardous Material. NO<sub>x</sub> = Nitrogen Oxide, CO = Carbon Monoxide, VOC = Volatile Organic Compounds, SO<sub>x</sub> = Sulfur Oxide.

### 3.2 Environmental Setting and Impacts

**3. a)** The project is located in the South Coast Air Basin. The most recent air plan for the South Coast Air Basin is the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved in the South Coast Air Basin within the timeframes required under federal law (SCAQMD, 2016). Growth projections from local general plans adopted by cities in the district are provided to the Southern California Association of Governments (SCAG), the agency that develops regional growth forecasts, and they are then used to develop future air quality forecasts in the 2016 AQMP. The proposed project would provide educational opportunities to support the planned growth in the City of Menifee and County of Riverside.

The proposed project site is proposed to be a neighborhood-serving school, so some of the students would walk to the school site, and some would be dropped off by their parents. The City of Menifee Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) (City of Menifee, 2020), indicates that K-12 schools would decrease the number of trips or the distance those trips travel to transport students to school and, thus, would be a VMT reducing project which would also reduce emissions associated with school transportation. Thus, the proposed project site is considered to be consistent with the air quality-related regional plans since it supports that proposed development in the General Plan for the area by providing education opportunities closer to areas that are currently not served by nearby schools.

**3. b) Construction Emissions:** Construction activities associated with the proposed project would result in emissions of carbon monoxide (CO), particulate matter less than 10 microns in diameter (PM10), particulate matter less than 2.5 microns in diameter (PM2.5), volatile organic compounds (VOCs), nitrogen oxides (NOx) and sulfur oxides (SOx). Construction activities include grading for the construction of new foundations, installation of the new school buildings, installation of playgrounds and recreational facilities, and paving to develop parking lots. Construction-related activities will generate emissions from worker vehicles, trucks, and construction equipment.

Daily construction emissions were calculated for the peak daily construction activities. Construction emissions are the sum of the highest daily emissions from employee vehicles, fugitive dust sources, construction equipment, and transport activities for the construction period. The peak day is based on the day in which the highest emissions occur for each pollutant. The construction emission calculations were determined using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 for an elementary school with a parking lot and a city park (to estimate emissions associated with playgrounds/ballfields). Criteria pollutant emissions during construction activities were then compared to their respective significance thresholds. Peak construction emissions for the proposed project are summarized in Table 2-2. The CalEEMod output for the construction emissions is provided in Appendix A.

The proposed project emissions during the construction phase are compared to the SCAQMD CEQA thresholds in Table 2-2. The peak construction emissions are expected to be less than the SCAQMD CEQA significance thresholds so that no significant impacts on air quality are expected during the construction phase.

TABLE 2-2

## Peak Construction Emissions

Year of Activity	Peak Daily Emissions (lbs/day)					
	CO	VOC	NOx	SOx	PM10	PM2.5
2022 Emissions	29.7	3.7	38.9	<0.1	9.9	6.0
2023 Emissions	21.6	34.2	21.6	<0.1	2.6	1.2
SCAQMD Threshold	<b>550</b>	<b>75</b>	<b>100</b>	<b>150</b>	<b>150</b>	<b>55</b>
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

See Appendix A for CalEEMod results.

Notes: SCAQMD Threshold = threshold criteria for determining environmental significance of construction activities, as provided in the South Coast Air Quality Management District's 1993 Handbook for Air Quality Analysis.

The construction emissions were also compared to the SCAQMD's localized significance thresholds (SCAQMD, 2009) (see Table 2-3) for a five-acre project. The overall construction area is 12.5 acres; however construction activities are expected to be limited to a maximum of about four acres a day during peak construction activities. The localized significance thresholds are used to determine whether or not a project may generate significant adverse air quality impacts to the local sensitive receptors in the vicinity of the proposed project. The proposed

project site is located in SCAQMD source receptor area 24. The estimated construction emissions associated with construction of the school were compared to the localized significance thresholds for CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. In all cases, the construction emissions were below the localized significance thresholds (see Appendix A). Therefore, no significant localized air quality impacts are expected.

**TABLE 2-3**

**Localized Emission Impacts Analysis**

Source/Activity	On-site Source Emissions (lbs/day)					
	CO	VOC	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Peak On-site Emissions	29.7	34.2	38.9	<0.1	9.9	6.0
Screening Value <sup>(1)</sup>	1,577	NA	270	NA	13	8
Significant?	No	-	No	-	No	No

(1) Screening values for LST analysis from SCAQMD Final Localized Significance Threshold Methodology, Appendix C, Tables C-1, C-2, and C-4 and C-5 for SRA No. 24 for five-acre sites at 25 meters (October 2009).

Construction activities must comply with the SCAQMD's Rule 403 – Control of Fugitive Dust Emissions in order to minimize impacts on nearby residential areas.

### Operational Emissions

The emissions related to the operation of the proposed project include emissions from mobile sources, including buses and worker vehicles, and area sources (emissions associated with natural gas use, landscaping activities, etc.). The operational emissions from the proposed project were determined using CalEEMod Version 2016.3.2 (see Appendix A) and are summarized in Table 2-4. Table 2-4 reports the peak operational emissions regardless of whether the emissions occur during winter or summer months. The peak proposed project emissions during the operational phase are also compared to the SCAQMD CEQA thresholds in Table 2-4. The estimated operational emissions are expected to be less than the SCAQMD CEQA thresholds so that no significant impacts on air quality are expected during the operation of the proposed project.

It should be noted that the operational emissions provided in Table 2-4 are conservative and only include emissions associated with vehicle travel to the site. They do not include the estimated emission reductions associated with the decrease in transportation emissions due to sighting a neighborhood school closer to the population that it serves.

**3. c)** The proposed project site is not expected to expose sensitive receptors within one mile to significant emissions. The consumer products (e.g., paints, coatings, cleaners, solvents, etc.) used by the school are regulated by the California Air Resources Board (CARB). The VOC content of coatings, cleaners, and solvents have been regulated by CARB and the SCAQMD, and the allowable VOC content of these materials has been decreasing, resulting in a concurrent reduction in VOC and related toxic air contaminant emissions. No major changes in the use of materials or the land uses adjacent to the existing school are expected.

TABLE 2-4

## Operational Emissions Increases

Activity	Emissions (lbs/day, 24 hr/day)					
	CO	VOC	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source Emissions	0.1	1.6	<0.1	<0.1	<0.1	<0.1
Energy	0.1	<0.1	0.2	<0.1	<0.1	<0.1
Vehicle Emissions	26.5	1.9	8.7	<0.1	9.0	2.4
<b>Total Project Emissions</b>	<b>27.0</b>	<b>3.6</b>	<b>8.9</b>	<b>&lt;0.1</b>	<b>9.0</b>	<b>2.5</b>
SCAQMD Threshold	550	55	55	150	150	55
Significant?	NO	NO	NO	NO	NO	NO

See Appendix A for CalEEMod results.

School districts are required to consider emissions resulting from the use of chemicals listed in the California Health and Safety Code §25532 and §44321. The school site is located within the jurisdiction of the SCAQMD. In order to determine if the SCAQMD has any permitted facilities with the potential to emit hazardous air pollutants within one-quarter mile of the school site, the SCAQMD FIND website was accessed. The FIND website contains information on permitted facilities with emissions, including toxic air contaminants. No SCAQMD permitted source was identified within one-quarter mile of the school site. Four SCAQMD permitted sources were identified at three separate facilities within one mile of the school site. All of these SCAQMD permitted sources are emergency generators, which are not expected to be a regular producer of substantial emissions. Therefore, the proposed project is not expected to expose sensitive receptors to substantial emissions. Impacts related to toxic air contaminants are expected to be less than significant.

**3. d)** No emissions are expected during either the construction or operational phases that are expected to generate odors. Emissions are limited to construction equipment and mobile sources so that no significant odor impacts are expected.

### 3.3 Mitigation Measures

No mitigation measures are required since no significant adverse air quality impacts associated with the proposed project were identified.

## CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES.</b> Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 4.1 Significance Criteria

The impacts on biological resources will be considered significant if any of the following criteria apply:

The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.

The project interferes substantially with the movement of any resident or migratory wildlife species.

The project adversely affects aquatic communities through construction or operation of the project.

#### 4.2 Environmental Setting and Impacts

**4. a)** The proposed project involves the construction of a new elementary school, a new parking lot, new playgrounds and play fields, and an extension to Wickerd Road from Mira Street to Briggs Road. The new school site will be built on land that is currently vacant but has historically been used for agricultural uses and does not contain dense vegetation. There are no major water bodies on the existing school site, and the property is not located within a 100- or 500-year flood zone, nor are any wetlands present at the site.

The MSHCP is a comprehensive, multi-jurisdictional Habitat Conservation Plan focusing on conserving species and their associated habitats in Western Riverside County. It covers multiple species and multiple habitats under multiple jurisdictions and provides a coordinated MSHCP Conservation Area to preserve biological diversity and maintain the region's quality of life. Specific habitat areas within designated Individual Criteria Area Cells, Cell Groups, Wildlife Corridors, and Habitat Core Areas have, therefore, been identified for long term preservation/conservation; the MSHCP includes specific survey and mitigation requirements which vary depending on the location of the project within certain plan areas and/or proposed conservation areas. The proposed project site is located within the MSHCP Sun City/Menifee Area Plan, within the MSHCP-identified Burrowing Owl Survey Area and Narrow Endemic Plant Species Focused Survey Areas (County of Riverside, 2004)..

##### **Narrow Endemic Plant Species**

The Proposed School site is scattered with non-native grassland. The grassland is dominated by common and widespread non-native annual grass and weed species. A number of native annual and perennial species were also found growing in the grassland, and scattered through the agricultural land between harvesting and planting.

Species include tumbleweed (*Amaranthus albus*), common fiddleneck (*Amsinckia menziesii* var. *intermedia*), oat grasses (*Avena barbata* and *A. fatua*), shortpod mustard (*Brassica geniculata*), brome grasses (*Bromus diandrus* and *B. madritensis*), common pineapple weed (*Chamomilla suaveolens*), lambs' quarters (*Chenopodium album*), field bindweed (*Convolvulus arvensis*),

common horseweed (*Conyza canadensis*), calabazilla (*Cucurbita foetidissima*), jimsonweed (*Datura wrightii*), filarees (*Erodium brachycarpum* and *E. cicutarium*), wild barley (*Hordeum murinum*), prickly lettuce (*Lactuca serriola*), bur-clover (*Medicago polymorpha*), wild radish (*Raphanus sativus*), curly dock (*Rumex crispus*), Russian thistle (*Salsola tragus*), common groundsel (*Senecio vulgaris*), London rocket (*Sisymbrium irio*), and hare's ear cabbage (*Sisymbrium orientale*). There are no trees or oak trees growing on the proposed school site, nor is there any Coastal Sage Scrub. California buckwheat (*Eriogonum fasciculatum*) was found on the rock mound that exists in the center portion of the site, near the western boundary.

The proposed project site is located within the Narrow Endemic Plant Species Survey Area 4 of the MSHCP. The Narrow Endemic Plant Species listed for Area 4 include Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii*).

The proposed project site has been used for agricultural activities and native habitat has been removed from the site. The growing habitats for the Narrow Endemic Plant Species are not present on the proposed project site.

- Munz's onion is found on mesic exposures or seasonally moist microsites in grassy openings in coastal sage scrub, chaparral, juniper woodland, valley and foothill grasslands on clay soils.
- The San Diego ambrosia is found on open floodplain terraces or in the watershed margins of vernal pools.
- The many-stemmed dudleya is found on clay soils in barrens, rocky planes and ridgelines, as well as thinly vegetated openings in chaparral, coastal sage scrub and southern needlegrass grasslands.
- The spreading navarretia, California Orcutt grass, and Wright's trichocoronis all require vernal pools and alkaline soils. No such conditions exist at the proposed project site.

The site is not located in close proximity to any conservation areas established by the Riverside County Multi-Species Habitat Conservation Plan (MSHCP), nor to MSHCP Public/Quasi-Public Lands. The closest conservation area is Constrained Linkage 17 (Paloma Valley), located south of the site (and south of Scott Road) (County of Riverside, 2004). Therefore, the proposed project would have no impacts on these or any other native plant species of concern.

### Animals

Wildlife species has been observed inhabiting and foraging at the proposed project site. The kind of habitat present on the proposed project site is best suited to foraging bird species. Species included white-tailed kite (*Elanus caeruleus*), northern harrier (*Circus cyaneus*), red-tailed hawk (*Buteo jamaicensis*), killdeer (*Charadrius vociferus*), rock dove (*Columba livia*),

mourning dove (*Zenaida macroura*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), western kingbird (*Tyrannus verticalis*), loggerhead shrike (*Lanius ludovicianus*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), California horned lark (*Eremophila alpestris actia*), northern rough-winged swallow (*Stelgidopteryx serripennis*), bushtit (*Psaltiriparus minimus*), house wren (*Troglodytes aedon*), Savannah sparrow (*Passerculus sandwichensis*), song sparrow (*Melospiza melodia*), white-crowned sparrow (*Zonotrichia leucophrys*), western meadowlark (*Sturnella neglecta*), brown-headed cowbird (*Molothrus ater*), and house finch (*Carpodacus mexicanus*). Animals common to the area include desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher mounds (*Thomomys bottae*), the western fence lizard (*Sceloporus occidentalis*), Southern Pacific rattlesnake (*Crotalus viridis helleri*), and the coyote (*Canis latrans clepticus*).

### **Burrowing Owl Survey**

The burrowing owl (*Athene cunicularia hypugaea*) is a CDFG Species of Special Concern that can inhabit grasslands, deserts and shrublands with low-growing vegetation. Burrows are the essential component of the burrowing owl habitat, which provide protection, shelter, and nests for burrowing owls. Burrowing owls typically use burrows made by mammals, e.g., the California ground squirrel, but can also use man-made structures such as cement culverts, pipes, asphalt or wood debris piles and openings beneath pavement. Burrowing owls may utilize a site for breeding, wintering, foraging, and/or migration stopovers; a site is considered "occupied" if at least one burrowing owl has been observed occupying a burrow within the last three years. It has a scattered distribution throughout the Western Riverside County MSHCP area outside of montane areas. Agricultural areas can be suitable habitat if burrows exist of the site.

A burrowing owl habitat survey was conducted in June 2021. Habitat suitability for burrowing owls was assessed during the initial field survey. The obvious nature of the site appeared suitable for burrowing owls. It includes large open expanses of agricultural land and sparsely vegetated grassland on gently rolling and level terrain. As a critical habitat feature, burrowing owls require the use of rodent or other burrows for roosting and nesting. Burrows are the essential component of burrowing owl habitat. Both natural and artificial burrows provide protection, shelter and nests for owls. Numerous (hundreds) burrows were observed at the site and a number of burrows appeared to be active for mammal (e.g., gopher) activity. Therefore, the proposed project site contains habitat suitable for the burrowing owl; however, no burrowing owls were observed on or adjacent to the proposed project site. Squirrels, gophers, and rabbits were observed using and hiding in the burrows on-site.

No burrowing owls were determined to be present on the site; however, the MSHCP burrowing owls survey protocol requires a pre-construction survey for burrowing owls no more than 30 days prior to ground disturbance. The implementation of mitigation measure BR-1 requiring such surveys will ensure the project impacts on burrowing owls is less than significant and ensures the proposed project does not conflict with the MSHCP.

No federal- or state-listed endangered species, threatened species, sensitive species, or special status species were determined to be present on-site during the MSHCP surveys and assessments



or based on the review of additional listed species not covered by the MSHCP. Therefore, no substantial adverse effect will result to endangered, threatened, sensitive or special status species and the impacts on biological resources are considered to be less than significant.

Because of agricultural activities, the proposed project site does not support trees and shrubs suitable for nesting habitat for birds, including migratory birds. The suitable habitat at the site is limited to burrowing owls as discussed above. The implementation of mitigation measure BR-1 requiring pre-construction surveys will ensure the project impacts on migratory birds and burrowing owls is less than significant.

**4. b and c).** Historically, agricultural activities are the only known activities that have occurred on the site (EAI, 2020) and native habitat has been removed from the site. Natural watercourses, riparian/riverine areas, wetland, or other kinds of aquatic features (i.e., vernal pools or swales, ephemeral ponds, stock ponds or other human-modified depressions) are not present on the site. Therefore, the biological functions and values of riparian, wetlands, vernal pools or other types of aquatic environments do not exist. No narrow endemic plant species, or sensitive species associated with riparian/riverine, vernal pool or wetland habitats were determined to be present on-site. Therefore, the proposed project will have no impacts on these biological resources.

No federal- or state-listed endangered species, threatened species, sensitive species, or special status species were determined to be present on-site during the MSHCP surveys and assessments or based on the review of additional listed species not covered by the MSHCP. Therefore, no substantial adverse effect will result to endangered, threatened, sensitive or special status species and the impacts are considered to be less than significant.

**4. d)** Because of agricultural activities, the Proposed School Site does not support trees and shrubs suitable for nesting habitat for birds, including migratory birds. The suitable habitat at the site is limited to burrowing owls as discussed above. The implementation of mitigation measure BR-1 requiring preconstruction surveys will ensure the project impacts on migratory birds and burrowing owls is less than significant.

The proposed project site has been disturbed by agricultural uses and, as such, predominantly supports common wildlife species that are adapted to human land uses. Therefore, the proposed project site is not considered to act as a movement or migratory corridor or native nursery for wildlife species, as native habitat has been removed from the site. Therefore, although the site may provide for some movement of common wildlife species, the proposed project will not interfere substantially with the movement of wildlife species and will not impede the use of wildlife corridors or nursery sites, resulting in less than significant impacts.

**4. e and f).** The proposed project is not expected to conflict with local policies protecting biological resources, or conflict with local policies protecting biological resources, i.e., RCIP policies, as discussed below.

- Policy LU 8.1 provides for permanent preservation of open space lands that contain important natural resources, hazards, water features, watercourses, and scenic and

recreational values. No such resources were identified at the proposed project site as the site has been used for agricultural purposes.

- Policy LU 8.2 requires that development protect environmental resources by compliance with the Multipurpose Open Space Element of the General Plan and Federal and State regulations such as CEQA, NEPA, the Clean Air Act, and the Clean Water Act. Through the preparation of this document, as well as through implementation of mitigation measure BR-1, potential impacts on biological resources will be reduced to less than significant.
- Policy OS 5.5 states that new development shall preserve and enhance existing native riparian habitat and prevent obstruction of natural watercourses. No native habitat or natural watercourses exist at the proposed project site.
- Policy OS 5.6 states that upland habitat areas adjacent to wetland and riparian areas shall be identified and critical areas conserved. No riparian habitat exists at the Proposed Site.
- Policy OS 9.3 states that superior examples of native trees, natural vegetation, stands of established trees, and other features shall be maintained and conserved. No native trees or native vegetation exists at the proposed project site as the site has been used for agricultural purposes.

Regarding the Sun City/Menifee Valley Area Plan policies that pertain to preservation of biological resources,

- Policy SCMVAP 23.1 requires that a continuous linkage along Warm Springs Creek between the Southwestern Riverside County Multi-Species Reserve and French Valley east of Interstate 215 and south of Scott Road be maintained. The proposed project site is not located within or adjacent to or will impact this Reserve.
- Policy SCMVAP 23.2 will conserve upland habitats including coastal sage scrub, annual grassland and agricultural lands in the proposed core habitat conservation area within French Valley. No native trees or native vegetation exists at the proposed project site as the site has been used for agricultural purposes and the site is not located in French Valley
- Policy SCMVAP 23.3 will conserve auld clays in the proposed core habitat conservation area within French Valley to assist in conservation for Munz's onion. The proposed project site is not located with the core habitat conservation area within French Valley.
- Policy SCMVAP 23.4 will provide opportunities for a connection between the Southwestern Riverside County Multi Species Reserve and the Sedco Hills/Estelle Mountains via French Valley to protect populations of gnatcatchers in both of these areas. The proposed project site is not located within or adjacent to or will impact this Reserve.

Based the above, the proposed project site will not conflict with any local policies regarding the MSHCP or protection of biological resources.

### 4.3 Mitigation Measures

In order to comply with the MSHCP and avoid adverse impacts to burrowing owls the following mitigation measure shall be implemented.

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- BR-1 A pre-construction survey for burrowing owls shall be performed on the proposed project site 30 days prior to ground disturbance. The survey shall be performed according to current MSHCP burrowing owl survey protocols by a qualified biologist. If burrowing owls are found on-site during the pre-construction surveys, a Relocation Plan shall be prepared by a qualified biologist and submitted to the CDFG. All relocation and mitigation of the burrowing owls must follow CDFG protocols.

Development of the Proposed School site will increase urban development into an area of the county with an existing rural character, changing the general character of the area along with other planned development. The proposed project site has been in agricultural use and no native habitat is present and common animals inhabit the site. Implementation of the mitigation measure that requires preconstruction surveys and appropriate relocation of any identified burrowing owls on the site would reduce the impacts to less than significant.

**Mitigation Monitoring: Implementing Party:** The MUSD will be the implementing party for biological resources mitigation measure BR-1.

**Monitoring Agency:** MUSD will monitor implementation of the mitigation measure. The MUSD will follow the requirements of the Riverside MSHCP and hire an approved biologist to conduct a pre-construction survey for burrowing owls on the proposed project site within 30 days prior to ground disturbance. The contract with the biologist will include the requirements of BR-1. This survey will ensure compliance with the County of Riverside MSHCP protocols and migration measure BR-1. The requirements for the burrowing owl pre-construction survey will be included in the contract with the contractor that develops the proposed school site.

No significant adverse impacts to biological resources are expected to occur as a result of the construction or operation of the project, following implementation of the mitigation measures.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES.</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 5.1 Significance Criteria

Impacts to cultural resources will be considered significant if:

The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group.

Unique paleontological resources are present that could be disturbed by construction of the proposed project.

The project would disturb human remains.

### 5.2 Environmental Setting and Impacts

**5. a)** CEQA Guidelines state that “generally, a resource shall be considered ‘historically significant’ if the resource meets the criteria for listing in the California Register of Historical Resources including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated with the lives of persons important in our past;

- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;
- Has yielded or may be likely to yield information important in prehistory or history (CEQA Guidelines §15064.5).

Generally, resources (buildings, structures, equipment) that are less than 50 years old are excluded from listing in the National Register of History Places unless they can be shown to be exceptionally important. There are no buildings or structures at the site and it has not been developed. As a result, there are no structures at the proposed project site listed on registers of historic resources. No significant adverse impacts to historic buildings are expected as a result of implementing the proposed project.

**5. b)** A cultural resources records search was completed at the Eastern Information Center (EIC) by Duke Cultural Resources Management for the proposed project site (see Appendix B for the full report). The EIC is part of the California Historical Resources Information System (CHRIS) and is located at the University of California, Riverside. The records search included a review of all recorded historic and cultural resources surveys and excavation reports. In addition, the California State Historic Property Data file was examined, which includes the National Register of Historic Places, California Register of Historic Resources, California Historical Landmarks, and California Points of Historical Interest.

The records search at the EIC indicated that there were 58 cultural resource reports are on file at the EIC and 32 cultural resources were located within one mile of the proposed project site. Of the 32 cultural resources within one mile of the proposed project site, none are within the project boundaries. Twenty eight are prehistoric (e.g., milling features) and four are historic sites (homestead cabin, mining prospect, the former Leon Mine, and trash scatter). The locations of the cultural resources are scattered in all directions. The nearest prehistoric cultural resource is a milling stick and rock art site found approximately 0.1 miles southwest of the proposed project site. The nearest historic cultural resource is the former Leon Mine site found approximately 0.1 miles to the northeast of the proposed project site. The rest of the recorded resources in the record search are primarily prehistoric milling features or historic mining features, and are detailed in Appendix B.

In addition to the record search at the EIC, a review of online historical aerial photographs was conducted. There is no evidence of any occupation within the project boundaries. An intensive pedestrian survey was performed on August 14, 2020. The survey transects were 15 meters apart, covering approximately 30 percent of the proposed project site area. The entire area was chisel-plowed, most likely for fire abatement purposes (see Appendix B).

Considering the previous agricultural use of the land and cultural and paleontological records searches and field survey did not identify cultural or paleontological resources within or adjacent to the proposed project site, Duke Cultural Resources Management concluded that the proposed

project site has a low sensitivity for prehistoric cultural resources. Therefore, it is not likely that any cultural resources would be impacted by the proposed project (see Appendix B).

While the likelihood of encountering cultural resources is low, there is still a potential that archaeological resources may exist. Any such impact would be eliminated by using standard construction practices and complying with provisions of Section 21083.2 of the Public Resources Code, which requires the following in the event that unexpected subsurface resources are encountered:

- Conduct a cultural resources orientation for construction workers involved in excavation activities. This orientation will show the workers how to identify the kinds of cultural resources that might be encountered, and what steps to take if cultural resources are encountered during excavation activities;
- Monitoring of subsurface earth disturbance by a professional archaeologist and an appropriate representative if cultural resources are exposed during construction;
- Provide the archaeological monitor with the authority to temporarily halt or redirect earth disturbance work in the vicinity of cultural resources exposed during construction so the find can be evaluated and mitigated as appropriate; and
- As required by state law, prevent further disturbance if human remains are unearthed, until the County Coroner has made the necessary findings with respect to origin and disposition, and the Native American Heritage Commission has been notified if the remains are determined to be of Native American descent.

**5. c)** No known human remains or burial sites have been identified within the school site, so the proposed project is not expected to disturb any human remains.

### **5.3 Mitigation Measures**

No mitigation measures are required since no significant adverse cultural resources impacts associated with the proposed project were identified.

## CHAPTER 2: ENVIRONMENTAL CHECKLIST

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	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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### VI. ENERGY.

Would the project:

- |    |  |                          |                          |                                     |                                     |
|----|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) | Result in potentially significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy resources, during project construction or operations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) | Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
- 

#### 6.1 Significance Criteria

The impacts to energy resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

#### 6.2 Environmental Setting and Impacts

**6. a)** The proposed project involves the construction of a new elementary school site in the southern portion of the City of Menifee. Energy uses associated with the proposed project site are expected to include electricity, natural gas, and petroleum products in the form of gasoline and diesel fuel. Electricity will be used for lighting, computers, cafeteria purposes, etc. Natural gas is expected to be used for heating purposes. Gasoline and diesel fuels are used to transport students, employees and delivery trucks to/from the school site.

Using the CalEEMod estimates (see Appendix A), the school is estimated to require approximately 551,000 kilowatt hours per year (kWhr/yr) and approximately 605million BTU/year of natural gas. Construction of the proposed project site will be required to comply with the applicable portions of Title 24 of the California Code of Regulations (California Building Standards). Specifically, Parts 6 and 11, the California Energy Code and the California

Green Building Standards Code (CALGreen), address the need to improve energy efficiency and combat climate change and have been adopted to minimize energy consumption and reduce GHG emissions. Because of the success of these standards, California's per capita electricity consumption has dropped 24 percent over the last 40 years. Compliance with California's Title 24/CALGreen standards ensures that the project will not result in wasteful, inefficient or unnecessary consumption of energy resources or result in a significant impact on electricity or natural gas. Further, using energy resources to educate students would not be considered a unnecessary consumption of energy.

**6. b)** The proposed project is not expected to conflict with any adopted energy conservation plan or existing energy standard. The applicable energy conservation plan and standards are those that are included in Title 24/CALGreen standards. Electricity for the school site will be purchased through Southern California Edison which is subject to the requirements of Senate Bill 100 (SB 100). SB 100 requires that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 2045. As discussed in 6 a) above, the project is required to comply with the applicable portions of Title 24/CALGreen standards; therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

### **6.3 Mitigation Measures**

No mitigation measures are required since no significant adverse energy impacts associated with the proposed project were identified.



## CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VII. GEOLOGY AND SOILS.</b>				
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code, creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
- 

## 7.1 Significance Criteria

The impacts on the geological environment will be considered significant if any of the following criteria apply:

Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.

Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.

Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.

Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.

Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

## 7.2 Environmental Setting and Impacts

**7. a, c, and d)** The southern California area is located within a seismically active region. The most significant potential geologic hazard is estimated to be seismic shaking from future earthquakes generated by active or potentially active faults in the region. Although there have been a number of faults identified in southern California, all of the faults are associated with the San Andreas Fault system. The San Andreas Fault is located on the north side of the San Gabriel Mountains trending east-southeast as it passes the Los Angeles Basin. This fault is recognized as the longest and most active fault in California. It is generally characterized as a right-lateral strike-slip fault which is comprised of numerous sub-parallel faults in a zone over two miles wide. There is a high probability that southern California will experience a magnitude 7.0 or greater earthquake along the San Andreas or San Jacinto fault zones, which could generate strong ground motion in the project area (Reich, 1992). The Elsinore Fault Zone is located approximately 10 miles southwest of the Proposed school site. The San Jacinto fault zone is located approximately 15 miles northeast and the San Andreas fault zone is located approximately 26 miles northeast of the project site. The location of the proposed project site is flat with minimal change in elevations and no known landslides, lateral spreading, collapse or rock fall hazards (California Department of Conservation, 2019).

Based on the historical record, it is probable that earthquakes will affect the southern California region in the future. Research shows that damaging earthquakes will occur on or near

recognized faults which show evidence of recent geologic activity. There is the potential for damage to the new structure in the event of an earthquake. Thus, the new classroom building must be designed to comply with the California Building Code requirements since the project is located in a seismically active area. The local city is usually responsible for assuring that a new development complies with the California Building Code as part of the issuance of the building permits and can conduct inspections to ensure compliance. For schools, the Division of the State Architect (DSA) approves building permits and assures compliance with the applicable building codes. The California Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage, but with some non-structural damage; and (3) resist major earthquakes without collapse, but with some structural and non-structural damage.

The California Building Code determines seismic design based on minimum lateral seismic forces ("ground shaking"). The California Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the California Building Code seismic design require determination of the seismic zone and site coefficient, which represent the foundation conditions at the site. MUSD must obtain building permits, as applicable, for all new proposed project structures. MUSD shall submit building plans to the DSA. MUSD must receive approval of all building plans and building permits to assure compliance with the latest Building Code adopted by the DSA prior to commencing construction activities.

Accordingly, the installation of new structures at a school site is required to conform to the California Building Code and all other applicable state and local building codes. Thus, installations of new equipment would not alter the exposure of people or property to geological hazards such as earthquakes, liquefaction, subsidence, landslides, mudslides, ground failure, or other natural hazards. As a result, substantial exposure of people or structures to the risk of loss, injury, or death is not anticipated.

**7. b)** During construction of the proposed project, the possibility exists for temporary wind and water erosion resulting from excavation and grading activities. These activities are expected to be minor since the topography of the proposed project site is generally flat. Wind erosion will be minimized through soil stabilization measures required under SCAQMD Rule 403 – Fugitive Dust, which includes control measures such as water application in sufficient quantities to prevent the generation of visible dust plumes, and limit vehicular traffic and disturbances on soil, where possible. Water erosion is minimized by erosion control practices required pursuant to the National Pollution Discharge Elimination System which includes silt fencing, fiber rolls, or sandbags. Following completion of the construction phase, the school site would be covered by paving, structures, playfields and landscaping. Impacts related to soil erosion would be less than significant with implementation of the existing regulations and requirements.

**7. e)** Sewer service will be available through a Publicly Owned Treatment Works (POTW), so the soil will not need to support septic tanks, or alternative wastewater disposal systems. Therefore, no impacts on soils due to septic systems or alternative wastewater systems would occur.

7. f) As discussed in Section 5 above, an intensive pedestrian survey was performed on August 14, 2020. The survey transects were 15 meters apart, covering approximately 30 percent of the proposed project site area. The entire area was chisel-plowed, most likely for fire abatement purposes. Considering the previous agricultural use of the land and cultural/paleontological searches and field survey did not identify cultural or paleontological resources within or adjacent to the proposed project site, Duke Cultural Resources Management concluded that the proposed project site has a low sensitivity for prehistoric cultural resources (see Appendix B). Therefore, it is not likely that any paleontological resources would be impacted by the proposed project.

### **7.3 Mitigation Measures**

No mitigation measures are required since no significant adverse geology and soils impacts associated with the proposed project were identified.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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## VIII. GREENHOUSE GAS EMISSIONS.

Would the project:

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?      | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### 8.1 Significance Criteria

The impacts on greenhouse gas (GHG) emissions will be considered significant if any of the following criteria apply:

Small projects that exceed 3,000 metric tons per year.

Industrial projects that exceed 10,000 metric tons per year in the SCAQMD.

The threshold is based on the County of Riverside Greenhouse Gas Emissions Screening Tables (County of Riverside, 2012) which determines the GHG emissions allowed by a project such that 90 percent of the emissions (on average) from all projects would exceed that level and be “captured” by the threshold. To establish the threshold, the County reviewed 738 projects from the state Office of Planning and Research (OPR). Emissions from each of these projects were calculated by the SCAQMD to provide a consistent method of emissions calculations across the sample population. In calculating the emissions from projects within the sample population, GHG construction emissions were amortized over 30-years (the average economic life of a development project).

The analysis determined that the 90<sup>th</sup> percentile ranged from 2,983 metric tons (MT) to 3,143 MT of carbon dioxide equivalents per year. The 3,000 MT per year value is the low end value within that range rounded to the nearest hundred tons of emissions and is used in defining small projects that are considered less than significant and do not need further mitigation (County of Riverside, 2012).

## 8.2 Environmental Setting and Impacts

**8. a and b)** Global climate change refers to changes in average climatic conditions on the earth as a whole, including temperature, wind patterns, precipitation and storms. Global warming, a related concept, is the observed increase in the average temperature of the earth's surface and atmosphere. One identified cause of global warming is an increase of GHGs in the atmosphere. The six major GHGs identified by the Kyoto Protocol are CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), haloalkanes (HFCs), and perfluorocarbons (PFCs).

Three major greenhouse gas pollutants have been included: carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), and CH<sub>4</sub>. These GHG emissions are reported in million metric tons of CO<sub>2</sub> equivalent (MMTCO<sub>2</sub>e.) Mobile sources generate 59.4 percent of the total GHG emissions in the Basin (47.0 percent from on-road vehicles and 12.4 percent from other mobile sources (aircraft, trains, ships and boats, and other sources (construction equipment, airport equipment, oil and gas drilling equipment)). The remaining 40.6 percent of the total Basin GHG emissions are from stationary and area sources.

Fuel combustion is the largest contributor to stationary/area source GHG emissions, accounting for 68.6 percent of all the GHG emissions from the stationary/area source category. Fuel combustion from the stationary/area source category accounts for 27.8 percent of the total GHG emissions in the Basin.

In response to growing scientific and political concern regarding global climate change, California has recently adopted a series of laws to reduce both the level of GHGs in the atmosphere and to reduce emissions of GHGs from commercial and private activities within the state. In June 2005, Governor Schwarzenegger signed Executive Order S-3-05, which established GHG emissions reduction targets for the state, as well as a process to ensure that the targets are met. In May 2012, the County of Riverside released a GHG Gas Reduction Plan to reduce greenhouse gas emissions to 15 percent less than 2008 levels by 2020. This target is consistent with the AB 32 target to aid state and international efforts in stabilizing climate change.

The GHG emissions for the proposed project were estimated using CalEEMod (see Table 2-5 and Appendix A). GHG emissions during construction activities are primarily associated with internal combustion engines in heavy construction equipment, e.g., trucks, cranes, bulldozers, etc. The estimated GHG emissions due to construction activities associated with the proposed project are estimated to be about 638 metric tons during the entire construction period, or 21.2 metric tons per year amortized over 30 years.

Operational emissions associated with the proposed project include combustion emissions from vehicle engines, natural gas use, consumer products, architectural coatings, and landscaping activities. The estimated GHG operations emissions due to operation of the proposed project are expected to be about 1,513.9 metric tons per year. The total operational GHG emissions from the proposed modifications are 1,535.1 metric tons per year, which is below the Riverside County GHG threshold of 3,000 metric tons per year. Therefore, no significant increase in GHG emissions and related climate change are expected due to the proposed project.

**TABLE 2-5**  
**Proposed Project Increase in GHG Emissions**  
**(metric tons per year)**

ACTIVITY	CO <sub>2</sub> e
30-year Amortized Construction Emissions	21.2
Increase in Operational Emissions	1,513.9
Total GHG Emissions	1,535.1
Significance Threshold Level	3,000
<b>Significant?</b>	<b>No</b>

The GHG emission estimates in Table 2-5 are conservative and included GHG emissions associated with vehicle travel to the site. They do not include the estimated GHG emission reductions associated with the decrease in transportation emissions due to sighting a neighborhood school closer to the population that it serves.

### **8.3 Mitigation Measures**

No mitigation measures are required since no significant adverse greenhouse gas impacts associated with the proposed project were identified.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>IX. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



### 9.1 Significance Criteria

The following thresholds of significance are generally based on Appendix G to the CEQA Guidelines. Implementation of the proposed project may have a significant adverse hazards and hazardous materials impact on the environment if the project:

- Creates a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Creates 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; or
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.

### 9.2 Environmental Setting and Impacts

**9. a), b), c) and d)** A Phase I Environmental Site Assessment (Phase I ESA) under the requirements of California Education Code Section 17213.1(a) was completed by Environmental Audit, Inc. in June 2020 for the proposed project site. As part of the Phase I ESA, numerous information sources were reviewed to develop an understanding of the current and historical land use practices at the proposed project site and surrounding properties that may impact the proposed project site, associated with the handling, use, storage, and/or disposal of hazardous substances or wastes. The Phase I ESA concluded the following:

- The proposed project site (approximately 46 acres) was formerly used for dry land grain farming and is now vacant.
- The proposed project site was not identified on any database lists as a property known or suspected to be contaminated. The radius search distances for various federal, state, local and tribal database lists reviewed complied with the requirements of ASTM, E1527-05.
- No facilities that emit hazardous air pollutants have been permitted by the SCAQMD within a one-quarter mile radius of the school site.
- No sites with known toxic and/or hazardous substances contamination are located near the proposed project site, including sites compiled pursuant to Government Code Section 65962.5.
- No landfills, chemical plants, oil fields, refineries, or other businesses that may have produced major hazardous contamination existed at the proposed project site.

- No naturally occurring hazardous materials, including asbestos and oil and gas existed at the proposed project site.

The proposed project would not generate or create a significant hazard through the transport or use of hazardous materials. While grading and construction activities may involve the transport, storage, use or disposal of some hazardous materials, e.g., on-site fueling for construction equipment, this activity will be short term and subject to federal, state, and local health and safety requirements.

Per Education Code Section 17213.1(a), a Phase I Environmental Site Assessment (ESA) was completed for the proposed project site (EAI, 2020). The Phase I ESA concluded that there were no recognized environmental conditions (current or historical) (e.g., hazardous substances or petroleum products indicative of a release to the environment). Further the site is not on a list of hazardous materials sites compiled pursuant to Government code Section 65962.5. The site was considered to be in a *de minimis* condition indicating that it does not represent a threat to human health or the environment, and is not subject to enforcement actions. The Phase I ESA was submitted to the Department of Toxic Substances Control (DTSC) for their review and approval. All new school sites must obtain a no further action (NFA) designation from DTSC which establishes no significant risk to children's health, children's learning abilities, public health or the environment due to the presence or threatened release of hazardous materials or naturally occurring hazardous materials. DTSC determined that No Further Action related to hazardous conditions was required for the project site. Therefore, no significant hazard impacts are expected at the proposed project site.

**9. e)** The nearest commercial airport is the French Valley Airport located approximately 5.2 miles south of the Site at 37600 Sky Canyon Drive, Murrieta. The proposed project site is not located within the vicinity of the French Valley Airport, and there are no other airports (public or private) within two miles of the proposed project site. A privately owned airport identified as Pines Airpark Airport (Airport Identifier 8CA5) was located approximately 1.7 miles easterly of the proposed project site, however, the airport was permanently closed. Therefore, the proposed project site will not result in the exposure of additional people to airport safety or noise hazards

**9. f)** The site is currently vacant and surrounded by low density housing and commercial development. Development of an elementary school is not expected to interfere with any current emergency response plans. The MUSD would develop emergency response plans for Elementary School No. 15 to implement in the event of natural disasters, fires or other types of incidents. However, the proposed project site would not interfere with any current emergency response plans.

**9. g)** The proposed project is located in an area that has been disturbed for agricultural and urban development, and is not located within an area that contains dense vegetation. The California Department of Forestry and Fire Protection (CalFIRE) maps areas of significant fire hazard based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones, determine the requirements for special building codes designed to reduce the potential impacts of wildland fires on urban structures. The proposed project site and

surrounding areas are located within a non-Very High Fire Hazard Severity Zone, as the area is urbanized, and not located adjacent to wildland areas. The proposed project site is well outside Very High Fire Hazard Zone, which indicates that it is not subject to significant wildfire hazard. Implementation of the proposed project would be expected to have no impact related to wildland fires.

### **9.3 Mitigation Measures**

No mitigation measures are required since no significant adverse hazard or hazardous materials impacts associated with the proposed project were identified.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>X. HYDROLOGY AND WATER QUALITY.</b>				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
i) result in substantial erosion or siltation onsite or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 10.1 Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

#### **Water Quality:**

The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.

The project will cause the degradation of surface water substantially affecting current or future uses.

The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.

The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.

The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.

The project results in alterations to the course or flow of floodwaters.

#### **Water Demand:**

The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use a substantial amount of potable water.

The project increases demand for water by more than five million gallons per day.

### 10.2 Environmental Setting and Impacts

**10. a)** Wastewater generated by the proposed project site will be limited to sanitary waste, which will be treated by the local wastewater treatment plant so no significant water quality impacts are expected. See Section XVIII – Utilities and Service Systems for a more detailed discussion of the proposed project's impact on wastewater treatment systems.

**10. b and e)** The Eastern Municipal Water District (EMWD) is responsible for providing potable water within the proposed project area and ensuring the water meets applicable health standards for drinking water.

Approximately 20 percent of EMWD's potable (drinking) water demand is supplied by EMWD groundwater wells. The majority of the groundwater produced by EMWD comes from its wells in the Hemet and San Jacinto area. Some of these wells have limited production as a result of

the Fruitvale Judgement and Decree. EMWD also has wells in the Moreno Valley, Perris Valley and Murrieta areas.

EMWD operates a EMWD's groundwater management program to ensure groundwater sustainability for the communities it serves. These groundwater supply management strategies include enhancing water supplies through its recycled water program, desalination program, water use efficiency programs and, most recently, its healthy sewers program. The groundwater management program now includes a Water Banking project and a future proposed Purified Water Replenishment project that combines advanced water purification and natural filtration (EMWD, 2021).

No additional water wells are expected to be installed as part of the proposed project, and therefore, the project would not draw directly from groundwater, although some of its water use may come from groundwater supplies. However, groundwater supplies are managed by EMWD groundwater management program which should ensure long-term groundwater stability. Because of the groundwater management program, the proposed project would not substantially result in the alteration of the amount and/or flow of groundwater supplies.

The proposed project would permanently alter the composition of the surface water runoff due to construction of the new parking lot and retention basin, which through percolation has the potential to indirectly impact groundwater quality. Compliance with the requirements of the Storm Water Pollution Prevention Plan requirements (see discussion in 10 c below for further details) would reduce potential impacts on ground water quality to less than significant. No additional mitigation is required.

The proposed development is not expected to substantially reduce groundwater supplies or affect groundwater recharge to the point of depreciating the local groundwater table level or aquifer volume. Elementary School No. 15 development and operations will not consume large quantities of water. Water will primarily be used for drinking water purposes, sanitary sewer, and landscape irrigation. No water wells are proposed to be installed for the proposed project site; therefore, the project would not draw directly from groundwater. All water use can be accommodated by existing utilities operated by Eastern Municipal Water District. Water demand is further discussed in Section XVIII. No significant increase in water consumption and no decrease in ground water supplies are expected due to the proposed project.

**10. c)** There are no streams or rivers in the vicinity of the proposed project site. Therefore, the construction of the proposed project site would not impact drainages or alter a stream or river.

Part of the proposed project includes the construction of a new parking lot, playground, school buildings, and a retention basin over previously vacant land. As such, the project would permanently alter the composition of the surface runoff by construction of impervious surfaces, which has the potential to indirectly impact groundwater quality as water on the site's pervious surfaces percolates to the groundwater table.

The General Construction Activities Stormwater Permit (GCASP) is a statewide NPDES permit issued by the SWRCB (Water Quality Order 2009-0009-DWQ/NPDES General Permit

CAS000002). It regulates stormwater discharges from construction projects that encompass at least one acre of soil disturbance unless the discharge is in compliance with an NPDES Permit. In the Riverside area, the GCASP is administered by the RWQCB under Order R8-2010-1-0033 (NPDES No. CAS 618033), which was approved by the Regional Water Quality Control Board, Santa Ana Region, with oversight by U.S.EPA. The GCASP requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that sets forth 1) the Best Management Practices (BMPs) the discharger will use to protect stormwater runoff, and 2) monitoring programs to verify effectiveness of the BMPs. Recent changes to the General Permit include the following:

- Allows small, low risk construction sites (>1 and < 5 acres) to self-certify.
- Establishes numeric action and effluent levels for pH and turbidity.
- Establishes three levels of risk possible for a construction site.
- Imposes more minimum BMPs and requirements.
- Provides options for dischargers to monitor and report the soil characteristics at their project location to provide better risk determination results.
- Requires effluent monitoring and reporting for pH and turbidity in stormwater discharges.
- Requires some high risk dischargers to monitor receiving waters.
- Requires post-construction monitoring under certain conditions.
- Requires certain sites to develop and implement a rain event action plan to protect all exposed portions of the site within 48 hours prior to a likely rain event.
- Requires projects longer than 3 months to submit information and annually certify compliance.
- Requires certification and training requirements for key personnel.

A SWPPP will be required to outline the BMPs that apply to the project and minimize pollutants in storm water runoff during construction activities. BMPs range from source control, such as use of permeable pavement, to treatment of polluted runoff, such as use of detention or retention basins, sediment traps/basins, and constructed wetlands. Maintenance practices (e.g., street sweeping) and public outreach campaigns also fall under the category of BMPs. The preparation of a SWPPP and implementation of BMPs, as required by existing regulations and permit requirements, would minimize the impacts associated with storm water runoff to less than significant.

**10. d)** According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map, the proposed project site is not located within a flood hazard area (FEMA, 2021) and is not 100-year or 500-year flood zone (City of Menifee, 2014). Additionally, the proposed project is not located in a mapped dam inundation area and is not subject to hazards associated with dam hazards or flooding. Based on the topography and/or site elevations in relation to the ocean, the proposed project is not expected to result in an increased risk of seiche, tsunami or mud flow hazards. No significant water bodies are located in the vicinity of the proposed project so there is no risk of seiching. The proposed project is located over 50 miles from the Pacific Ocean, so there is no risk of tsunami. Finally, part of the proposed project is located on relatively flat land and existing building code requirements are expected to sufficiently mitigate potential mudflows.

### **10.3 Mitigation Measures**

No mitigation measures are required since no significant adverse hydrology or water quality impacts associated with the proposed project were identified.



## CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XI. LAND USE AND PLANNING.</b> Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 11.1 Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by the City or County.

### 11.2 Environmental Setting and Impacts

**11. a)** There are no components of the proposed project that would disrupt or divide an established community. The proposed project site located within land zoned for rural residential use (RR2) within the City of Menifee general plan zoning map. The project site was historically used for agricultural purposes. The immediate area surrounding the proposed site is residential or currently vacant. The project consists of the development of a new elementary school to service the existing and proposed population growth of the Menifee Valley, and reflects a continuation of the existing development patterns in the area. Therefore, the proposed project would not physically divide an established community.

**11. b)** Approval of the proposed project would include the construction of a new school site, including playfields, playground, and extension of Wickerd Road. The site is consistent with growth envisioned in the General Plan, which recognizes the conversion of agricultural lands into other uses could lead to significant impacts on agricultural resources but adopted a number of policies to mitigate that impact. Such policies include: (1) encourage retaining agriculturally designated lands through incentives such as tax credits; (2) discourage conversion and inappropriate land division in the immediate proximity or agricultural uses; (3) encourage conservation of productive agricultural lands and preservation of prime agricultural lands; and (4) continue to participate in the California Land Conservation Act (Williamson Act). Development of the proposed project will not conflict with any applicable land use plan, general plan or specific plan. The land is also not unique or prime agricultural land.

The proposed project site is not expected to conflict with local habitat conservation plans, or natural community conservation plans, as the proposed school site is currently vacant and does

not contain native habitat because it has been used for agricultural purposes. Based on these considerations, no significant adverse impacts to established residential or natural communities, or habitat conservation plans are expected.

### **11.3 Mitigation Measures**

No mitigation measures are required since no significant adverse land use impacts associated with the proposed project were identified.

## CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XII. MINERAL RESOURCES.</b> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 12.1 Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

The project results 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.

### 12.2 Environmental Setting and Impacts

**12. a and b)** A review of databases for mine sites was conducted for the proposed project site including the Mines Master Index File (US MINES), Abandoned Mines, Mines Site Location Listing (MINES), and Mineral Resources Data System (MINES MRDS) databases. No mines were identified at the proposed project site. A search of the above databases identified the Leon Mine in the MINES MRDS database as Deposit ID 10115561. The record indicates that the main entrance to the former mine is on the southern slope of the hill to the east, across Briggs Road from the northern section of the Site, and that gold was the primary product and silver secondary. The United States Geological Survey (USGS) was contacted for additional information on the mine. Mr. Schweitzer of the USGS was able to provide a link to a California Division of Mines and Geology Open-File Report 77-14, pages 468 and 469. This report includes limited information on the Former Leon Mine that indicates: (1) the mine was originally opened in the late 1800's; (2) by 1917 it was still being referred to as "a promising prospect;" and (3) the mine was last worked between about 1950 and 1953. In 1950 three tons of ore yielded one ounce of gold and one ounce of silver. There were two shafts, a shallow pit, and a trench.

The northwest shaft has since caved in and the southeast shaft is partially caved at the collar. The pit and trench lied between the two shafts and were shallow prospects. This mine is located north of the proposed project site and the mine would not be disturbed by construction of the school.

The Munger Map Book (May 1990 edition) contains data on oil and gas wells in the States of California and Alaska. These data are gathered from state agencies, oil well operators, and various trade journals serving the oil and gas industry. According to Munger, there are no wells (active or abandoned) located on the school site and the site is not within an administrative boundary of an oil field. Therefore, the proposed project would not impact or result in a loss of a known mineral resources.

### **12.3 Mitigation Measures**

No mitigation measures are required since no significant adverse mineral resource impacts associated with the proposed project were identified.

## CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIII. NOISE.</b> Would the project:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 13.1 Significance Criteria

Impacts on noise will be considered significant if:

- Construction noise levels exceed the City of Menifee noise ordinance or, if the noise threshold is currently exceeded, proposed project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, proposed project noise sources increase ambient noise levels by more than three dBA at the site boundary.

The Office of Planning and Research has established guidelines for exterior sound levels based on land use categories for Noise Elements in General Plans. The noise guidelines state that the normally acceptable outdoor noise exposure-level for Schools, Libraries, Churches, Hospitals, and Nursing Homes, and school zones is 50 to 70 dBA CNEL. Table 2-6 summarizes the noise compatibility guidelines applicable to a variety of different land use types. The Project area is within the City of Menifee and the City of Menifee General Plan Noise Element uses the same noise compatibility guidelines (City of Menifee, 2013).

**TABLE 2-6**  
**Land Use Noise Compatibility Guidelines**

<b>Land Use<sup>(a)</sup></b>	<b>Normally Acceptable</b>	<b>Conditionally Acceptable</b>	<b>Normally Unacceptable</b>	<b>Clearly Unacceptable</b>
Residential-Low Density, Single-Family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	75 - 85
Residential – Multiple Family	50 - 65	60 - 70	70 - 75	70 - 85
Transient Lodging – Motel, Hotels	50 - 65	60 - 70	70 - 80	80 - 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	80 - 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 - 70	NA	65 - 85
Sports Arenas, Outdoor Spectator Sports	NA	50 - 75	NA	70 - 85
Playgrounds, Neighborhood Parks	50 - 70	NA	67.5 - 77.5	72.5 - 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 70	NA	70 - 80	80 - 85
Office Buildings, Business Commercial and Professional	50 - 70	67.5 - 77.5	75 - 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	75 - 85	NA
<p><b><u>NORMALLY ACCEPTABLE:</u></b> Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.</p> <p><b><u>CONDITIONALLY ACCEPTABLE:</u></b> New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.</p> <p><b><u>NORMALLY UNACCEPTABLE:</u></b> New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.</p> <p><b><u>CLEARLY UNACCEPTABLE:</u></b> New construction or development should generally not be undertaken.</p>				

Source: Office of Planning and Research, California, *General Plan Guidelines*, October 2003.

## 13.2 Environmental Setting and Impacts

**13. a) and b)** The primary existing noise sources within the City of Menifee are major roadways that traverse the city. Mobile sources of noise, especially cars and trucks, are the most common and significant sources of noise within the City. Major transportation noise sources within Menifee include Interstate-215 and State Route 74. Secondly, land uses throughout the city generate stationary-source noise. Land uses that are sensitive to noise sources include residential, school and open space/recreational areas where quiet environments are necessary for enjoyment, public health, and safety.

The ambient noise environment in the vicinity of the proposed project is primarily from traffic, with Scott Road being the major thorough fare in the area. The 60-65 dBA noise contour associated with Scott Road runs approximately 215 feet from Scott Road (City of Menifee,

2013). The proposed school site is located approximately 0.5 mile from Scott Road, therefore, the noise levels at the school site from Scott Road are expected to be less than 40 dBA; 60 dBA is in the “normally acceptable” noise range for schools (see Table 2-6). Historically, the Pines Airpark was located about 1.7 miles east of the proposed school site so small plane take-off and landings were a part of the noise setting. However, the airport has been permanently closed.

Construction activity associated with the development of the new school buildings/classrooms, parking lot, playfields, recreational facility parking lot, and Wickerd Road extension will produce noise as a result of operation of construction equipment. Typical sound levels for typical construction equipment ranges from about 80 to 85 decibels (dBA) (see Table 2-7). Proposed project construction is anticipated to increase noise levels temporarily at noise-sensitive (e.g., residential) receptors in the vicinity of the existing school site, because heavy construction equipment is required during construction activities. The magnitude of the increases would depend on the type of construction activity, the noise level generated by various pieces of construction equipment, site geometry (i.e., shielding by intervening fences, buildings, and other structures), and the distance between the noise source and the receptors. These noise sources will operate during daylight hours and will be a source of noise over the construction period.

**TABLE 2-7**  
**Construction Noise Sources**

<b>Equipment</b>	<b>Typical Noise Level 50 Feet from source (dBA)<sup>(a)</sup></b>
Air Compressor	80
Backhoe	80
Concrete Mixers	85
Concrete Pumps	82
Cranes	83
Dozers	85
Excavators/Graders	85
Front Loader	80
Generators	82
Pavers	85
Rollers	85
Scrapers, Graders	85
Welders	80
Trucks	84-95

(a) Federal Transit Administration, 2018. Levels are in dBA at 50-foot reference distance. These values are based on a range of equipment and operating conditions.

(b) Analysis values are intended to reflect noise levels from equipment in good conditions, with appropriate mufflers, air intake silencers, etc. In addition, these values assume averaging of sound level over all directions from the listed piece of equipment at 50 feet.

Construction noise levels were estimated based on the types of equipment proposed to be used on-site to complete the various construction activities. These sources include equipment such as loaders, dozers, cranes, trucks, pavers, etc. During any construction project, the overall average noise levels vary with the level of construction activity and the types of equipment that are on-site and operating at a particular time. The estimated noise level during construction activities is expected to be an average of about 80 dBA at 50 feet from the center of construction activity and drop off by six decibels with every doubling distance as outlined in Table 2-8.

**TABLE 2-8**

**Noise Level Attenuation from Construction Site**

<b>Distance from Construction Noise Source (ft)</b>	<b>Estimated Noise Level (dBA)</b>
50	80
100	74
200	68
400	62
800	56
1,600	50

Because of the nature of the construction activities, the types, number, operation time and loudness of construction equipment will vary throughout the construction period. As a result, the sound level associated with construction will change as construction progresses. The construction activities that generate noise will be carried out during the daytime from Monday to Friday. The City of Menifee prohibits the hours of construction activities that occurs within a ¼ mile of an inhabited dwelling during the evening and nighttime hours, with certain exemptions. School construction activities will be limited to daytime hours and will be in compliance with the City of Menifee noise ordinance. Construction noise sources will be temporary and will cease following construction activities. Noise impacts associated with the proposed project construction activities are expected to be less than significant as they would occur during the weekday hours of 8 am to 6 pm.

Operational noise levels would be primarily associated with transportation sources, e.g., vehicles and buses. The City of Menifee estimated the traffic noise impacts associated with the General Plan Buildout (post 2035), with Scott Road being the major thorough fare in the area. The 2035 noise levels at Scott Newport Road at west of Briggs were estimated to increase by about 2.1 to 4.7 decibels at 100 feet from the road. The traffic noise levels were considered to be less than significant as the noise increase would be less than 5 decibels (City of Menifee, 2013b). The proposed school site is located approximately 0.5 mile from Scott Road, therefore, the noise levels at the school site from Scott Road are expected to be less than 50 dBA (an estimate 44 dBA) when the Menifee General Plan is built out in 2035. 60 dBA is in the “normally acceptable” noise range for schools (see Table 2-6) so noise levels would continue to be acceptable for the proposed use.



Stationary source noise generated by the proposed project site would be limited to impacts to sensitive receptors immediately adjacent to or within the proposed project site. Proposed project-related sources of stationary noise would include building heating, ventilation, and air conditioning systems, school bells, school announcements, students playing on the playgrounds, and student movements between classes. Given the distances between these sources and potential off-site receptors, plus the fact that most of them are momentary or short-term, no significant noise impacts are anticipated to occur at adjacent receptor areas.

**13. c)** The proposed project site is not located within an airport land use plan. Historically, the Pines Airpark was located about 1.7 miles east of the proposed school site. However, the airport has been permanently closed so the proposed project site is not located near an airport or private air strip. Noise due to air traffic is not expected to disturb school activities or expose people residing or working in the project area to excessive noise levels.

### **13.3 Mitigation Measures**

Compliance with existing noise ordinances is expected to minimize construction noise impacts to less than significant. No mitigation measures are required since no significant adverse noise quality impacts associated with the proposed project were identified.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XIV. POPULATION AND HOUSING.** Would the project:

- |    |  |                          |                          |                          |                                     |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) | Induce substantial unplanned population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) | Displace a substantial number of existing people or housing units, necessitating the construction of replacement housing elsewhere?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**14.1 Significance Criteria**

The impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

The demand for temporary or permanent housing exceeds the existing supply.

The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

**14.2 Environmental Setting and Impacts**

**14. a) and b)** The proposed project site is being developed to support the existing and anticipated regional population growth in the Menifee area. The proposed school will provide educational opportunities for students within the area but is not expected to specifically induce population growth directly. The proposed project will extend Wickerd Road from Mira Street to Briggs road to provide adequate access to the proposed school. The extension would only serve the school so it would not induce population growth. Further, no people will be displaced due to construction of the proposed project site, as the site is currently vacant. The proposed project is not expected to induce unplanned population growth or displace existing people or housing units. Therefore, no significant impacts to population and housing are expected.

**14.3 Mitigation Measures**

No mitigation measures are required since no significant adverse impacts on population and housing associated with the proposed project were identified.

## CHAPTER 2: ENVIRONMENTAL CHECKLIST

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	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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### **XV. PUBLIC SERVICES.** Would the project:

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

	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fire protection?				
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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### **15.1 Significance Criteria**

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

### **15.2 Environmental Setting and Impacts**

**15. a)** The County of Riverside provides a variety of facilities and services to residents on a County-wide basis including fire protection, law enforcement, solid waste disposal, parks and recreation, libraries, and hospitals. The Riverside County Fire Department operates 95 fire stations within the County. Six County fire stations are located within about 10 miles of the proposed project as follows, with Fire Station #76 the primary station responsible for fire protection for the proposed school:

<b>Fire Station</b>	<b>Location – Distance from Proposed Project</b>
Menifee Lakes #76	29950 Menifee Road Menifee, CA 92584 (951) 679-2241 (~3.8 miles)
Menifee Fire Station #68	26020 Wickerd Road Menifee, CA 92584 (951) 679-5163 (~4.9 miles)
French Valley Station #83	37500 Sky Canyon Drive Murrieta, CA 92563 (951) 696-0962 (~5.9 miles)
Sun City Station #7	27860 Bradley Road Sun City, CA 92586 (951) 679-3413 (~7.8 miles)
Winchester #34	32655 Haddock Street Winchester, CA 92596 (951) 926-6430 (~8.4 miles)
Homeland Station #54	25730 Sultanas Road Homeland, CA 92548 (951) 926-2433 (~9.6 miles)

The proposed project is located in an area that has been disturbed for agricultural and urban development, and is not located within an area that contains dense vegetation. Further, the proposed project site is well outside Very High Fire Hazard Zone, which indicates that it is not subject to significant wildfire hazard. The fire hazards associated with the proposed project would be typical of urban areas and the project is not expected to require an increase in fire services. Therefore, no significant adverse impacts to fire services are expected.

The City of Menifee Police Department provides law enforcement services in the area of the proposed project. Other services provided by the Police Department include, but are not limited to, operating the emergency 911 system, performing traffic control, crime scene investigation, and providing crime prevention education. The closest Police Department is located at 29714 Haun Road, approximately 4.9 miles from the proposed project site.

The proposed school is being proposed to support the additional student population associated with homes in the area that are being built in response to existing and anticipated regional

population growth; however, the proposed school is not expected to generate additional population growth into the area. Additional police service is not expected to be required to service the proposed project, but may be required due to general population growth in the area. Therefore, no significant impacts on police services are expected due to construction and operation of the modifications to the existing school site.

The proposed project is adding an additional 1,200 student capacity in order to handle the increased number of students entering the school district. Thus, the project is considered to help aid in preventing overcrowding and would provide an overall beneficial impact to schools

### **15.3 Mitigation Measures**

No mitigation measures are required since no significant adverse impacts on public services associated with the proposed project were identified.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XVI. RECREATION.** Would the project:

- |    |   |                          |                          |                          |                                     |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) | Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) | Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**16.1 Significance Criteria**

The impacts to recreation will be considered significant if:

The project results in an increased demand for neighborhood or regional parks or other recreational facilities.

The project adversely effects existing recreational opportunities.

**16.2 Environmental Setting and Impacts**

**16. a), and b)** Six parks and recreational facilities in the City of Menifee are located within two miles of the proposed project site. The closest park to the proposed project is Mira Park, located across the street from the proposed school site. The park facilities include: a baseball field, multi-purpose/soccer field, basketball court, playground/tot lot, and a picnic area. Other recreational activities are available near the proposed project site include indoor playgrounds, various golf courses, and museums.

The development of the proposed project site will not result in additional residents living in the area or impact any existing parks or recreational facilities. Some of the facilities and fields that will be created in the construction of the proposed project site will be available for public use and thus the project will provide a beneficial impact on recreation in the area.

### **16.3 Mitigation Measures**

No mitigation measures are required since no significant adverse impacts on recreation associated with the proposed project were identified.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVII. TRANSPORTATION</b> Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3 subdivision(b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 17.1 Significance Criteria

The impacts on transportation/traffic will be considered significant if any of the following criteria apply:

Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

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

Result in inadequate emergency access



## 17.2 Environmental Setting and Impacts

**17 a)** Western Riverside County is served by major freeways connecting Los Angeles, Orange, and San Diego Counties to Riverside and San Bernardino Counties. The Riverside Freeway (91) provides major access through Riverside County in an east-west direction. This freeway links Riverside County to Orange and Los Angeles Counties. Major north-south access is provided by Interstate 15 (I-15) and Interstate 215 (I-215). These freeways connect the Western Riverside County area to San Diego County to the south and San Bernardino County to the north.

The proposed project site is located off of Scott Road, about 1.85 miles east of Interstate 215. Scott Road is the major arterial in the area and is located approximately 0.5 mile north of Scott Road and adjacent to Briggs Road. Briggs Road is a paved north/south road east of the school site providing access to the school. Wickerd Road is partially paved in the area and the project would result in paving the road from Mira Street to Briggs Road, so access to the site would be provided along Wickerd Road from either Briggs Road or Menifee Road.

A traffic analysis was completed as part of the City of Menifee's 2013 General Plan. The traffic impacts associated with expected growth in the Menifee area, including the sphere of influence, were determined using the City of Menifee Traffic Model, a refined version of the Riverside County Transportation Analysis Model (RivTAM). The proposed project site is located within the City of Menifee and the volume to capacity ratios associated with implementation of the General Plan were evaluated at various roadway segments along Scott Road in the vicinity of the proposed project site (City of Menifee, 2013). The results of the traffic analysis are provided in Table 2-9. As shown in Table 2-9, traffic levels in the vicinity of the school site are expected to be operating at acceptable traffic flow conditions through 2035.

**TABLE 2-9**

**Menifee General Plan 2035 Roadway Segments<sup>(1)</sup>**

Segment	Through Travel Lanes	Estimated Daily Capacity	2035 ADT	Volume/ Capacity Ratio	ADT Capacity Threshold <sup>(2)</sup>
Scott Road West of Menifee Road	6D	53,900	25,300	0.47	Acceptable
Scott Road East of Menifee Road	6D	53,900	32,200	0.60	Acceptable
Scott West of Briggs Road	6D	53,900	31,600	0.59	Acceptable
Scott Road East of Briggs Road	6D	53,900	28,400	0.53	Acceptable

(1) Source: City of Menifee, 2013

(2) The Average Daily Vehicle Capacity Threshold is determined by the following V/C ratio range: 0.00-0.79 = "acceptable"; 0.80-1.00 = "Approaching Capacity"; 1.01-1.25 = "Potentially Exceeds Capacity"; 1.26+ = "Exceeds Capacity."

The City of Menifee had adopted vehicle LOS policies that set standards for City infrastructure. Based on the above, the new school site would be expected to be in compliance with the City's

LOS policies, as traffic associated with the school site would be a small fraction of the development included in the General Plan.

**17 b)** Access to the school site will be provided from a new extension of Wickerd Road, west of Briggs Road. School hours are expected to be approximately 7:30 a.m. to 2:00 p.m. A student pickup and dropoff area is being provided onsite with access from Wickerd Road. This portion of Wickerd Road would largely serve the proposed project site. Traffic queuing would occur onsite in the Parent Pickup Loop and subsequently could spill offsite onto Wickerd Road. Traffic associated with student pickup/dropoff normally clears up within about 15 minutes of school start and closure.

A number of street improvements would also be provided including: (1) extending Wickerd Road from Mira Street to Briggs Road; (2) providing a crosswalk on Wickerd Road at Mira Street; and (3) pavement markings and school signs will be provided along Wickerd Road. The MUSD will work with the City of Menifee to ensure that the appropriate improvements are made to the roadway network in order to maintain adequate traffic flow.

During construction activities, up to 60 construction workers would be required during peak construction activities. The construction workers would be expected to stage onsite during the construction activities and along the extension to Wickerd Road (west of Briggs Road) as the grading activities would need to be conducted as part of the first phase on construction. The construction workers would be expected to arrive between 6:30 and 7:00 a.m. with construction ending between 5:00 and 5:30 p.m. The construction activities are temporary and will cease following completion of the school construction and prior to any increase associated with the additional students that would be allowed by the increase in capacity.

The proposed new school is expected to have a maximum student capacity of 900 in grades kindergarten through sixth grade, with 50 additional employees. The proposed school district boundary for the ES#10 is Interstate 215 to the west, Domenigoni Parkway to the north, Winchester Road to the east, and Scott Road to the south. Since the school is proposed to be a neighborhood-serving school, some of the students would walk to the school site, and some would be dropped off by their parents.

The Office of Planning and Research issued a Technical Advisory to support the implementation of SB 743, which identified vehicle miles of travel (VMT) as the preferred metric for analyzing traffic impacts as part of CEQA documents. Based on the State Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) which states that absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.

The City of Menifee Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (City of Menifee, 2020), indicates that K-12 schools would decrease the number of trips or the distance those trips travel to transport students to school and, thus, would be a VMT reducing project. As a VMT-reducing project, the calculation of VMT is not required. Based on the above, the

proposed new school is not expected to conflict or be inconsistent with CEQA Guidelines § 15064.3 subdivision(b).

**17.c)** The proposed project includes the construction of a new K-5 elementary school. Access to the site will be provided through an extension of Wickerd Road from Mira Street to Briggs Road along the southern boundary of the school site. The District will work with the City of Menifee and County of Riverside, as applicable, so that this new access road will be in compliance with applicable transportation standards. No hazardous features (sharp curves or dangerous intersections) are included as part of the proposed new school site. There are no known potential incompatible uses that could result in traffic hazards in the vicinity of the school site.

**17. d)** Emergency access will be implemented as part of the development of the new school site. Adequate access will be provided by extending Wickerd Road adjacent to the school site, including emergency access. Therefore, the proposed school site would not result in inadequate emergency access to the site.

### **17.3 Mitigation Measures**

No mitigation measures are required since no significant adverse impacts on transportation associated with the proposed project were identified.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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## XVIII. TRIBAL CULTURAL RESOURCES.

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

- |    |   |                          |                                     |                          |                                     |
|----|---|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) | Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

### 18.1 Significance Criteria

The proposed project impacts to tribal resources will be considered significant if:

The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of tribal cultural significance to a community or ethnic or social group or a California Native American tribe.

Unique objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.

### 18.2 Environmental Setting and Impacts

The State CEQA Guidelines were amended in July 2015 to include evaluation of impacts on tribal cultural resources. Tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe (Public Resources Code 21074). Assembly Bill (AB) 52 specifies that a project that may cause a substantial adverse change to a Tribal Cultural Resource (TCR) may result in a significant effect on the environment. AB52 requires tribes interested in development projects within a traditionally and culturally affiliated geographic area to notify a lead agency of such interest and to request notification of future projects subject to CEQA prior to determining if a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The lead agency is then required to notify the tribe within 14 days of deeming a development application subject to CEQA complete to notify the requesting tribe as an invitation to consult on the project. AB52 identifies examples of mitigation measures that will avoid or minimize impacts to a TCR and applies to projects that have a notice of preparation or a notice of intent to adopt a negative declaration/mitigated negative declaration circulated on or after July 1, 2015.

The District received a request from the Pechanga Band of Luiseno Indians (hereinafter referred to as the “Tribe”) to participate in the AB52 CEQA consultation process for projects within the District. Therefore, the District sent out a notice of the proposed project to the Tribe on December 15, 2020. The Tribe responded on January 4, 2021 and requested formal consultation under AB52 for the proposed project. Members of the Tribe and representatives of the District begin consultation by reviewing the project description and the potential mitigation measures to protect tribal cultural resources. The District recommended measures that the Tribe had previously suggested for another school site in the District.

**18 a. and b)** A site-specific updated cultural resources survey of the project site was conducted by Duke Cultural Resources Management (see Appendix B). Of the 32 cultural resources within one mile of the proposed project site, none are within the project boundaries. The survey concluded that the soil at the project site has been heavily disturbed and shows signs of plowing and chisel-plowed, most likely for agricultural use or fire abatement purposes. Due to previous agricultural use of the land and previous ground disturbances, the proposed project is not likely to impact cultural or tribal resources. However, grading of the proposed project site will be required during construction, and grading into native soils would likely be required. Tribal cultural resources have been found in developments near the project site and there is the potential for tribal cultural resources to be located in native soils at the project site. Therefore, based on consultation with the Pechanga Tribe, mitigation measures have been incorporated to minimize the potential impacts on tribal cultural resources.

### 18.3 Mitigation Measures

The following mitigation measures will be imposed on the proposed project.

**TR-1 Archeologist Retained.** The District will retain a qualified archaeologist to monitor all ground disturbing activities in an effort to identify any unknown archaeological

resources. The Project Archaeologist and the representative(s) from the Native American Tribe(s) shall be included in the pre-grade meetings to provide cultural/historical sensitivity training including the establishment of set guidelines for ground disturbance in sensitive areas with the grading contractors. The Project Archaeologist and the Tribal representative(s) shall manage and oversee monitoring for ground disturbing activities into native soils, including clearing, grubbing, mass or rough grading, and trenching. The Project Archaeologist and the Tribal representative(s), shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources in coordination with any required special interest or tribal monitors.

**TR-2 Native American Monitoring - Pechanga.** Tribal monitor(s) shall be required on-site during all ground-disturbing activities into native soils including grading, stockpiling of materials, and engineered fill. Prior to commencing grading activities into native soils, the District shall retain a qualified tribal monitor from the Pechanga Band of Luiseno Indians. The Tribal Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground-disturbance activities to allow recovery of cultural resources, in coordination with the Project Archaeologist.

**TR-3 Inadvertent Archeological Find.** If during ground disturbance activities, unique cultural resources are discovered that were not assessed by the archaeological report(s), monitoring, and/or environmental assessment conducted previously, the following procedures shall be followed. Unique cultural resources are defined, for this condition only, as being multiple artifacts in close association with each other, but may include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Native American Tribe(s).

- i. All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the developer, the archaeologist, the tribal representative(s) and the District to discuss the significance of the find.
- ii. At the meeting, the significance of the discoveries shall be discussed and after consultation with the tribal representative(s) and the archaeologist, a decision shall be made, with the concurrence of the District, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources.
- iii. Isolates and clearly non-significant deposits will be documented in the field so the monitored grading can proceed.
- iv. Grading of further ground disturbance into native soils shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. Work shall be allowed to continue outside of the buffer area and will be monitored by additional Tribal monitors if needed.
- v. Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Management Plan Treatment and Monitoring Agreements entered into with the appropriate tribes. This may

include avoidance of the cultural resources through project design, in-place preservation of cultural resources located in native soils and/or reburial on the Project property so they are not subject to further disturbance in perpetuity as identified in Non-Disclosure of Reburial Condition.

- vi. Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for tribal cultural resources. If the landowner and the Tribe(s) cannot agree on the significance or the mitigation for the archaeological or cultural resources, these issues will be presented to the District for decision. The District shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources, recommendations of the project archeologist and shall take into account the cultural and religious principles and practices of the Tribe. Notwithstanding any other rights available under the law, the decision of the District shall be appealable to the District Board.

TR-4 **Human Remains.** If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

TR-5 **Non-Disclosure of Location Reburials.** It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

TR-6 **Cultural Resources Disposition.** In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:

- a) One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the Menifee Unified School District Facilities Department:
  1. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources.

2. Reburial of the resources on the project property. The measures for reburial shall include, at least, the following: Measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed, with an exception that sacred items, burial goods and Native American human remains are excluded. Any reburial process shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV Report shall be filed with the District under a confidential cover and not subject to the Public Records Request.
3. If preservation in place or reburial is not feasible then the resources shall be curated in a culturally appropriate manner at a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees necessary for permanent curation. There shall be no destructive or invasive testing on sacred items, burial goods and Native American human remains. Results concerning finds of any inadvertent discoveries shall be included in the Phase IV monitoring report.

**TR-7 Archeology Report - Phase III and IV.** The District shall prompt the Project Archeologist to submit two (2) copies of the Phase III Data Recovery report (if conducted for the Project) and the Phase IV Cultural Resources Monitoring Report. Once the report(s) are determined to be adequate, two (2) copies shall be submitted to the Eastern Information Center (EIC) at the University of California Riverside (UCR) and one (1) copy shall be submitted to the Pechanga Cultural Resources Department.

In the event that grading is required into native soils (ungraded areas), mitigation measures will apply that require a qualified archaeologist and Native American monitor to be present during grading activities and that appropriate measures be implemented in the event that unique resources are discovered. Thus, the impacts of the proposed project on tribal resources are considered to be less than significant with implementation the appropriate mitigation measures.

**Mitigation Monitoring:** The District shall assure that the required monitoring program is completed with input and oversight of the Tribe. The monitoring activities will occur during the construction phase. The District will retain a Riverside County quality archaeologist and tribal observer designated by the Tribe and the Tribe will have oversight of grading activities into native soils.

Following mitigation, no significant adverse impacts on tribal cultural resources are expected due to the proposed project.



## CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>XIX. UTILITIES/SERVICE SYSTEMS.</b> Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 19.1 Significance Criteria

The impacts to utilities/service systems will be considered significant if any of the following criteria are met:

The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.

The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use a substantial amount of potable water.

The project increases demand for water by more than 300,000 gallons per day.

The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

## **19.2 Environmental Setting and Impacts**

**19. a)** As discussed in 19 b and 19 c below, the proposed project would not result in new or expanded water or wastewater treatment. As discussed in 10 c, the construction of the proposed project site is not expected to impact drainages or alter a stream or river.

The proposed project would need to be supplied with electricity, natural gas, and telecommunications. Existing service lines run along the eastern border of the proposed project site. These services can be provided from the existing lines that currently service the surrounding area, so no significant impacts would be expected due to construction of electricity, natural gas or telecommunication services.

**19. b)** The EMWD delivers water from three sources: imported water from the Metropolitan Water District (MWD), groundwater from the San Jacinto Basin, and recycled water.

New water lines will be needed to connect the new school buildings to the existing water lines. All lines will be designed per EMWD requirements. The infrastructure will be installed to the requirements of the County's Engineering Department. Water use increases as a result of the proposed project will be limited to water for drinking purposes, sanitary purposes and landscape purposes. The CalEEMod model estimates the water usage associated with an elementary school to be approximately 11 million gallons per year or 30,162 gallons of water per day. The estimated water demands are expected to be well below the 300,000 gallons per day threshold. Further, the population growth and associated infrastructure, including schools, have been built into the Menifee General Plan. Thus, no new infrastructure or water treatment facilities will be required to support the proposed project as existing facilities can meet the necessary capacity.

**19. c)** Compliance with NPDES requirements applies to the proposed project which will minimize construction related water quality impacts. The proposed project site is expected to generate an estimated 6,000 gallons of wastewater per day, based on the CalEEMod model predictions for an elementary school site. Although the development will result in additional demands upon the current sewer facilities, the Eastern Municipal Water District (EMWD) is expected to have sufficient capacity to accommodate the project's demand for wastewater treatment facilities. EMWD operates and maintains five regional water reclamation facilities, i.e., Hemet/San Jacinto, Moreno Valley, Perris Valley, Sun City and Temecula Valley, treating over 45 million gallons a day of wastewater. EMWD has upgraded its sewer treatment capacity to support the region's growth. Effluent generated by the proposed school modifications will go to the Perris Valley Regional Water Reclamation Facility. The facility currently receives approximately 13.8 million gallons per day of wastewater and has a capacity to treat up to 22

million gallons per day with an ultimate capacity of approximately 100 million gallons per day (EMWD, 2016). Therefore, the proposed school is not expected to not require or result in the construction or expansion of new wastewater treatment facilities.

**19. d and e)** The proposed project is located within the service area boundaries of Waste Management of the Inland Empire. The waste management company delivers collected solid waste to one of two active landfills in Western Riverside County: the El Sobrante Landfill and the Lamb Canyon Sanitary Landfill. The current remaining disposal capacity of the El Sobrante Landfill is estimated to last until approximately 2030. The current remaining disposal capacity of the Lamb Canyon Sanitary Landfill is estimated to last until approximately 2023. The proposed elementary school is estimated to generate approximately 164 tons per year of waste (CalEEMod model). The landfill needs of the proposed project are expected to be met by the existing landfill capacity. The proposed project must comply with local, state and federal regulations and statutes regarding federal wastes, including the County Integrated Waste Management Plan (CIWMP). Therefore, no significant impacts associated with solid or hazardous wastes are expected.

### **19.3 Mitigation Measures**

No mitigation measures are required since no significant adverse impacts on utilities and service systems associated with the proposed project were identified.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XX. WILDFIRE.</b> If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evaluation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 20.1 Significance Criteria

The impacts to wildfires will be considered significant if:

The project results in new structures located within or adjacent to lands classified as very high fire hazard severity zones

The project adversely effects emergency response or emergency evacuation plans.

### 20.2 Environmental Setting and Impacts

**20. a), b), c), and d).** The proposed project will not increase the existing risk of wildland fires. The proposed project site is surrounded by large ranch type housing on the east, west, and south, and a small park to the southwest. The vacant lots surrounding the proposed project site are graded or plowed for agricultural uses or further development. The proposed project site and the areas surrounding the school site were used for agricultural uses prior to development. Based on the Fire Hazard Severity Zones in Western Riverside County, no wildlands are located in the immediate area and the site is not within or adjacent to lands classified as very high fire hazard severity zones.<sup>1</sup> For these reasons, the project would not expose people or structures to wild fires, would not impair an adopted emergency response plan or emergency evacuation plan for wild fires, would not expose project occupants to pollutants from a wildfire or the uncontrolled spread of a wildfire and would not exposure people or structures to flooding or landslides as a result of post-fire slope or drainage changes. Therefore, no potential significant adverse impacts resulting from wildfires are expected from the proposed school.

### 20.3 Mitigation Measures

No mitigation measures are required since no significant adverse wildfire impacts associated with the proposed project were identified.

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<sup>1</sup> See CalFire Fire Hazard Severity Zone Map, <https://osfm.fire.ca.gov/media/5916/meniffee.pdf>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XX. MANDATORY FINDINGS OF SIGNIFICANCE.</b>				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 20. MANDATORY FINDINGS OF SIGNIFICANCE

**20. a)** No significant impacts to biological impacts are expected due to expansion to the proposed project site because no native habitat exists and no sensitive biological habitat or species exist at the site. The vacant area in which construction will occur has been heavily disturbed by agricultural activity and previous grading activities. Due to previous ground disturbances, the proposed project site does not support native habitat, and is not used for the movement or migration of native wildlife species. As discussed in Section IV. – Biological Resources, no significant adverse impacts on biological resources is expected. Therefore, development of the proposed project is not expected to degrade the quality of the environment, reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below

self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal.

As discussed in Section V. – Cultural Resources, cultural resources have been found within one mile of the proposed project site. A field survey of the site was conducted by an archaeologist which did not identify any cultural or paleontological resources within or adjacent to the Proposed School site. Further, due to previous agricultural use and previous ground disturbances, the proposed project is not likely to impact cultural or tribal cultural resources. (see Appendix B). Thus, the impacts of the proposed project on cultural resources are considered to be less than significant. Therefore, the proposed project is not expected to eliminate important examples of the major periods of California history or prehistory

As discussed in Section XVIII. - Tribal Cultural Resources. Based on a cultural resources survey (see Appendix B), no cultural or tribal cultural resources have been observed on the project site. Due to previous agricultural use and previous ground disturbances, the proposed project is not likely to impact cultural or tribal cultural resources. Tribal cultural resources have been found in developments near the project site and there is the potential for tribal cultural resources to be located in native soils at the project site. Mitigation measures have been developed which, among other things, requires a Native American monitor to be present during grading activities and that appropriate measures be implemented in the event that unique resources are discovered. Thus, the impacts of the proposed project on tribal cultural resources are considered to be less than significant, with the implementation of the imposed mitigation measures.

**20. b)** CEQA Guidelines Section 15064(h) requires an evaluation of whether the District's implementation of the proposed project will result in any "cumulatively considerable" contribution to an existing (or reasonably foreseeable future) significant impact. As discussed in the above analyses, the implementation of the proposed project would not result in any significant impacts and will not directly or indirectly adversely affect human beings. Therefore, impacts of the proposed project are not cumulatively significant and would not make a considerable contribution to a cumulatively significant. The District concludes that the proposed project will not result in any significant impacts, individually or cumulatively, that must be addressed further.

**20. c)** Based on the evaluation of the proposed project's impacts on CEQA Checklist items 1 through 19, there are no environmental effects associated with the proposed project that would result in adverse effects on human beings, either directly or indirectly, as evaluated in the previous sections of this document. While there are a variety of temporary adverse impacts during construction related to noise, for example, these impacts are expected to be temporary and less than significant. Long-term operational impacts include increased traffic and noise in the local vicinity of the school site. Potential hazards associated with the use of the site for an elementary school are expected to be less than significant. Therefore, the analysis herein concludes that the direct and indirect environmental impacts will be less than significant.

## REFERENCES

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## CHAPTER 2: ENVIRONMENTAL CHECKLIST

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## **APPENDIX A**

**CalEEMod**

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3201 MUSD ES15 - South Coast AQMD Air District, Annual

3201 MUSD ES15  
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	900.00	Student	12.50	69,000.00	0
Parking Lot	200.00	Space	3.10	135,000.00	0
City Park	2.70	Acre	2.70	117,612.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023

Utility Company      Southern California Edison

CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 12.5 developed acres. All dimentions are preliminary.

Construction Phase - No demo phase.

Construction Off-road Equipment Mitigation -

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	75,243.03	69,000.00
tblLandUse	LandUseSquareFeet	80,000.00	135,000.00
tblLandUse	LotAcreage	1.73	12.50
tblLandUse	LotAcreage	1.80	3.10

**2.0 Emissions Summary**

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3331	3.0431	2.9567	7.0900e-003	0.4244	0.1238	0.5482	0.1586	0.1158	0.2744	0.0000	634.9245	634.9245	0.1051	0.0000	637.5525
2023	0.4435	0.8514	1.0294	2.4200e-003	0.0772	0.0344	0.1116	0.0208	0.0323	0.0531	0.0000	216.6843	216.6843	0.0326	0.0000	217.5003
Maximum	0.4435	3.0431	2.9567	7.0900e-003	0.4244	0.1238	0.5482	0.1586	0.1158	0.2744	0.0000	634.9245	634.9245	0.1051	0.0000	637.5525

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3331	3.0431	2.9567	7.0900e-003	0.3031	0.1238	0.4269	0.1016	0.1158	0.2174	0.0000	634.9240	634.9240	0.1051	0.0000	637.5520
2023	0.4435	0.8513	1.0294	2.4200e-003	0.0772	0.0344	0.1116	0.0208	0.0323	0.0531	0.0000	216.6842	216.6842	0.0326	0.0000	217.5002
Maximum	0.4435	3.0431	2.9567	7.0900e-003	0.3031	0.1238	0.4269	0.1016	0.1158	0.2174	0.0000	634.9240	634.9240	0.1051	0.0000	637.5520

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	24.17	0.00	18.38	31.76	0.00	17.40	0.00	0.00	0.00	0.00	0.00	0.00

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2022	3-31-2022	1.1027	1.1027
2	4-1-2022	6-30-2022	0.7516	0.7516
3	7-1-2022	9-30-2022	0.7599	0.7599
4	10-1-2022	12-31-2022	0.7622	0.7622
5	1-1-2023	3-31-2023	0.6606	0.6606
6	4-1-2023	6-30-2023	0.6260	0.6260
		Highest	1.1027	1.1027

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2943	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0274	0.0274	7.0000e-005	0.0000	0.0292
Energy	3.2600e-003	0.0296	0.0249	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	207.7997	207.7997	7.8700e-003	2.0900e-003	208.6194
Mobile	0.2286	1.1187	3.1771	0.0127	1.1066	9.0100e-003	1.1156	0.2965	8.3800e-003	0.3049	0.0000	1,177.7617	1,177.7617	0.0529	0.0000	1,179.0851
Waste						0.0000	0.0000		0.0000	0.0000	33.3880	0.0000	33.3880	1.9732	0.0000	82.7172
Water						0.0000	0.0000		0.0000	0.0000	0.6922	40.2998	40.9920	0.0728	2.0200e-003	43.4137
Total	0.5262	1.1485	3.2160	0.0129	1.1066	0.0113	1.1179	0.2965	0.0107	0.3072	34.0801	1,425.8885	1,459.9687	2.1068	4.1100e-003	1,513.8646



## Mitigated Operational

[illegible]

## Construction Phase

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/25/2022	5	30	
3	Building Construction	Building Construction	2/26/2022	4/21/2023	5	300	
4	Paving	Paving	4/22/2023	5/19/2023	5	20	
5	Architectural Coating	Architectural Coating	5/20/2023	6/16/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 3.1

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 103,500; Non-Residential Outdoor: 34,500; Striped Parking Area: 8,100  
 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	135.00	53.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003	7.4200e-003	7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
<b>Total</b>	<b>0.0159</b>	<b>0.1654</b>	<b>0.0985</b>	<b>1.9000e-004</b>	<b>0.0903</b>	<b>8.0600e-003</b>	<b>0.0984</b>	<b>0.0497</b>	<b>7.4200e-003</b>	<b>0.0571</b>	<b>0.0000</b>	<b>16.7197</b>	<b>16.7197</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>16.8549</b>

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**3.2 Site Preparation - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.5000e-004	2.9000e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8293	0.8293	2.0000e-005	0.0000	0.8298
<b>Total</b>	<b>3.5000e-004</b>	<b>2.5000e-004</b>	<b>2.9000e-003</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>2.6000e-004</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.8293</b>	<b>0.8293</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.8298</b>

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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003	7.4200e-003	7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
<b>Total</b>	<b>0.0159</b>	<b>0.1654</b>	<b>0.0985</b>	<b>1.9000e-004</b>	<b>0.0407</b>	<b>8.0600e-003</b>	<b>0.0487</b>	<b>0.0223</b>	<b>7.4200e-003</b>	<b>0.0298</b>	<b>0.0000</b>	<b>16.7197</b>	<b>16.7197</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>16.8549</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

**3.2 Site Preparation - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.5000e-004	2.9000e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8293	0.8293	2.0000e-005	0.0000	0.8298
<b>Total</b>	<b>3.5000e-004</b>	<b>2.5000e-004</b>	<b>2.9000e-003</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>1.0000e-005</b>	<b>9.9000e-004</b>	<b>2.6000e-004</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.8293</b>	<b>0.8293</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.8298</b>

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**3.3 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245	0.0226	0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
<b>Total</b>	<b>0.0544</b>	<b>0.5827</b>	<b>0.4356</b>	<b>9.3000e-004</b>	<b>0.1301</b>	<b>0.0245</b>	<b>0.1546</b>	<b>0.0540</b>	<b>0.0226</b>	<b>0.0765</b>	<b>0.0000</b>	<b>81.8019</b>	<b>81.8019</b>	<b>0.0265</b>	<b>0.0000</b>	<b>82.4633</b>

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**3.3 Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1700e-003	8.3000e-004	9.6500e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.7642	2.7642	7.0000e-005	0.0000	2.7659
<b>Total</b>	<b>1.1700e-003</b>	<b>8.3000e-004</b>	<b>9.6500e-003</b>	<b>3.0000e-005</b>	<b>3.2900e-003</b>	<b>2.0000e-005</b>	<b>3.3200e-003</b>	<b>8.7000e-004</b>	<b>2.0000e-005</b>	<b>9.0000e-004</b>	<b>0.0000</b>	<b>2.7642</b>	<b>2.7642</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>2.7659</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0586	0.0000	0.0586	0.0243	0.0000	0.0243	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
<b>Total</b>	<b>0.0544</b>	<b>0.5827</b>	<b>0.4356</b>	<b>9.3000e-004</b>	<b>0.0586</b>	<b>0.0245</b>	<b>0.0831</b>	<b>0.0243</b>	<b>0.0226</b>	<b>0.0468</b>	<b>0.0000</b>	<b>81.8018</b>	<b>81.8018</b>	<b>0.0265</b>	<b>0.0000</b>	<b>82.4632</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

**3.3 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1700e-003	8.3000e-004	9.6500e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.7642	2.7642	7.0000e-005	0.0000	2.7659
<b>Total</b>	<b>1.1700e-003</b>	<b>8.3000e-004</b>	<b>9.6500e-003</b>	<b>3.0000e-005</b>	<b>3.2900e-003</b>	<b>2.0000e-005</b>	<b>3.3200e-003</b>	<b>8.7000e-004</b>	<b>2.0000e-005</b>	<b>9.0000e-004</b>	<b>0.0000</b>	<b>2.7642</b>	<b>2.7642</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>2.7659</b>

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**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1877	1.7177	1.8000	2.9600e-003		0.0890	0.0890		0.0837	0.0837	0.0000	254.8978	254.8978	0.0611	0.0000	256.4244
<b>Total</b>	<b>0.1877</b>	<b>1.7177</b>	<b>1.8000</b>	<b>2.9600e-003</b>		<b>0.0890</b>	<b>0.0890</b>		<b>0.0837</b>	<b>0.0837</b>	<b>0.0000</b>	<b>254.8978</b>	<b>254.8978</b>	<b>0.0611</b>	<b>0.0000</b>	<b>256.4244</b>



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**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0156	0.5349	0.1322	1.4600e-003	0.0368	9.8000e-004	0.0377	0.0106	9.4000e-004	0.0115	0.0000	141.0842	141.0842	8.6600e-003	0.0000	141.3008
Worker	0.0581	0.0413	0.4778	1.5100e-003	0.1629	1.1900e-003	0.1641	0.0433	1.0900e-003	0.0444	0.0000	136.8275	136.8275	3.4400e-003	0.0000	136.9134
Total	0.0737	0.5762	0.6100	2.9700e-003	0.1997	2.1700e-003	0.2018	0.0539	2.0300e-003	0.0559	0.0000	277.9117	277.9117	0.0121	0.0000	278.2141

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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1877	1.7177	1.8000	2.9600e-003		0.0890	0.0890		0.0837	0.0837	0.0000	254.8975	254.8975	0.0611	0.0000	256.4241
Total	0.1877	1.7177	1.8000	2.9600e-003		0.0890	0.0890		0.0837	0.0837	0.0000	254.8975	254.8975	0.0611	0.0000	256.4241

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**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0156	0.5349	0.1322	1.4600e-003	0.0368	9.8000e-004	0.0377	0.0106	9.4000e-004	0.0115	0.0000	141.0842	141.0842	8.6600e-003	0.0000	141.3008
Worker	0.0581	0.0413	0.4778	1.5100e-003	0.1629	1.1900e-003	0.1641	0.0433	1.0900e-003	0.0444	0.0000	136.8275	136.8275	3.4400e-003	0.0000	136.9134
Total	0.0737	0.5762	0.6100	2.9700e-003	0.1997	2.1700e-003	0.2018	0.0539	2.0300e-003	0.0559	0.0000	277.9117	277.9117	0.0121	0.0000	278.2141

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**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0629	0.5754	0.6498	1.0800e-003		0.0280	0.0280		0.0263	0.0263	0.0000	92.7219	92.7219	0.0221	0.0000	93.2733
Total	0.0629	0.5754	0.6498	1.0800e-003		0.0280	0.0280		0.0263	0.0263	0.0000	92.7219	92.7219	0.0221	0.0000	93.2733

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**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2200e-003	0.1464	0.0430	5.1000e-004	0.0134	1.7000e-004	0.0135	3.8600e-003	1.6000e-004	4.0100e-003	0.0000	49.7569	49.7569	2.7400e-003	0.0000	49.8254
Worker	0.0199	0.0136	0.1602	5.3000e-004	0.0593	4.2000e-004	0.0597	0.0157	3.9000e-004	0.0161	0.0000	47.8998	47.8998	1.1300e-003	0.0000	47.9280
Total	0.0241	0.1599	0.2032	1.0400e-003	0.0726	5.9000e-004	0.0732	0.0196	5.5000e-004	0.0201	0.0000	97.6568	97.6568	3.8700e-003	0.0000	97.7534

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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0629	0.5754	0.6498	1.0800e-003		0.0280	0.0280		0.0263	0.0263	0.0000	92.7218	92.7218	0.0221	0.0000	93.2732
Total	0.0629	0.5754	0.6498	1.0800e-003		0.0280	0.0280		0.0263	0.0263	0.0000	92.7218	92.7218	0.0221	0.0000	93.2732

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2200e-003	0.1464	0.0430	5.1000e-004	0.0134	1.7000e-004	0.0135	3.8600e-003	1.6000e-004	4.0100e-003	0.0000	49.7569	49.7569	2.7400e-003	0.0000	49.8254
Worker	0.0199	0.0136	0.1602	5.3000e-004	0.0593	4.2000e-004	0.0597	0.0157	3.9000e-004	0.0161	0.0000	47.8998	47.8998	1.1300e-003	0.0000	47.9280
<b>Total</b>	<b>0.0241</b>	<b>0.1599</b>	<b>0.2032</b>	<b>1.0400e-003</b>	<b>0.0726</b>	<b>5.9000e-004</b>	<b>0.0732</b>	<b>0.0196</b>	<b>5.5000e-004</b>	<b>0.0201</b>	<b>0.0000</b>	<b>97.6568</b>	<b>97.6568</b>	<b>3.8700e-003</b>	<b>0.0000</b>	<b>97.7534</b>

**3.5 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	4.0600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0144</b>	<b>0.1019</b>	<b>0.1458</b>	<b>2.3000e-004</b>		<b>5.1000e-003</b>	<b>5.1000e-003</b>		<b>4.6900e-003</b>	<b>4.6900e-003</b>	<b>0.0000</b>	<b>20.0269</b>	<b>20.0269</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1888</b>

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**3.5 Paving - 2023****Unmitigated Construction Off-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	4.4500e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3306	1.3306	3.0000e-005	0.0000	1.3313
<b>Total</b>	<b>5.5000e-004</b>	<b>3.8000e-004</b>	<b>4.4500e-003</b>	<b>1.0000e-005</b>	<b>1.6500e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.3306</b>	<b>1.3306</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.3313</b>

**Mitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	4.0600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0144</b>	<b>0.1019</b>	<b>0.1458</b>	<b>2.3000e-004</b>		<b>5.1000e-003</b>	<b>5.1000e-003</b>		<b>4.6900e-003</b>	<b>4.6900e-003</b>	<b>0.0000</b>	<b>20.0268</b>	<b>20.0268</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1888</b>

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**3.5 Paving - 2023****Mitigated Construction Off-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	4.4500e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3306	1.3306	3.0000e-005	0.0000	1.3313
<b>Total</b>	<b>5.5000e-004</b>	<b>3.8000e-004</b>	<b>4.4500e-003</b>	<b>1.0000e-005</b>	<b>1.6500e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.3306</b>	<b>1.3306</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.3313</b>

**3.6 Architectural Coating - 2023****Unmitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Archit. Coating	0.3386					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
<b>Total</b>	<b>0.3405</b>	<b>0.0130</b>	<b>0.0181</b>	<b>3.0000e-005</b>		<b>7.1000e-004</b>	<b>7.1000e-004</b>		<b>7.1000e-004</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>2.5571</b>

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**3.6 Architectural Coating - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	6.8000e-004	8.0100e-003	3.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.3950	2.3950	6.0000e-005	0.0000	2.3964
<b>Total</b>	<b>9.9000e-004</b>	<b>6.8000e-004</b>	<b>8.0100e-003</b>	<b>3.0000e-005</b>	<b>2.9600e-003</b>	<b>2.0000e-005</b>	<b>2.9800e-003</b>	<b>7.9000e-004</b>	<b>2.0000e-005</b>	<b>8.1000e-004</b>	<b>0.0000</b>	<b>2.3950</b>	<b>2.3950</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>2.3964</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3386					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
<b>Total</b>	<b>0.3405</b>	<b>0.0130</b>	<b>0.0181</b>	<b>3.0000e-005</b>		<b>7.1000e-004</b>	<b>7.1000e-004</b>		<b>7.1000e-004</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>2.5571</b>

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**3.6 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	6.8000e-004	8.0100e-003	3.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.3950	2.3950	6.0000e-005	0.0000	2.3964
Total	9.9000e-004	6.8000e-004	8.0100e-003	3.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.3950	2.3950	6.0000e-005	0.0000	2.3964

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**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**



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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2286	1.1187	3.1771	0.0127	1.1066	9.0100e-003	1.1156	0.2965	8.3800e-003	0.3049	0.0000	1,177.7617	1,177.7617	0.0529	0.0000	1,179.0851
Unmitigated	0.2286	1.1187	3.1771	0.0127	1.1066	9.0100e-003	1.1156	0.2965	8.3800e-003	0.3049	0.0000	1,177.7617	1,177.7617	0.0529	0.0000	1,179.0851

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
City Park	5.10	61.43	45.20	54,319	54,319	54,319	54,319
Elementary School	1,161.00	0.00	0.00	2,858,037	2,858,037	2,858,037	2,858,037
Parking Lot	0.00	0.00	0.00				
Total	1,166.10	61.43	45.20	2,912,356	2,912,356	2,912,356	2,912,356

#### 4.3 Trip Type Information

Land Use	Miles				Trip %				Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	6.90	33.00	48.00	19.00	19.00	66	28	6
Elementary School	16.60	8.40	6.90	6.90	65.00	30.00	5.00	5.00	63	25	12
Parking Lot	16.60	8.40	6.90	6.90	0.00	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Elementary School	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	175.5445	175.5445	7.2500e-003	1.5000e-003	176.1725
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	175.5445	175.5445	7.2500e-003	1.5000e-003	176.1725
Natural Gas Mitigated	3.2600e-003	0.0296	0.0249	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	32.2552	32.2552	6.2000e-004	5.9000e-004	32.4469
Natural Gas Unmitigated	3.2600e-003	0.0296	0.0249	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	32.2552	32.2552	6.2000e-004	5.9000e-004	32.4469

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

Land Use	NaturalGas Use kBTU/yr	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr												MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Elementary School	604440	3.2600e-003	0.0296	0.0249	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	32.2552	32.2552	6.2000e-004	5.9000e-004	32.4469
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>3.2600e-003</b>	<b>0.0296</b>	<b>0.0249</b>	<b>1.8000e-004</b>		<b>2.2500e-003</b>	<b>2.2500e-003</b>		<b>2.2500e-003</b>	<b>2.2500e-003</b>	<b>0.0000</b>	<b>32.2552</b>	<b>32.2552</b>	<b>6.2000e-004</b>	<b>5.9000e-004</b>	<b>32.4469</b>

**Mitigated**

Land Use	NaturalGas Use kBTU/yr	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr												MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Elementary School	604440	3.2600e-003	0.0296	0.0249	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	32.2552	32.2552	6.2000e-004	5.9000e-004	32.4469
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>3.2600e-003</b>	<b>0.0296</b>	<b>0.0249</b>	<b>1.8000e-004</b>		<b>2.2500e-003</b>	<b>2.2500e-003</b>		<b>2.2500e-003</b>	<b>2.2500e-003</b>	<b>0.0000</b>	<b>32.2552</b>	<b>32.2552</b>	<b>6.2000e-004</b>	<b>5.9000e-004</b>	<b>32.4469</b>

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**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Elementary School	503700	160.4896	6.6300e-003	1.3700e-003	161.0638
Parking Lot	47250	15.0549	6.2000e-004	1.3000e-004	15.1087
<b>Total</b>		<b>175.5445</b>	<b>7.2500e-003</b>	<b>1.5000e-003</b>	<b>176.1725</b>

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**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Elementary School	503700	160.4896	6.6300e-003	1.3700e-003	161.0638
Parking Lot	47250	15.0549	6.2000e-004	1.3000e-004	15.1087
<b>Total</b>		<b>175.5445</b>	<b>7.2500e-003</b>	<b>1.5000e-003</b>	<b>176.1725</b>

**6.0 Area Detail**

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2943	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0274	0.0274	7.0000e-005	0.0000	0.0292
Unmitigated	0.2943	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0274	0.0274	7.0000e-005	0.0000	0.0292

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**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2592					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-003	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0274	0.0274	7.0000e-005	0.0000	0.0292
Total	0.2943	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0274	0.0274	7.0000e-005	0.0000	0.0292

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2592					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-003	1.3000e-004	0.0141	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0274	0.0274	7.0000e-005	0.0000	0.0292
<b>Total</b>	<b>0.2943</b>	<b>1.3000e-004</b>	<b>0.0141</b>	<b>0.0000</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.0274</b>	<b>0.0274</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.0292</b>

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**7.0 Water Detail****7.1 Mitigation Measures Water**

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	40.9920	0.0728	2.0200e-003	43.4137
Unmitigated	40.9920	0.0728	2.0200e-003	43.4137

## 7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.217	11.3878	4.7000e-004	1.0000e-004	11.4286
Elementary School	2.18182 / 5.61038	29.6042	0.0723	1.9300e-003	31.9852
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>40.9920</b>	<b>0.0728</b>	<b>2.0300e-003</b>	<b>43.4138</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.217	11.3878	4.7000e-004	1.0000e-004	11.4286
Elementary School	2.18182 / 5.61038	29.6042	0.0723	1.9300e-003	31.9852
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>40.9920</b>	<b>0.0728</b>	<b>2.0300e-003</b>	<b>43.4138</b>

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**8.0 Waste Detail****8.1 Mitigation Measures Waste**



## 3201 MUSD ES15 - South Coast AQMD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	33.3880	1.9732	0.0000	82.7172
Unmitigated	33.3880	1.9732	0.0000	82.7172

**8.2 Waste by Land Use**Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.23	0.0467	2.7600e-003	0.0000	0.1157
Elementary School	164.25	33.3413	1.9704	0.0000	82.6016
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>33.3880</b>	<b>1.9732</b>	<b>0.0000</b>	<b>82.7172</b>

8.2 Waste by Land Use

Mitigated

Land Use	Waste Disposed	Total CO2	CH4	N2O	CO2e
	tons	MT/yr			
City Park	0.23	0.0467	2.7600e-003	0.0000	0.1157
Elementary School	164.25	33.3413	1.9704	0.0000	82.6016
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		33.3880	1.9732	0.0000	82.7172

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9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3201 MUSD ES15**  
**South Coast AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	900.00	Student	12.50	69,000.00	0
Parking Lot	200.00	Space	3.10	135,000.00	0
City Park	2.70	Acre	2.70	117,612.00	0

**1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023

Utility Company      Southern California Edison

CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - 12.5 developed acres. All dimentions are preliminary.

Construction Phase - No demo phase.

Construction Off-road Equipment Mitigation -

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	75,243.03	69,000.00
tblLandUse	LandUseSquareFeet	80,000.00	135,000.00
tblLandUse	LotAcreage	1.73	12.50
tblLandUse	LotAcreage	1.80	3.10

**2.0 Emissions Summary**

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.7040	38.8929	29.7382	0.0642	18.2675	1.6365	19.8815	9.9840	1.5056	11.4689	0.0000	6,224.955 3	6,224.955 3	1.9496	0.0000	6,273.695 2
2023	34.1509	18.3145	21.6083	0.0538	1.8482	0.7143	2.5625	0.4978	0.6720	1.1698	0.0000	5,330.814 6	5,330.814 6	0.7176	0.0000	5,348.663 0
Maximum	34.1509	38.8929	29.7382	0.0642	18.2675	1.6365	19.8815	9.9840	1.5056	11.4689	0.0000	6,224.955 3	6,224.955 3	1.9496	0.0000	6,273.695 2

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.7040	38.8929	29.7382	0.0642	8.3310	1.6365	9.9450	4.5222	1.5056	6.0071	0.0000	6,224.955 3	6,224.955 3	1.9496	0.0000	6,273.695 2
2023	34.1509	18.3145	21.6083	0.0538	1.8482	0.7143	2.5625	0.4978	0.6720	1.1698	0.0000	5,330.814 6	5,330.814 6	0.7176	0.0000	5,348.663 0
Maximum	34.1509	38.8929	29.7382	0.0642	8.3310	1.6365	9.9450	4.5222	1.5056	6.0071	0.0000	6,224.955 3	6,224.955 3	1.9496	0.0000	6,273.695 2

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	49.40	0.00	44.27	52.11	0.00	43.22	0.00	0.00	0.00	0.00	0.00	0.00

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6160	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572
Energy	0.0179	0.1624	0.1364	9.7000e-004	0.0123	0.0123	0.0123	0.0123	0.0123	0.0123	194.8235	194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813
Mobile	1.9463	8.5202	26.4500	0.1045	8.8839	0.0710	8.9549	2.3769	0.0660	2.4429	10,648.5457	10,648.5457	10,648.5457	0.4642		10,660.1499
<b>Total</b>	<b>3.5802</b>	<b>8.6835</b>	<b>26.6990</b>	<b>0.1055</b>	<b>8.8839</b>	<b>0.0837</b>	<b>8.9677</b>	<b>2.3769</b>	<b>0.0788</b>	<b>2.4557</b>	<b>10,843.6105</b>	<b>10,843.6105</b>	<b>10,843.6105</b>	<b>0.4685</b>	<b>3.5700e-003</b>	<b>10,856.3884</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6160	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572
Energy	0.0179	0.1624	0.1364	9.7000e-004	0.0123	0.0123	0.0123	0.0123	0.0123	0.0123	194.8235	194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813
Mobile	1.9463	8.5202	26.4500	0.1045	8.8839	0.0710	8.9549	2.3769	0.0660	2.4429	10,648.5457	10,648.5457	10,648.5457	0.4642		10,660.1499
<b>Total</b>	<b>3.5802</b>	<b>8.6835</b>	<b>26.6990</b>	<b>0.1055</b>	<b>8.8839</b>	<b>0.0837</b>	<b>8.9677</b>	<b>2.3769</b>	<b>0.0788</b>	<b>2.4557</b>	<b>10,843.6105</b>	<b>10,843.6105</b>	<b>10,843.6105</b>	<b>0.4685</b>	<b>3.5700e-003</b>	<b>10,856.3884</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/25/2022	5	30	
3	Building Construction	Building Construction	2/26/2022	4/21/2023	5	300	
4	Paving	Paving	4/22/2023	5/19/2023	5	20	
5	Architectural Coating	Architectural Coating	5/20/2023	6/16/2023	5	20	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 75****Acres of Paving: 3.1****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 103,500; Non-Residential Outdoor: 34,500; Striped Parking Area: 8,100 (Architectural Coating – sqft)****OffRoad Equipment**



Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	135.00	53.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.2 Site Preparation - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0713	0.0445	0.6270	1.9300e-003	0.2012	1.4400e-003	0.2026	0.0534	1.3200e-003	0.0547		192.1903	192.1903	4.8400e-003		192.3114
<b>Total</b>	<b>0.0713</b>	<b>0.0445</b>	<b>0.6270</b>	<b>1.9300e-003</b>	<b>0.2012</b>	<b>1.4400e-003</b>	<b>0.2026</b>	<b>0.0534</b>	<b>1.3200e-003</b>	<b>0.0547</b>		<b>192.1903</b>	<b>192.1903</b>	<b>4.8400e-003</b>		<b>192.3114</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126	1.4836	1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715,8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>8.1298</b>	<b>1.6126</b>	<b>9.7424</b>	<b>4.4688</b>	<b>1.4836</b>	<b>5.9524</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715,8655</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.2 Site Preparation - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0713	0.0445	0.6270	1.9300e-003	0.2012	1.4400e-003	0.2026	0.0534	1.3200e-003	0.0547		192.1903	192.1903	4.8400e-003		192.3114
<b>Total</b>	<b>0.0713</b>	<b>0.0445</b>	<b>0.6270</b>	<b>1.9300e-003</b>	<b>0.2012</b>	<b>1.4400e-003</b>	<b>0.2026</b>	<b>0.0534</b>	<b>1.3200e-003</b>	<b>0.0547</b>		<b>192.1903</b>	<b>192.1903</b>	<b>4.8400e-003</b>		<b>192.3114</b>

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**3.3 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	1.5041	1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.3 Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0792	0.0495	0.6967	2.1400e-003	0.2236	1.6000e-003	0.2252	0.0593	1.4700e-003	0.0608		213.5448	213.5448	5.3800e-003		213.6794
<b>Total</b>	<b>0.0792</b>	<b>0.0495</b>	<b>0.6967</b>	<b>2.1400e-003</b>	<b>0.2236</b>	<b>1.6000e-003</b>	<b>0.2252</b>	<b>0.0593</b>	<b>1.4700e-003</b>	<b>0.0608</b>		<b>213.5448</b>	<b>213.5448</b>	<b>5.3800e-003</b>		<b>213.6794</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	1.5041	1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>3.9030</b>	<b>1.6349</b>	<b>5.5379</b>	<b>1.6184</b>	<b>1.5041</b>	<b>3.1225</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.3 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0792	0.0495	0.6967	2.1400e-003	0.2236	1.6000e-003	0.2252	0.0593	1.4700e-003	0.0608		213.5448	213.5448	5.3800e-003		213.6794
<b>Total</b>	<b>0.0792</b>	<b>0.0495</b>	<b>0.6967</b>	<b>2.1400e-003</b>	<b>0.2236</b>	<b>1.6000e-003</b>	<b>0.2252</b>	<b>0.0593</b>	<b>1.4700e-003</b>	<b>0.0608</b>		<b>213.5448</b>	<b>213.5448</b>	<b>5.3800e-003</b>		<b>213.6794</b>

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**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569,6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569,6322</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1383	4.7983	1.1337	0.0134	0.3392	8.8200e-003	0.3480	0.0977	8.4300e-003	0.1061		1,431.3134	1,431.3134	0.0841		1,433.4155
Worker	0.5345	0.3339	4.7028	0.0145	1.5090	0.0108	1.5198	0.4002	9.9400e-003	0.4101		1,441.4273	1,441.4273	0.0363		1,442.3357
<b>Total</b>	<b>0.6728</b>	<b>5.1321</b>	<b>5.8364</b>	<b>0.0279</b>	<b>1.8482</b>	<b>0.0196</b>	<b>1.8678</b>	<b>0.4978</b>	<b>0.0184</b>	<b>0.5162</b>		<b>2,872.7407</b>	<b>2,872.7407</b>	<b>0.1204</b>		<b>2,875.7512</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1383	4.7983	1.1337	0.0134	0.3392	8.8200e-003	0.3480	0.0977	8.4300e-003	0.1061		1,431.3134	1,431.3134	0.0841		1,433.4155
Worker	0.5345	0.3339	4.7028	0.0145	1.5090	0.0108	1.5198	0.4002	9.9400e-003	0.4101		1,441.4273	1,441.4273	0.0363		1,442.3357
Total	0.6728	5.1321	5.8364	0.0279	1.8482	0.0196	1.8678	0.4978	0.0184	0.5162		2,872.7407	2,872.7407	0.1204		2,875.7512

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**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061



## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1032	3.6275	1.0214	0.0130	0.3392	4.0800e-003	0.3433	0.0977	3.9000e-003	0.1016		1,387.898 9	1,387.898 9	0.0733		1,389.732 0
Worker	0.5026	0.3021	4.3429	0.0139	1.5090	0.0105	1.5195	0.4002	9.6800e-003	0.4099		1,387.705 7	1,387.705 7	0.0328		1,388.525 0
<b>Total</b>	<b>0.6058</b>	<b>3.9296</b>	<b>5.3643</b>	<b>0.0269</b>	<b>1.8482</b>	<b>0.0146</b>	<b>1.8628</b>	<b>0.4978</b>	<b>0.0136</b>	<b>0.5114</b>		<b>2,775.604 6</b>	<b>2,775.604 6</b>	<b>0.1061</b>		<b>2,778.256 9</b>

**Mitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.209 9</b>	<b>2,555.209 9</b>	<b>0.6079</b>		<b>2,570.406 1</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1032	3.6275	1.0214	0.0130	0.3392	4.0800e-003	0.3433	0.0977	3.9000e-003	0.1016		1,387.898 9	1,387.898 9	0.0733		1,389.732 0
Worker	0.5026	0.3021	4.3429	0.0139	1.5090	0.0105	1.5195	0.4002	9.6800e-003	0.4099		1,387.705 7	1,387.705 7	0.0328		1,388.525 0
<b>Total</b>	<b>0.6058</b>	<b>3.9296</b>	<b>5.3643</b>	<b>0.0269</b>	<b>1.8482</b>	<b>0.0146</b>	<b>1.8628</b>	<b>0.4978</b>	<b>0.0136</b>	<b>0.5114</b>		<b>2,775.604 6</b>	<b>2,775.604 6</b>	<b>0.1061</b>		<b>2,778.256 9</b>

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**3.5 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.4061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4388</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.584 1</b>	<b>2,207.584 1</b>	<b>0.7140</b>		<b>2,225.433 6</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.5 Paving - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0558	0.0336	0.4825	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		154.1895	154.1895	3.6400e-003		154.2806
<b>Total</b>	<b>0.0558</b>	<b>0.0336</b>	<b>0.4825</b>	<b>1.5500e-003</b>	<b>0.1677</b>	<b>1.1700e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0800e-003</b>	<b>0.0455</b>		<b>154.1895</b>	<b>154.1895</b>	<b>3.6400e-003</b>		<b>154.2806</b>

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Appendix A

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 <sub>1</sub>	2,207.584 <sub>1</sub>	0.7140		2,225.433 <sub>6</sub>
Paving	0.4061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4388</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.584<sub>1</sub></b>	<b>2,207.584<sub>1</sub></b>	<b>0.7140</b>		<b>2,225.433<sub>6</sub></b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.5 Paving - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0558	0.0336	0.4825	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		154.1895	154.1895	3.6400e-003		154.2806
<b>Total</b>	<b>0.0558</b>	<b>0.0336</b>	<b>0.4825</b>	<b>1.5500e-003</b>	<b>0.1677</b>	<b>1.1700e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0800e-003</b>	<b>0.0455</b>		<b>154.1895</b>	<b>154.1895</b>	<b>3.6400e-003</b>		<b>154.2806</b>

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**3.6 Architectural Coating - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.8587					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>34.0503</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

### 3.6 Architectural Coating - 2023

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1005	0.0604	0.8686	2.7800e-003	0.3018	2.1000e-003	0.3039	0.0800	1.9400e-003	0.0820		277.5412	277.5412	6.5500e-003		277.7050
<b>Total</b>	<b>0.1005</b>	<b>0.0604</b>	<b>0.8686</b>	<b>2.7800e-003</b>	<b>0.3018</b>	<b>2.1000e-003</b>	<b>0.3039</b>	<b>0.0800</b>	<b>1.9400e-003</b>	<b>0.0820</b>		<b>277.5412</b>	<b>277.5412</b>	<b>6.5500e-003</b>		<b>277.7050</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.8587					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>34.0503</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

3201 MUSD ES15 - South Coast AQMD Air District, Summer

**3.6 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1005	0.0604	0.8686	2.7800e-003	0.3018	2.1000e-003	0.3039	0.0800	1.9400e-003	0.0820		277.5412	277.5412	6.5500e-003		277.7050
<b>Total</b>	<b>0.1005</b>	<b>0.0604</b>	<b>0.8686</b>	<b>2.7800e-003</b>	<b>0.3018</b>	<b>2.1000e-003</b>	<b>0.3039</b>	<b>0.0800</b>	<b>1.9400e-003</b>	<b>0.0820</b>		<b>277.5412</b>	<b>277.5412</b>	<b>6.5500e-003</b>		<b>277.7050</b>

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**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9463	8.5202	26.4500	0.1045	8.8839	0.0710	8.9549	2.3769	0.0660	2.4429		10,648.54	10,648.54	0.4642		10,660.14
												57	57			99
Unmitigated	1.9463	8.5202	26.4500	0.1045	8.8839	0.0710	8.9549	2.3769	0.0660	2.4429		10,648.54	10,648.54	0.4642		10,660.14
												57	57			99

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
City Park	5.10	61.43	45.20	54,319	54,319	54,319	54,319
Elementary School	1,161.00	0.00	0.00	2,858,037	2,858,037	2,858,037	2,858,037
Parking Lot	0.00	0.00	0.00				
Total	1,166.10	61.43	45.20	2,912,356	2,912,356	2,912,356	2,912,356

## 4.3 Trip Type Information

Land Use	Miles				Trip %				Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00			66	28	6
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00			63	25	12
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00			0	0	0

## 4.4 Fleet Mix

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Elementary School	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
NaturalGas Mitigated	0.0179	0.1624	0.1364	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813
NaturalGas Unmitigated	0.0179	0.1624	0.1364	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813



## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	kBTU/yr	lb/day											lb/day				
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Elementary School	1656	0.0179	0.1624	0.1364	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0179</b>	<b>0.1624</b>	<b>0.1364</b>	<b>9.7000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>		<b>194.8235</b>	<b>194.8235</b>	<b>3.7300e-003</b>	<b>3.5700e-003</b>	<b>195.9813</b>

**Mitigated**

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	kBTU/yr	lb/day											lb/day				
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Elementary School	1.656	0.0179	0.1624	0.1364	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0179</b>	<b>0.1624</b>	<b>0.1364</b>	<b>9.7000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>		<b>194.8235</b>	<b>194.8235</b>	<b>3.7300e-003</b>	<b>3.5700e-003</b>	<b>195.9813</b>

**6.0 Area Detail**

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6160	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572
Unmitigated	1.6160	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572

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**6.2 Area by SubCategory**Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1855					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0104	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572
Total	1.6160	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572

## 3201 MUSD ES15 - South Coast AQMD Air District, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1855					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0104	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004		0.2413	0.2413	6.3000e-004		0.2572
<b>Total</b>	<b>1.6160</b>	<b>1.0200e-003</b>	<b>0.1126</b>	<b>1.0000e-005</b>	<b>4.0000e-004</b>	<b>4.0000e-004</b>	<b>4.0000e-004</b>	<b>4.0000e-004</b>	<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>0.2413</b>	<b>0.2413</b>	<b>6.3000e-004</b>		<b>0.2572</b>

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**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

3201 MUSD ES15 - South Coast AQMD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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3201 MUSD ES15 - South Coast AQMD Air District, Winter

3201 MUSD ES15  
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	900.00	Student	12.50	69,000.00	0
Parking Lot	200.00	Space	3.10	135,000.00	0
City Park	2.70	Acre	2.70	117,612.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2023

Utility Company      Southern California Edison

CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 12.5 developed acres. All dimentions are preliminary.

Construction Phase - No demo phase.

Construction Off-road Equipment Mitigation -

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	75,243.03	69,000.00
tblLandUse	LandUseSquareFeet	80,000.00	135,000.00
tblLandUse	LotAcreage	1.73	12.50
tblLandUse	LotAcreage	1.80	3.10

**2.0 Emissions Summary**

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
2022	3.7116	38.8976	29.6665	0.0641	18.2675	1.6365	19.8815	9.9840	1.5056	11.4689	0.0000	6,211.117 <sub>8</sub>	6,211.117 <sub>8</sub>	1.9492	0.0000	6,259.848 <sub>5</sub>
2023	34.1608	18.3196	21.2543	0.0526	1.8482	0.7145	2.5627	0.4978	0.6722	1.1700	0.0000	5,201.076 <sub>9</sub>	5,201.076 <sub>9</sub>	0.7174	0.0000	5,218.988 <sub>6</sub>
Maximum	34.1608	38.8976	29.6665	0.0641	18.2675	1.6365	19.8815	9.9840	1.5056	11.4689	0.0000	6,211.117 <sub>8</sub>	6,211.117 <sub>8</sub>	1.9492	0.0000	6,259.848 <sub>5</sub>

**Mitigated Construction**

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
2022	3.7116	38.8976	29.6665	0.0641	8.3310	1.6365	9.9450	4.5222	1.5056	6.0071	0.0000	6,211.117 <sub>8</sub>	6,211.117 <sub>8</sub>	1.9492	0.0000	6,259.848 <sub>5</sub>
2023	34.1608	18.3196	21.2543	0.0526	1.8482	0.7145	2.5627	0.4978	0.6722	1.1700	0.0000	5,201.076 <sub>9</sub>	5,201.076 <sub>9</sub>	0.7174	0.0000	5,218.988 <sub>6</sub>
Maximum	34.1608	38.8976	29.6665	0.0641	8.3310	1.6365	9.9450	4.5222	1.5056	6.0071	0.0000	6,211.117 <sub>8</sub>	6,211.117 <sub>8</sub>	1.9492	0.0000	6,259.848 <sub>5</sub>

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Percent Reduction	0.00	0.00	0.00	0.00	49.40	0.00	44.27	52.11	0.00	43.21	0.00	0.00	0.00	0.00	0.00	0.00

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6160	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572
Energy	0.0179	0.1624	0.1364	9.7000e-004	0.0123	0.0123	0.0123	0.0123	0.0123	0.0123	194.8235	194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813
Mobile	1.8435	8.6910	24.6282	0.0990	8.8839	0.0713	8.9553	2.3769	0.0663	2.4432	10,089.19	10,089.19	10,089.19	0.4628		10,100.76
<b>Total</b>	<b>3.4774</b>	<b>8.8544</b>	<b>24.8771</b>	<b>0.0999</b>	<b>8.8839</b>	<b>0.0841</b>	<b>8.9680</b>	<b>2.3769</b>	<b>0.0791</b>	<b>2.4560</b>	<b>10,284.26</b>	<b>10,284.26</b>	<b>10,284.26</b>	<b>0.4671</b>	<b>3.5700e-003</b>	<b>10,297.00</b>
											27	27	27			51

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6160	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572
Energy	0.0179	0.1624	0.1364	9.7000e-004	0.0123	0.0123	0.0123	0.0123	0.0123	0.0123	194.8235	194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813
Mobile	1.8435	8.6910	24.6282	0.0990	8.8839	0.0713	8.9553	2.3769	0.0663	2.4432	10,089.19	10,089.19	10,089.19	0.4628		10,100.76
<b>Total</b>	<b>3.4774</b>	<b>8.8544</b>	<b>24.8771</b>	<b>0.0999</b>	<b>8.8839</b>	<b>0.0841</b>	<b>8.9680</b>	<b>2.3769</b>	<b>0.0791</b>	<b>2.4560</b>	<b>10,284.26</b>	<b>10,284.26</b>	<b>10,284.26</b>	<b>0.4671</b>	<b>3.5700e-003</b>	<b>10,297.00</b>
											27	27	27			51



## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/25/2022	5	30	
3	Building Construction	Building Construction	2/26/2022	4/21/2023	5	300	
4	Paving	Paving	4/22/2023	5/19/2023	5	20	
5	Architectural Coating	Architectural Coating	5/20/2023	6/16/2023	5	20	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 75****Acres of Paving: 3.1****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 103,500; Non-Residential Outdoor: 34,500; Striped Parking Area: 8,100 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	135.00	53.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Site Preparation - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

**3.2 Site Preparation - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0781	0.0487	0.5625	1.8000e-003	0.2012	1.4400e-003	0.2026	0.0534	1.3200e-003	0.0547		179.7366	179.7366	4.5100e-003		179.8494
<b>Total</b>	<b>0.0781</b>	<b>0.0487</b>	<b>0.5625</b>	<b>1.8000e-003</b>	<b>0.2012</b>	<b>1.4400e-003</b>	<b>0.2026</b>	<b>0.0534</b>	<b>1.3200e-003</b>	<b>0.0547</b>		<b>179.7366</b>	<b>179.7366</b>	<b>4.5100e-003</b>		<b>179.8494</b>

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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126	1.4836	1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>8.1298</b>	<b>1.6126</b>	<b>9.7424</b>	<b>4.4688</b>	<b>1.4836</b>	<b>5.9524</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

**3.2 Site Preparation - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0781	0.0487	0.5625	1.8000e-003	0.2012	1.4400e-003	0.2026	0.0534	1.3200e-003	0.0547		179.7366	179.7366	4.5100e-003		179.8494
<b>Total</b>	<b>0.0781</b>	<b>0.0487</b>	<b>0.5625</b>	<b>1.8000e-003</b>	<b>0.2012</b>	<b>1.4400e-003</b>	<b>0.2026</b>	<b>0.0534</b>	<b>1.3200e-003</b>	<b>0.0547</b>		<b>179.7366</b>	<b>179.7366</b>	<b>4.5100e-003</b>		<b>179.8494</b>

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**3.3 Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	1.5041	1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>8.6733</b>	<b>1.6349</b>	<b>10.3082</b>	<b>3.5965</b>	<b>1.5041</b>	<b>5.1006</b>		<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

**3.3 Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0868	0.0541	0.6250	2.0000e-003	0.2236	1.6000e-003	0.2252	0.0593	1.4700e-003	0.0608		199.7073	199.7073	5.0100e-003		199.8326
<b>Total</b>	<b>0.0868</b>	<b>0.0541</b>	<b>0.6250</b>	<b>2.0000e-003</b>	<b>0.2236</b>	<b>1.6000e-003</b>	<b>0.2252</b>	<b>0.0593</b>	<b>1.4700e-003</b>	<b>0.0608</b>		<b>199.7073</b>	<b>199.7073</b>	<b>5.0100e-003</b>		<b>199.8326</b>

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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	1.5041	1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
<b>Total</b>	<b>3.6248</b>	<b>38.8435</b>	<b>29.0415</b>	<b>0.0621</b>	<b>3.9030</b>	<b>1.6349</b>	<b>5.5379</b>	<b>1.6184</b>	<b>1.5041</b>	<b>3.1225</b>	<b>0.0000</b>	<b>6,011.4105</b>	<b>6,011.4105</b>	<b>1.9442</b>		<b>6,060.0158</b>

3201 MUSD ES15 - South Coast AQMD Air District, Winter

**3.3 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0868	0.0541	0.6250	2.0000e-003	0.2236	1.6000e-003	0.2252	0.0593	1.4700e-003	0.0608		199.7073	199.7073	5.0100e-003		199.8326
<b>Total</b>	<b>0.0868</b>	<b>0.0541</b>	<b>0.6250</b>	<b>2.0000e-003</b>	<b>0.2236</b>	<b>1.6000e-003</b>	<b>0.2252</b>	<b>0.0593</b>	<b>1.4700e-003</b>	<b>0.0608</b>		<b>199.7073</b>	<b>199.7073</b>	<b>5.0100e-003</b>		<b>199.8326</b>

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**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1456	4.7791	1.2693	0.0130	0.3392	9.1100e-003	0.3483	0.0977	8.7100e-003	0.1064		1,389.6294	1,389.6294	0.0903		1,391.8856
Worker	0.5855	0.3654	4.2184	0.0135	1.5090	0.0108	1.5198	0.4002	9.9400e-003	0.4101		1,348.0243	1,348.0243	0.0338		1,348.8703
<b>Total</b>	<b>0.7312</b>	<b>5.1445</b>	<b>5.4877</b>	<b>0.0265</b>	<b>1.8482</b>	<b>0.0199</b>	<b>1.8681</b>	<b>0.4978</b>	<b>0.0187</b>	<b>0.5165</b>		<b>2,737.6537</b>	<b>2,737.6537</b>	<b>0.1241</b>		<b>2,740.7559</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>



3201 MUSD ES15 - South Coast AQMD Air District, Winter

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1456	4.7791	1.2693	0.0130	0.3392	9.1100e-003	0.3483	0.0977	8.7100e-003	0.1064		1,389.6294	1,389.6294	0.0903		1,391.8856
Worker	0.5855	0.3654	4.2184	0.0135	1.5090	0.0108	1.5198	0.4002	9.9400e-003	0.4101		1,348.0243	1,348.0243	0.0338		1,348.8703
<b>Total</b>	<b>0.7312</b>	<b>5.1445</b>	<b>5.4877</b>	<b>0.0265</b>	<b>1.8482</b>	<b>0.0199</b>	<b>1.8681</b>	<b>0.4978</b>	<b>0.0187</b>	<b>0.5165</b>		<b>2,737.6537</b>	<b>2,737.6537</b>	<b>0.1241</b>		<b>2,740.7559</b>

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**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1087	3.6043	1.1224	0.0126	0.3392	4.2800e-003	0.3435	0.0977	4.0900e-003	0.1017		1,348.1168	1,348.1168	0.0781		1,350.0702
Worker	0.5522	0.3305	3.8879	0.0130	1.5090	0.0105	1.5195	0.4002	9.6800e-003	0.4099		1,297.7502	1,297.7502	0.0305		1,298.5124
<b>Total</b>	<b>0.6609</b>	<b>3.9347</b>	<b>5.0103</b>	<b>0.0256</b>	<b>1.8482</b>	<b>0.0148</b>	<b>1.8630</b>	<b>0.4978</b>	<b>0.0138</b>	<b>0.5116</b>		<b>2,645.8670</b>	<b>2,645.8670</b>	<b>0.1086</b>		<b>2,648.5825</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

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**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1087	3.6043	1.1224	0.0126	0.3392	4.2800e-003	0.3435	0.0977	4.0900e-003	0.1017		1,348.1168	1,348.1168	0.0781		1,350.0702
Worker	0.5522	0.3305	3.8879	0.0130	1.5090	0.0105	1.5195	0.4002	9.6800e-003	0.4099		1,297.7502	1,297.7502	0.0305		1,298.5124
<b>Total</b>	<b>0.6609</b>	<b>3.9347</b>	<b>5.0103</b>	<b>0.0256</b>	<b>1.8482</b>	<b>0.0148</b>	<b>1.8630</b>	<b>0.4978</b>	<b>0.0138</b>	<b>0.5116</b>		<b>2,645.8670</b>	<b>2,645.8670</b>	<b>0.1086</b>		<b>2,648.5825</b>

**3.5 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.4061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4388</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

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**3.5 Paving - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4320	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		144.1945	144.1945	3.3900e-003		144.2792
<b>Total</b>	<b>0.0614</b>	<b>0.0367</b>	<b>0.4320</b>	<b>1.4500e-003</b>	<b>0.1677</b>	<b>1.1700e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0800e-003</b>	<b>0.0455</b>		<b>144.1945</b>	<b>144.1945</b>	<b>3.3900e-003</b>		<b>144.2792</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 <sub>1</sub>	2,207.584 <sub>1</sub>	0.7140		2,225.433 <sub>6</sub>
Paving	0.4061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4388</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.584<sub>1</sub></b>	<b>2,207.584<sub>1</sub></b>	<b>0.7140</b>		<b>2,225.433<sub>6</sub></b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

**3.5 Paving - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4320	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		144.1945	144.1945	3.3900e-003		144.2792
<b>Total</b>	<b>0.0614</b>	<b>0.0367</b>	<b>0.4320</b>	<b>1.4500e-003</b>	<b>0.1677</b>	<b>1.1700e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0800e-003</b>	<b>0.0455</b>		<b>144.1945</b>	<b>144.1945</b>	<b>3.3900e-003</b>		<b>144.2792</b>

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**3.6 Architectural Coating - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.8587					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>34.0503</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

**3.6 Architectural Coating - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1105	0.0661	0.7776	2.6000e-003	0.3018	2.1000e-003	0.3039	0.0800	1.9400e-003	0.0820		259.5500	259.5500	6.1000e-003		259.7025
<b>Total</b>	<b>0.1105</b>	<b>0.0661</b>	<b>0.7776</b>	<b>2.6000e-003</b>	<b>0.3018</b>	<b>2.1000e-003</b>	<b>0.3039</b>	<b>0.0800</b>	<b>1.9400e-003</b>	<b>0.0820</b>		<b>259.5500</b>	<b>259.5500</b>	<b>6.1000e-003</b>		<b>259.7025</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.8587					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708	0.0708	0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>34.0503</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

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**3.6 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1105	0.0661	0.7776	2.6000e-003	0.3018	2.1000e-003	0.3039	0.0800	1.9400e-003	0.0820		259.5500	259.5500	6.1000e-003		259.7025
<b>Total</b>	<b>0.1105</b>	<b>0.0661</b>	<b>0.7776</b>	<b>2.6000e-003</b>	<b>0.3018</b>	<b>2.1000e-003</b>	<b>0.3039</b>	<b>0.0800</b>	<b>1.9400e-003</b>	<b>0.0820</b>		<b>259.5500</b>	<b>259.5500</b>	<b>6.1000e-003</b>		<b>259.7025</b>

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**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8435	8.6910	24.6282	0.0990	8.8839	0.0713	8.9553	2.3769	0.0663	2.4432	10,089.19	78	10,089.19	0.4628		10,100.76
Unmitigated	1.8435	8.6910	24.6282	0.0990	8.8839	0.0713	8.9553	2.3769	0.0663	2.4432	10,089.19	78	10,089.19	0.4628		10,100.76

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
City Park	5.10	61.43	45.20	54,319	54,319		54,319
Elementary School	1,161.00	0.00	0.00	2,858,037	2,858,037		2,858,037
Parking Lot	0.00	0.00	0.00				
Total	1,166.10	61.43	45.20	2,912,356	2,912,356		2,912,356

## 4.3 Trip Type Information

Land Use	Miles				Trip %				Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00			66	28	6
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00			63	25	12
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00			0	0	0

## 4.4 Fleet Mix



## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Elementary School	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
NaturalGas Mitigated	0.0179	0.1624	0.1364	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813
NaturalGas Unmitigated	0.0179	0.1624	0.1364	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813

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**5.2 Energy by Land Use - NaturalGas****Unmitigated**

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	kBTU/yr																
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Elementary School	1656	0.0179	0.1624	0.1364	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0179</b>	<b>0.1624</b>	<b>0.1364</b>	<b>9.7000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>		<b>194.8235</b>	<b>194.8235</b>	<b>3.7300e-003</b>	<b>3.5700e-003</b>	<b>195.9813</b>

**Mitigated**

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	kBTU/yr																
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Elementary School	1.656	0.0179	0.1624	0.1364	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.8235	194.8235	3.7300e-003	3.5700e-003	195.9813
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0179</b>	<b>0.1624</b>	<b>0.1364</b>	<b>9.7000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>		<b>194.8235</b>	<b>194.8235</b>	<b>3.7300e-003</b>	<b>3.5700e-003</b>	<b>195.9813</b>

**6.0 Area Detail**

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6160	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572
Unmitigated	1.6160	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572

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**6.2 Area by SubCategory**Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1855					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0104	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572
Total	1.6160	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	0.2413	0.2413	0.2413	6.3000e-004		0.2572

## 3201 MUSD ES15 - South Coast AQMD Air District, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1855					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0104	1.0200e-003	0.1126	1.0000e-005	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004	4.0000e-004		0.2413	0.2413	6.3000e-004		0.2572
<b>Total</b>	<b>1.6160</b>	<b>1.0200e-003</b>	<b>0.1126</b>	<b>1.0000e-005</b>	<b>4.0000e-004</b>	<b>4.0000e-004</b>	<b>4.0000e-004</b>	<b>4.0000e-004</b>	<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>0.2413</b>	<b>0.2413</b>	<b>6.3000e-004</b>		<b>0.2572</b>

A-80

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

3201 MUSD ES15 - South Coast AQMD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**11.0 Vegetation**

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## **APPENDIX B**

### **Cultural Resources Report**

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## Cultural and Paleontological Resources Assessment

# Proposed Menifee USD Elementary School

City of Menifee, Riverside County, California

**Prepared for:**

**Menifee Union School District**  
29775 Haun Road  
Menifee, CA 92586

**Prepared by:**

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Duke CRM Project Number: C-0327



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### Appendices

Appendix A:	Paleontological Records Search Results
Appendix B:	Alternative Paleontological Mitigation Measures
Appendix C:	DUKE C R M Staff Resumes

**ABBREVIATIONS**

B.A.....	Bachelor of Arts
CRHR .....	California Register of Historical Resources
CEQA .....	California Environmental Quality Act of 1970
CLIENT.....	Meniffee Union School District
COUNTY .....	County of Riverside
DUKE CRM .....	Duke Cultural Resources Management
EIC.....	Eastern Information Center
M.A. ....	Master of Arts
M.S. ....	Master of Science
MLD .....	Most Likely Descendant
MUSD.....	Meniffee Union School District
NAHC .....	Native American Heritage Commission
NRHP .....	National Register of Historic Places
PRC .....	Public Resources Code
PROJECT .....	Proposed Meniffee USD Elementary School Project
RPA .....	Registered Professional Archaeologist
WSC .....	Western Science Center

## MANAGEMENT SUMMARY

Duke Cultural Resources Management, LLC (DUKE CRM) is under contract to the Menifee Union School district (MUSD) to provide cultural and paleontological resources services for the proposed MUSD Elementary School property on the northwest corner of Briggs Road and Wickerd Road, Menifee, Riverside County, California. The property is approximately 46 acres. The purpose of this report is to document compliance with the California Environmental Quality Act (CEQA) with regard to cultural and paleontological resources.

The cultural and paleontological resources assessment included a records search for cultural resources at the Eastern Information Center (EIC) and a records search for paleontological resources at the Western Science Center (WSC). In addition, a field survey was conducted to identify any cultural and/or paleontological resources visible on the surface of the Project area.

The results of the EIC records search indicated the Project area had not been previously investigated for the presence of cultural resources and that no previously recorded cultural resources were identified within or directly adjacent to the Project area. The records of the WSC indicate that there are no known fossil specimens within or adjacent to the Project area. However, below five feet from the current surface older Pleistocene alluvium is likely present and is considered to have a high potential to yield significant fossils of extinct animals from the Ice Age as well as fossil plant remains.

The records search and field survey did not identify cultural (archaeological, historic built environment or Traditional Cultural Resources) or paleontological resources within or adjacent to the Project area. Research conducted indicates that there are no documented cultural resources recorded within 1/3 mile of the Project. However, a moderate sensitivity for archaeological resources (prehistoric and historic) exists as the Project area is in or near a water source with potential to have been utilized by Native Americans and in the historic era. Based on current Project design and research and survey findings, neither cultural nor paleontological monitoring is recommended.

Research indicates that there is a high sensitivity for paleontological resources below approximately five feet in depth within the Project area. However, it is not anticipated that ground disturbance below six feet will be required for the Project and is therefore unlikely to impact paleontological resources. If paleontological discoveries are made during construction, it is recommended that work in the immediate vicinity of the find shall be halted and a qualified paleontologist shall assess the nature and significance of the find and make recommendations.

A change in Project plans that include excavation below six feet this could result in a potentially significant impact to paleontological resources according to CEQA. Should excavation exceed six feet, it is recommended a qualified paleontologist be retained to conduct paleontological monitoring in order to address potential impacts to paleontological resources to a level that is less than significant under CEQA (see Appendix B for alternative mitigation measures).

If archaeological discoveries are made during construction, it is recommended that work in the immediate vicinity of the find be halted and a qualified archaeologist be retained to assess the nature and significance of the find and make recommendations prior to further disturbance. If the discovery is prehistoric in age, it is recommended that local Native Americans representatives be consulted. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or their authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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## INTRODUCTION

At the request of Menifee Union School District (MUSD or CLIENT), Duke Cultural Resources Management, LLC (DUKE CRM) has prepared a cultural and paleontological resources assessment for the proposed MUSD Elementary School (Project) located on the northwest corner of Briggs Road and Wickerd Road, Menifee, Riverside County, California 92584 (Figure 1 – Project Vicinity Map). The Project area is approximately 46 acres. The purpose of this report is to document compliance with the California Environmental Quality Act (CEQA) with regard to cultural and paleontological resources.

### Project Description

The Project entails the construction of the MUSD Elementary School No. 15 on three parcels totaling approximately 46 acres (Accessor's Parcel Numbers 372-170-030, 372-180-005, and 372-180-007). The desirable location of the Elementary school is approximately 9.28 acres in the southwestern corner of the Project boundary. The remaining 36.87 acres is on higher ground and will be the main area for grading. The Project is located within the jurisdiction of the City of Menifee and is zoned as Light Agriculture (A-1). Historically, the Project has never been developed but has been used over the years for dry land grain (wheat) farming (EAI 2020). No known grading activities have been previously conducted at the Project, other than tilling for dry land grain farming (EAI 2020). Additionally, there is no known artificial fill material imported to the site (EAI 2020).

The Project is currently a vacant lot situated north of Mira Park across Wickerd road and southwest of the abandoned Leon Mine located across Briggs Road. The Project is located within Township 6 South, and Range 3 West, in the northeast ¼ of Section 13 (Figure 2 – Project Location Map, Figure 3 – Project Aerial). The Project is depicted on the USGS *Romoland, Calif.* 7.5 Minute Quadrangle map.

### Regulatory Environment

#### CEQA

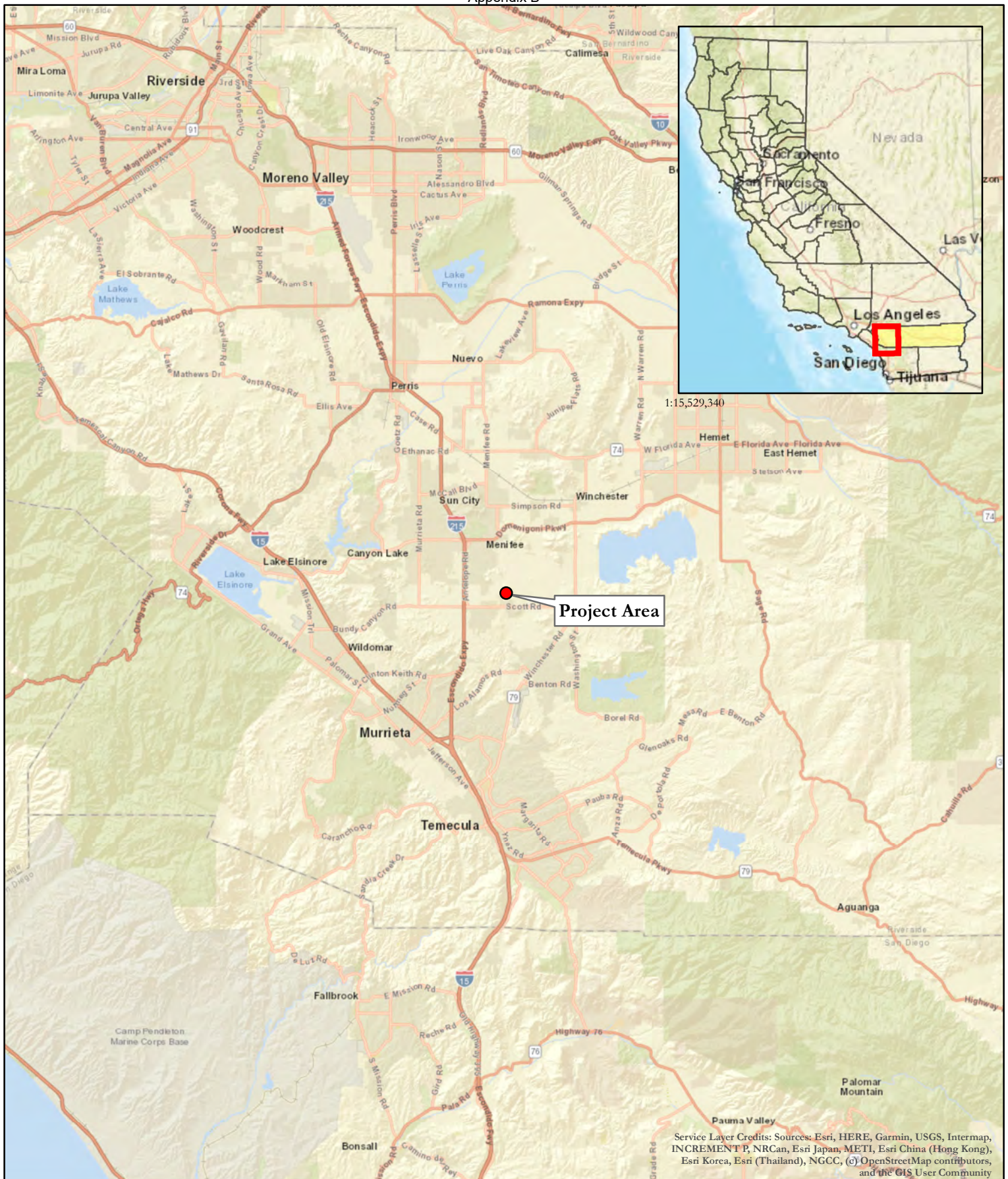
CEQA Guidelines define a *historical resource* as a resource listed in or determined eligible for listing in the California Register of Historical Resources (CRHR) or eligible for the National Register of Historic Places (NRHP). This includes cultural resources that have been determined eligible for a local register or through a local historic resources survey. A resource may be considered potentially eligible for listing in the CRHR if it meets any of the four criteria listed below and retains sufficient integrity:

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

To be considered a *historical resource* a cultural resource should also retain integrity of location, design, setting, materials, workmanship, feeling and/or association. As used here, integrity is defined as the ability of a historical resource to convey its significance. To determine which of these factors are most important will depend on the property being evaluated and which particular CRHR criterion under which the resource is considered eligible for listing.

Furthermore, CEQA necessitates that the Lead Agency consider whether the Project will significantly affect *unique archaeological resources* that may be ineligible for listing in the CRHR and to avoid these unique archaeological resources when possible or mitigate impacts to less than significant levels (PRC 21083.2). As stated by CEQA, a *unique archaeological resource* is an archaeological artifact, object, or site which clearly demonstrates with a high probability that it meets-without merely adding to the current body of knowledge-any of the following criteria:



**Figure 1 - Project Vicinity**

Menifee Union School District Elementary School, C-0327

● Project Area



0 5 10  
Miles

1 inch = 6 miles

1:360,000





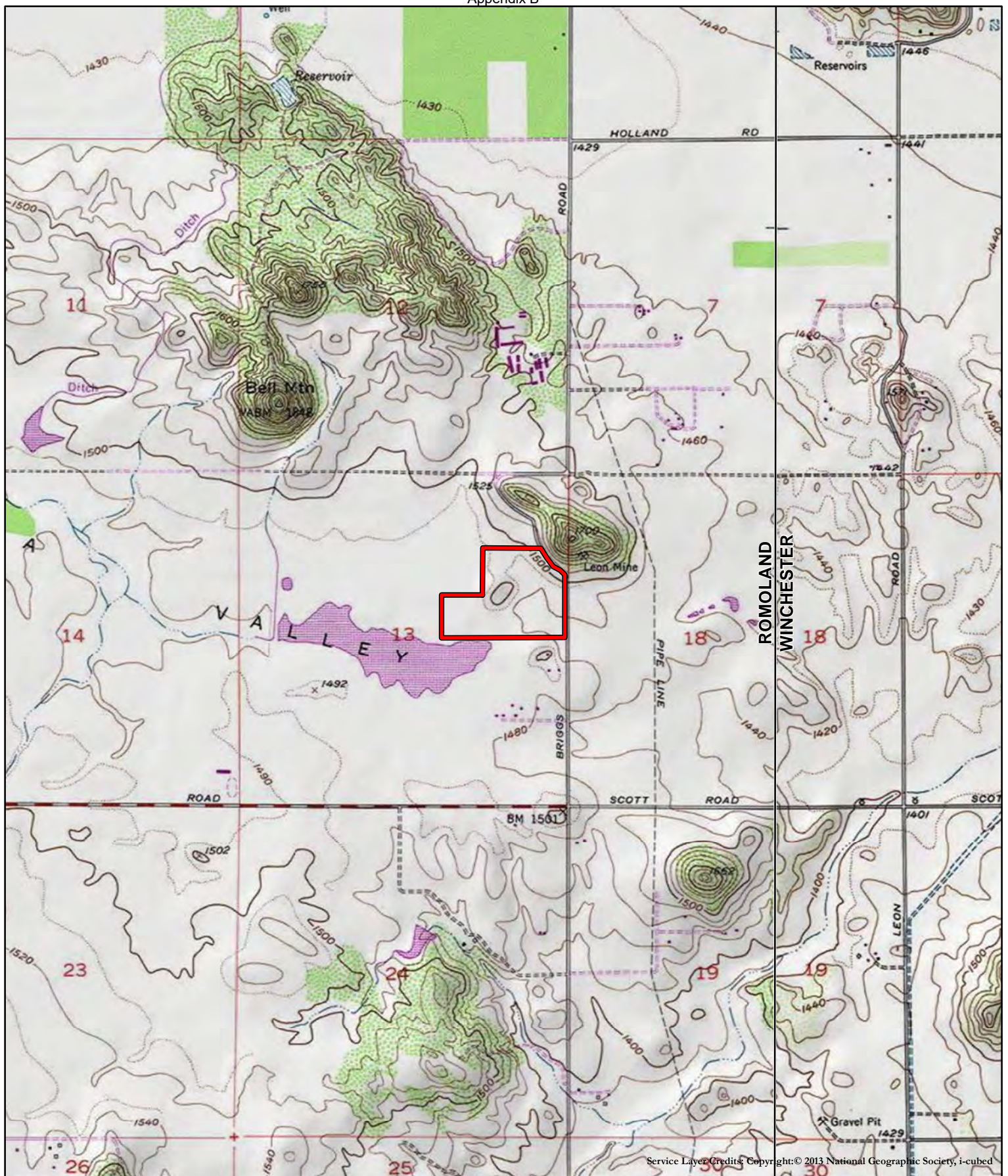


Figure 2 - Project Location

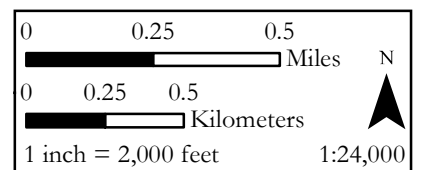
Menifee Union School District Elementary School, C-0327



**DUKE**  
**CRM**

- Project Area
- USGS 7.5' Quads

Romoland, Calif USGS 7.5'  
T6S R3W Section 13







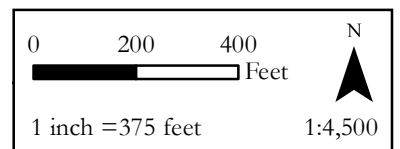
**Map 3 - Project Aerial**

Menifee Union School District Elementary School, C-0327



**DUKE**  
**CRM**

 Project Area



1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

## NATURAL & CULTURAL SETTING

### Geology and Paleontology

The Project is located in Menifee Valley at an elevation ranging from 1,485 to 1,500 feet above mean sea level. The surface geology of the property is old alluvial fan deposits from the Pleistocene Epoch (2.5 million years ago to today) and metasandstone from the Mesozoic Era (252 to 66 million years ago). The metasandstone is not considered sensitive for paleontology because the processes of metamorphism would likely destroy fossils. However, old alluvial fan deposits are considered highly sensitive for paleontological resources starting at 5 feet below the surface (Riverside County TLMA GIS 2014). Elsewhere throughout the Inland Empire, older Pleistocene alluvial sediments have been reported to yield significant fossils of extinct animals from the Ice Age including mammoths, mastodons, ground sloths, dire wolves, short-faced bears, saber-toothed cats, large and small horses, large and small camels, and bison (Jefferson 1991, Reynolds and Reynolds 1991, Scott and Cox 2008, Springer et al. 2009, 2010, Scott 2010) as well as fossil plant remains (Reynolds and Reynolds 1991; Anderson et al. 2002) (Riverside County TLMA GIS 2014 and Figure 4). There is a high potential to encounter paleontological resources below five feet in depth (Figure 4 “High B”).

The Project area is capped by Holocene fluvial deposits and within the 100-year flood zone, which both indicate that the area was in or near a water source in prehistory. This increases the likelihood for the presence of buried prehistoric archaeological resources.

### Cultural

#### *Prehistory*

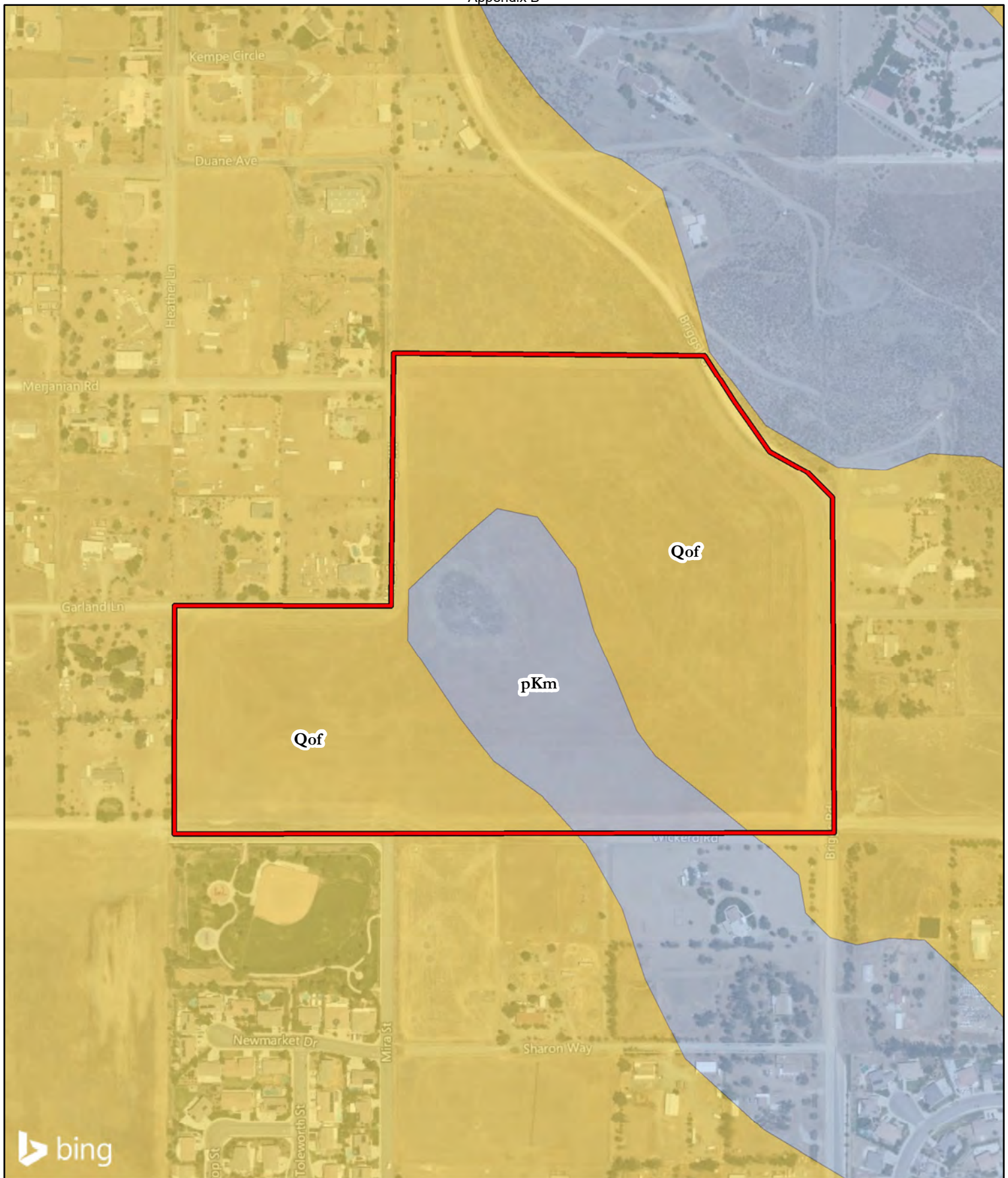
There are many chronological sequences proposed for southern California. However, two primary regional syntheses are commonly used in the archaeological literature. The first, advanced by Wallace (1955), defines four cultural horizons for the southern California coastal province, each with characteristic local variations:

- I. Early Man (~9000–8500 B.P.)
- II. Milling Stone (8500–4000 B.P.)
- III. Intermediate (4000–1500 B.P.)
- IV. Late Prehistoric (1500~200 B.P.)

Warren and Crabtree employ an approach based on Traditions that reflect changes in ecological adaptations to the deserts of southern California, defining five traditions with concomitant chronologies in discussing the region’s prehistory (1986):

- I. Lake Mojave (12000–7000 B.P.)
- II. Pinto (7000–4000 B.P.)
- III. Gypsum (4000–1500 B.P.)
- IV. Saratoga Springs (1500–800 B.P.)
- V. Shoshonean (800~200 B.P.)





**Figure 4 - Project Geology**


Menifee Union School District Elementary School, C-0327




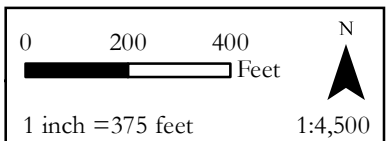
**DUKE  
CRM**

 Project Area

Geology from Morton and Miller (2006):

 Qof: old alluvial fan deposits

 pKm: Cretaceous and Pre-Cretaceous metamorphic formations of sedimentary and volcanic origin



Changes in settlement pattern and subsistence focus are viewed, in large part, as cultural adaptations to a changing environment, beginning with the gradual environmental warming in the late Pleistocene, the desiccation of the desert pluvial lakes during the early Holocene, the short return to pluvial conditions during the middle Holocene, and the general warming and drying trend, with periodic reversals that continues to this day.

### ***Ethnography***

The Project is located within the traditional territory of the Luiseño Indians. The territory of the Luiseño extended along the coast south from Agua Hedionda Lagoon, northwestward to Aliso Creek just north of San Juan Capistrano, and eastward to the Elsinore Valley, Inland Empire and Palomar Mountain. Like other Native American groups in southern California, the Luiseño caught and collected seasonally available food resources and led a semi-sedentary lifestyle. Luiseño villages were generally located in valley bottoms near a reliable water source. The Luiseño took advantage of the available resources through seasonal rounds from the coast to the inland mountains, though village populations predominantly sedentary occupying the village for the entire year (Oxendine 1983:57). Subsistence was based primarily on seeds from local grasses, manzanita, sunflower, sage, chía, and pine nuts and acorns. Seeds were dried, ground, and cooked into a mush.

Seasonal camps were established along the coast and near bays and estuaries to gather shellfish and hunt waterfowl (Hudson 1971). Game animals such as deer, rabbit, jackrabbit, wood rat, mice, antelope, and many types of birds were regularly hunted (Bean and Shipek 1978). In addition, the Luiseño utilized fire for crop management and communal rabbit drives (Bean and Shipek 1978). Small seasonal habitation sites in the area would contain quantities of fire affected rock, some burned bone, and small amounts of ground and flaked stone tools. They might be found as open sites atop knolls or ridges, or in protected areas near streams or in rock shelters.

The Luiseño community was the focus of family life. The Luiseño had a well-developed sense of ownership (White 1963:122), and their concept of property rights included the idea of private property. Property rights covered items and land owned by the village as well as items such as houses, gardens, ritual equipment, trade beads, eagle nests, and songs that were owned by individuals. Luiseño villages were politically independent and were administered by a chief through patrilineal inheritance.

### ***History***

In California, the historic era is generally divided into three periods: the Spanish or Mission era (1769 to 1821), the Mexican or Rancho era (1821 to 1848), and the American era (1848 to present). The Project area was only loosely utilized during the Spanish and Mexican era. Temecula Rancho, the closest Mexican era rancho to the Project area covered roughly 26,600 acres with the northeast boundary located approximately five miles southwest of the Project area.

During the mid-1800s the Menifee area was a small farming community. In the early 1880s a quartz lode was discovered by miner Luther Menifee Wilson in the valley named after him. By 1887 a post office was established (Gudde 1998). The area of Menifee remained largely unchanged with agriculture at its core until the early 1960s when Del Webb, a building contractor, envisioned the concept of an active retirement community as the neighborhood of Sun City where there would be a mix of residential and commercial activity (City of Menifee 2020).

## **METHODS**

### **Records Search**

The California Historic Resources Information System cultural resources records search was requested at the Eastern Information Center (EIC) located at the University of California, Riverside on April 20, 2020. The records search results are dated August 14, 2020 and were received by DUKE CRM on August 15, 2020. The records search included a review of all recorded historic and prehistoric archaeological sites within a one-mile radius of the Project area, as well as a review of known cultural resource investigation reports. In addition, the

California State Historic Property Data File was reviewed, which includes the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historical Landmarks, and California Points of Historical Interest. DUKE CRM internal archives and additional web-based resources were also inspected for relevant background information.

A paleontological records search through the Western Science Center (WSC) was conducted on September 24, 2020 and included a review of geologic maps of the Project and surrounding area.

## Field Survey

DUKE CRM Archaeologist Nicholas F. Hearth conducted an intensive level pedestrian survey in 15 meters transects on August 14, 2020 with the goal of identifying cultural and paleontological resources within the Project area. Access to these potential resources was through public roads. Cultural resources are defined as buildings, structures, sites, features and/or objects greater than 45 years of age.

## Personnel

The field survey was conducted by Nicholas F. Hearth. This report was prepared by Curt Duke and Nicholas F. Hearth with contributions by Mr. Ben Scherzer and Mr. Edgar Alvarez.

Mr. Duke is the Principal Archaeologist of DUKE C R M. Mr. Duke meets the professional qualifications of the Secretary of the Interior for prehistoric and historical archaeology and is a Registered Professional Archaeologist (RPA) who has worked in all phases of archaeology (archival research, field survey, testing and data recovery excavation, laboratory analysis, construction monitoring) since 1994. Mr. Duke holds a Master of Arts (M.A.) degree in Anthropology with an emphasis in archaeology from California State University, Fullerton and a Bachelor of Arts degree in Anthropology from the University of California, Santa Cruz. Mr. Duke has worked throughout southern and Northern California and parts of Arizona and Nevada (Appendix B).

Mr. Hearth holds a M.A. degree in Anthropology from the University of California, Riverside and has eight years of experience in California archaeology. He is a Registered Professional Archaeologist.

## RESULTS

### Records search

Results from the EIC indicates that there are no previously recorded cultural resources within or adjacent to the Project area. However, 32 cultural resources are located within one mile of the Project (Table 1). The closest of these resources is located approximately  $\frac{1}{3}$  mile from the proposed Project known as the Leon Mine Site (P-33-007709). The Leon Mine site and other nearby resources will not be impacted by the Project. There have been 58 cultural resource studies within a one-mile radius of the Project area and 15 additional studies which provide an overview of the cultural resources in the general Project vicinity. None of these studies involved the Project area. However, one survey abuts the Project to the south. This report, *An Archaeological Survey of The Scott Road North Project, Riverside County, California* was prepared by James D. Eighmey and John R. Cook with ASM Affiliates in 1999 (report no. RI-10046). No cultural resources were identified during this survey.

The cultural resource studies range from small to large surveys with few linear and monitoring studies. There are approximately 11 small acre surveys, 20 medium acre surveys, and 14 large acre surveys. Approximately 40 – 50 percent of the 1-mile radius has been surveyed, but none has been surveyed within the Project area. Additionally, there have been two linear surveys for water and transmission lines and two monitoring studies done within a 1-mile radius. Most of the cultural resource studies conducted are on and to the north of Garboni Road, as well as on and to the south of Scott Road. Many of the cultural resources found during the archaeological surveys have been prehistoric. There are approximately 28 prehistoric resources within the 1-mile radius and are mainly composed of milling features which are ubiquitous in the area. The four historic resources consist of a homestead cabin, a mining prospect, the Leon Mine site, and a trash scatter.



**Table 1 - Cultural Resources within 1 Mile of Project**

Resource No.	Resource Type	Description	CRHR Eligibility Status	Distance and Direction
P-33-000977	Prehistoric	Occupation site with midden containing numerous milling features, groundstone, and stone tools	Unknown	1 mile south
P-33-001079	Prehistoric	Milling feature site with large two-acre midden around spring	Unknown	1 mile south
P-33-001207	Prehistoric	One portable milling basin	Unknown	.75 miles northeast
P-33-001302	Historic	Trash scatter containing amethyst glass, shotshell USC-climax, milk glass, and various ceramic types	Unknown	.65 miles east
P-33-002007	Prehistoric	Milling complex and sparse lithic scatter	Unknown	.85 miles east
P-33-002028	Prehistoric	Milling feature with two milling slicks	Unknown	.65 miles northeast
P-33-002029	Prehistoric	Milling feature with one milling slick	Unknown	.63 miles northeast
P-33-002039	Prehistoric	Two milling features with multiple milling slicks	Unknown	.80 miles east
P-33-002156	Prehistoric	Multiple milling features and rock art site	Unknown	1 mile southwest
P-33-007709	Historic	A ruin with a single-story structure and mine shaft. Leon Mine Site	Unknown	.1 miles northeast
P-33-007715	Historic	Homestead cabin with a Vernacular Wood Frame architectural style	Unknown	.80 miles south
P-33-008673	Prehistoric	Milling feature with two milling slicks	Unknown	.90 miles southwest
P-33-008674	Prehistoric	Three milling features with a total of four milling slicks	Unknown	1 mile southwest
P-33-009745	Historic	A mining prospect with associated tailings pile	Unknown	.55 miles northwest
P-33-009746	Prehistoric	Isolated unifacial metate	Not Eligible	.42 miles northwest
P-33-011424	Prehistoric	Two milling features with two milling slicks	Unknown	1 mile southwest
P-33-011425	Prehistoric	Milling feature with one milling slick	Unknown	1 mile southwest
P-33-012297	Prehistoric	Isolated metate slick fragment of a milling feature	Unknown	.80 miles southeast
P-33-013376	Prehistoric	Milling feature with two milling slicks	Unknown	.85 miles north
P-33-013377	Prehistoric	Four milling features with a total of five milling slicks and two mortars	Unknown	.90 miles north
P-33-013378	Prehistoric	Two milling features with a total of three milling slicks	Unknown	.87 miles north
P-33-013379	Prehistoric	Milling feature with single mortar	Unknown	.80 miles north
P-33-013380	Prehistoric	Three milling features with a total of two milling slicks, one basin, and one mortar	Unknown	.78 miles north
P-33-013381	Prehistoric	Milling feature with one milling slick	Unknown	.75 miles north
P-33-013382	Prehistoric	Two milling features with a total of five milling slicks	Unknown	.77 miles north
P-33-020980	Prehistoric	Late Prehistoric seasonal campsite with milling features, stone tools, groundstone, and many cultural constituents	Not Eligible	.75 miles north
P-33-023948	Prehistoric	Isolated granitic unifacial mano	Not Eligible	.60 miles northeast
P-33-023949	Prehistoric	Isolated granitic biface mano	Not Eligible	.75 miles east
P-33-023950	Prehistoric	Isolated granitic metate fragment	Not Eligible	.75 miles east
P-33-023951	Prehistoric	Isolated granitic biface mano	Not Eligible	.78 miles east
P-33-023952	Prehistoric	Milling feature with one milling slick	Unknown	.74 miles east
P-33-023956	Prehistoric	Milling feature with twelve mortars	Unknown	.69 miles east

The 1896 plat map indicates that the introduction of the Leon Mine site in the northeast  $\frac{1}{4}$  of Section 13 (Bureau of Land Management 2020). A land patent was issued for the southeast  $\frac{1}{4}$  of Section 13 to Charles H. Briggs on April 24, 1820. No data of the Project area was noted. Additionally, a review of historic aerials reveals that no buildings have been previously constructed within the Project area (Historic Aerials 2020). A review of the USGS historical topographic map indicate little changes within the Project area from 1901 to 2012. The 1901 *Elsinore, Calif 30'* USGS quadrangle map shows a vacant lot and the presence of Leon Mine and Bell Mountain to the north of the Project location. Briggs Road is present, and Wickerd Road is present only eastward. USGS topo maps from 1942 to 1953 maps also show the Leon Mine, Bell Mountain, and Briggs Road; however, Wickerd Road is absent. Additionally, by 1953 a pipeline is shown east of the Project location. The 1973 *Romoland, Calif 7.5'* USGS quadrangle map illustrates buildings north of Maxine Lane about  $\frac{1}{2}$  mile from the Project area. There are also buildings south of the Project area by Eagin Road. The only changes in the 1979 *Romoland, Calif 7.5'* USGS quadrangle map from earlier maps is the presence of additional buildings to the north and south, as well as a manmade body of water abutting the Project area to the southwest. In 2012, the Project area remained a vacant lot and all roads, including Wickerd Road, are present.

The WSC did not identify previously identified paleontological resources within five miles of the property (Appendix A). However, it identified that old alluvial fan deposits underlying most of the Project area have a high sensitivity for paleontological resources

### Field Survey

An intensive pedestrian field survey was conducted by Nicholas F. Hearth on August 14, 2020. Survey transects were 15 meters apart. Approximately 30 percent of the Project area had excellent ground visibility (~75% to 100%), 35 percent had moderate ground visibility (~35% to 50%), and 35 percent had low to no ground visibility (0% to 20%). Vegetation within the Project area included non-native flora such as Russian thistle and wheat. Mr. Hearth observed that the entire Project area was chisel-plowed, most likely for fire abatement purposes. The area surrounding the Project area is a mix of farmland, residential properties, and Mira Park to the south. Additionally, the Project consists of rolling terrain with numerous shale and quartz bedrock throughout. No archaeological, historical, or paleontological resources were observed during the field survey as illustrated in photographs of the Project area (Figures 5 – 8).

## RECOMMENDATIONS

DUKE CRM assessed the proposed Project area for the presence of and potential impacts to cultural and paleontological resources according to the requirements of CEQA. Cultural and paleontological records searches and field survey did not identify cultural or paleontological resources within or adjacent to the Project area. Therefore, we conclude that the Project as currently designed is unlikely to impact cultural or paleontological resources. The research conducted indicates that although there are no archaeological resources recorded closer than  $\frac{1}{3}$  mile of the Project area, a moderate sensitivity for archaeological resources (prehistoric and historic) exists. This is due to the Project's location in or near a natural water source that could have been utilized by Native Americans and in the historic era.

Cultural and paleontological monitoring is not recommended. If Menifee USD Elementary School Project plans change to include excavation below six feet, impacts to significant paleontological resources may occur. It is recommended that excavation in excess of six feet below surface be monitored by a qualified paleontologist to mitigate potential impacts to paleontological resources to a level that is less than significant under CEQA.

We recommend that should cultural resources are discovered during construction, work in the immediate vicinity of the find should be halted and a qualified archaeologist retained to assess the nature and significance of the find and make recommendations before construction in that area is allowed to continue. If the discovery is prehistoric in nature, it is recommended that local Native Americans representatives be consulted.





**Figure 5:** Project area overview from southwest corner of Project boundary, view northwest.



**Figure 6:** Project area overview from northern edge of Project boundary, view south.





**Figure 7:** Project area overview from southern edge of Project boundary, view north.



**Figure 8:** Project area overview from eastern edge of Project boundary, view south.

DUKE CRM research indicates that there is a high sensitivity for paleontological resources below five feet in depth within the Project area. However, it is not anticipated that ground disturbance below six feet will be required. Therefore, it is not anticipated that the Project will have significant impact on paleontological resources. It is recommended that should paleontological discoveries be made during construction, work in the immediate vicinity of the find be halted and a qualified paleontologist retained to assess the nature and significance of the find and make recommendations for treatment.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.



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 2008 Late Pleistocene distribution of *Bison* (Mammalia; Artiodactyla) in the Mojave Desert of southern California and Nevada. *In* X. Wang and L.G. Barnes (eds.), *Geology and Vertebrate Paleontology of Western and Southern North America, Contributions in Honor of David P. Whistler*. Natural History Museum of Los Angeles County Science Series No. 41, p. 359 - 382.
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# **Appendix A**

## **Paleontological Records Search Results**



DUKE CRM  
Benjamin Scherzer  
18 Technology Drive, Suite 103  
Irvine, CA 92618

September 24, 2020

Dear Mr. Scherzer,

This letter presents the results of a record search conducted for the Meniffee Union School District Project in the city of Meniffee, Riverside County, California. The project site is located at west of Briggs Road, east of Lindenberg Road, and north of Wickerd Road in Section 13 of Township 6 South and Range 3 West on the Romoland CA USGS 7.5 minute topographic quadrangle.

The geologic unit underlying the project area is mapped primarily as old alluvial fan deposits dating to the Pleistocene epoch with a small segment of Mesozoic metasandstone (Morton, 1996). Metasandstone is considered to be of low paleontological sensitivity, however Pleistocene alluvial units are considered to be of high paleontological sensitivity. The Western Science Center does not have localities within the project area, but does have numerous localities within similarly mapped alluvial sediments throughout the region and localities from the Diamond Valley Lake Project as close as 5 miles from the project area. Pleistocene alluvial deposits in southern California are well documented and known to contain abundant fossil resources including those associated with Columbian mammoth (*Mammuthus columbi*), Pacific mastodon (*Mammut pacificus*), Sabertooth cat (*Smilodon fatalis*), Ancient horse (*Equus sp.*) and many other Pleistocene megafauna.

Any fossils recovered from the Meniffee Union School District Project area would be scientifically significant. Excavation activity associated with development of the area has the potential to impact the paleontologically sensitive Pleistocene alluvial units and it is the recommendation of the Western Science Center that a paleontological resource mitigation plan be put in place to monitor, salvage, and curate any recovered fossils associated with the current study area.

If you have any questions, or would like further information, please feel free to contact me at [dradford@westerncentermuseum.org](mailto:dradford@westerncentermuseum.org)

Sincerely,

A handwritten signature in black ink, appearing to read 'Darla Radford', written in a cursive style.

Darla Radford  
Collections Manager

# **Appendix B**

## **Alternative Paleontological Mitigation Measures**

## Alternative Mitigation Measures

Should Menifee USD Education Center Project plans change to include excavation below six feet, excavation has the potential to impact significant paleontological resources. It is recommended a qualified paleontologist be retained to conduct paleontological monitoring; to mitigate potential impact to paleontological resources to a level that is less than significant under CEQA.

In order to mitigate this potential impact to a level that is less than significant under CEQA, DUKE C R M recommends that:

1. a paleontological monitor be retained to observe grading operations below six feet in depth from the native ground surface. The monitor shall work under the direct supervision of a qualified paleontologist (B.S./B.A. in geology and/or paleontology with demonstrated competence in research, fieldwork, reporting, and curation).
  - a. The qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols.
  - b. The paleontological monitor shall be empowered to temporarily halt or redirect grading efforts if paleontological resources are discovered.
  - c. In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area.
  - d. In consultation with the qualified paleontologist the paleontological monitor shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly removed, and the area shall be cleared.
  - e. If the discovery is significant the qualified paleontologist shall notify the applicant and the City immediately.
  - f. In consultation with the applicant and the City the qualified paleontologist shall develop a plan of mitigation which will likely include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.



# **Appendix C**

## **DUKE CRM Staff Resumes**

## Curt Duke

President/Principal Archaeologist



### Expertise

Cultural Resources Management  
California Prehistory  
Section 106 Compliance  
CEQA Compliance  
Native American Consultation

### Education

CSU, Fullerton, M.A., Anth, 2006  
SDSU, Grad Studies, Anth, 1996-97  
UC Santa Cruz, B.A., Anth, 1994

### Professional Registrations

RPA, No. 15969  
County of Riverside (No. 151)  
County of Orange

### Professional Memberships

Society for California Archaeology  
Society for American Archaeology  
Pacific Coast Archaeological Society  
Assoc. of Environmental Professionals  
Building Industry Association

### Professional Experience

President/Principal Archaeologist, DUKE CRM, March 2011 to present  
Archaeologist/Principal, LSA Associates, 1997-2011  
Archaeological/Paleontological Technician, Various Companies, 1995-97  
Archaeological Technician/Teachers Assistant, Cabrillo College, 1994  
Anthropological Laboratory Technician, UC Santa Cruz, 1994

### Selected Project Experience

Reid/Baldwin Adobe, LA Arboretum, Arcadia, 2019-Present  
Veteran Affairs Medical Clinic, Santa Rosa, 2019  
Deane Dana Friendship Park, Rancho Palos Verdes, 2019  
Makayla Mine Expansion Project, Olancho, 2019  
Sweeny Road, Lompoc, 2018  
Vantage Point Church, Eastvale, 2016 and 2018  
VA West Los Angeles Campus Master Plan, 2017-Present  
Avenue S-8 and 40<sup>th</sup> St. E. Roundabout, Palmdale, 2017-18  
SR-110 Improvements, Los Angeles, 2017  
Diamond Valley Estates Specific Plan, Hemet, 2017  
VA West Los Angeles Campus Hospital Replacement, 2016-Present  
Shoemaker Bridge Replacement, Long Beach, 2016-Present  
Spruce Goose Hangar, Playa Vista, 2016  
Rice Avenue at 5th Street Grade Separation, Oxnard, 2015-Present  
Vila Borba, Chino Hills, 2013-Present  
Skyridge Residential, Mission Viejo, 2011-Present  
Baker Water Treatment Plant, Lake Forest, 2014-2015  
VA Clinic, Loma Linda, 2014-Present  
Evanston Inn, Pasadena, 2014-2016  
Petersen Ranch, Leona Valley, 2013-2014  
California Street/Highway 101, Ventura, 2014-Present  
6<sup>th</sup> Street Bridge Replacement, Los Angeles, 2013-Present  
I-15/I-215 IC Project, Devore, 2008-10  
Colton Crossing Rail-to-Rail Grade Separation, 2008-11  
City of LA DPW BOE, On-Call, Cultural/Paleo Services, 2008-11  
Mid County Parkway, Riverside County, 2014-10  
McSweeney Farms Specific Plan, Hemet, 2004-08  
Mesquite Regional Landfill, Coachella Valley, 2006-08  
Hacienda at Fairview Valley Specific Plan, Apple Valley 2007-08  
Majestic Hills Specific Plan, Hesperia, 2006-07  
Chuckwalla Solar I Project, Desert Center, 2007-08  
Needles Highway Improvement Project, 2004-06  
Superstition Solar I Project, Salton Sea, Imperial County, 2008  
Muddy Canyon Archaeological Project, Newport Beach, 1997-2001  
Temecula 32, Archaeological Phase II Testing, 2007  
Mammoth Lakes Parks/Rec and Trail System Master Plan, 2010  
24th Street Improvements, City of Bakersfield, 2008-11  
California Valley Solar Ranch, San Luis Obispo County, 2009-10  
Delano-Alpaugh Water Pipeline, Kern/Tulare Counties, 2006-09  
I-15/SR-79 IC Project, Temecula, 2006-10  
Westlake Historic Resources Survey, Los Angeles, 2008-09  
CETAP, western Riverside County, 1999-2001  
Los Coches Creek Elementary School, near Alpine, 2003-06  
Oak Valley Specific Plan 1 Amendment, Beaumont, 2004  
San Nicolas Island, Naval Base Ventura County, CA, 1997

## Nicholas F. Hearth

Principal Investigator/ Archaeologist



### Expertise

Cultural Resources Management  
California Prehistory  
Section 106 & CEQA Compliance  
Native American Consultation  
Lithic Analysis

### Education

UC, Riverside, PhD Candidate,  
Anthropology  
UC, Riverside, M.A., Anthropology, 2006  
UMass, Amherst, B.A., Anthropology,  
2003

### Professional Registrations

RPA, No. 989903

### Professional Memberships

Society for California Archaeology  
Society for American Archaeology  
Prehistoric Quarry and Early Mines  
Interest Group  
Coachella Valley Archaeological Society

### Professional Archaeological Experience

Principal Investigator, DUKE CRM, March 2018-present.  
Field/Laboratory Director, DUKE CRM, 2014-2018.  
Associate Archaeologist, Applied EarthWorks, 2012-2014.  
Archaeologist, Public Archaeology Laboratory, 2011-2012.  
Project Leader, Valles Caldera National Preserve, 2011.  
Field Director, Florin Cultural Resource Services, 2010.  
Archaeologist, Bighorn Archaeological Consultants, 2009-2010.  
Lithic Analyst/Field Supervisor, Northwestern University  
Archaeology Project, 2007-2009.  
Crew Chief, Yalahau Region Human Ecology Proj., 2005-2007.  
Report Writer, CRM Tech, 2006.  
Field Technician, Yalahau Region Human Ecology Proj., 2004.  
Field/Laboratory Technician, Public Archaeology Survey Team,  
2003-2004.  
Laboratory Director/Laboratory Assistant/Field Technician,  
UMass Archaeological Services, 2002-2003.

### Selected Project Experience\*

Reid-Baldwin Adobe, LA Arboretum, Arcadia, 2019 – present  
SR 57-60 IC and Golf Course, Diamond Bar, 2019 - present  
Makayla Mine Expansion Project, Olancho, 2019  
PCH Signal Improvements, Malibu, 2019 – present  
Ocean Place (Tract 17425), Seal Beach, 2018 - present  
1st over Glendale, Los Angeles, 2018 - 2019  
Diamond Valley Estates Residential, Hemet, 2017 - present  
SBCTA 210/Pepper, Rialto, 2016-2019  
Vila Borba Residential, Chino Hills, 2015-present  
California Street, Ventura, 2014-present  
Skyridge Residential, Mission Viejo, 2014-present  
26426 National Trails Highway, Helendale, 2018  
City of Redlands TTM20126, 2018  
Vanderham Monitoring, Jurupa Valley 2017-2018  
Trumark-Higgins Monitoring, Chino Hills, 2017  
Mission Heritage, Riverside, 2017  
76 Station, Orange, 2016  
Vantage Point Church, Eastvale, 2016  
Rancho Mirage Resignalization, 2015-2016.  
Rice Avenue at 5th St., Grade Separation, Oxnard, 2015-2018  
Lakeside Temescal Valley Residential Development, 2014-2016  
Tracy Hills Specific Plan, 2015  
Clinton Keith Road Expansion, Murrieta, 2014  
Mission Hills Reservoir, Indio, 2013  
Regent Crossroads, Winchester, 2013  
Crowder Canyon Arch. District Data Recovery Plan, 2013  
San Gabriel Trench Archaeological Project, 2013  
I10/Jefferson St. Interchange Improvement, 2012-2013  
PG&E TCS Remediation, Needles, 2012 to 2014  
Old Place Neck Data Recovery, Staten Island, NY. 2012  
Jackson Flat Data Recovery Kanab, UT, 2009-2010

*\*Complete project experience available upon request*

# Benjamin Scherzer

## Paleontologist



### Expertise

Paleontological Resources Management  
Fossil excavation  
Fossil preparation  
Stratigraphy  
Natural gas mudlogging  
Directional drilling

### Education

M.S., Earth Science, 2008, MSU, Bozeman, MT  
B.A., Geology/Math, 2002, Earlham College, IN

### Professional Registrations

Paleontologist, County of Orange  
Paleontologist, County of Riverside

### Professional Memberships

Society of Vertebrate Paleontology  
Geological Society of America  
Society for Sedimentary Geology  
American Association of Petroleum Geologists, Pacific Section  
South Coast Geological Society  
Western Association of Vertebrate Paleontologists

### Publications and Professional Papers

Scherzer, B. 2017. A possible physeteroid (cetacea: odontoceti) from the Yorba member of the Puente Formation, Orange County, California.

Scherzer, B. 2016. An archaic baleen whale (Cetacea: Mysticeti) from the Vaqueros Formation, and other fossil material from the Skyridge Project, Orange County, California.

Scherzer, B. 2015. Miocene teleost fish from Chino Hills: preliminary results from the Vila Borba Project, San Bernardino County, California.

### Professional Experience

Paleontologist, DUKE CRM, February 2014-present  
Paleontologist, VCS Environmental, 2020-present  
Paleontologist, Rincon Consultants, 2020-present  
Paleontologist, Red Tail Environmental, 2020-present  
Paleontologist, L&L Environmental, 2017-2018  
Stratigrapher, Archeological Resource Management Corp., 2015-2018  
Paleontological Specialist II, SD Natural History Museum, 2013-2018  
Paleontological Specialist II, SWCA (Pasadena), 2012-2015  
Paleontologist, SWCA (Vernal, UT), 2011-2012  
Fossil Preparator, Carter County Museum, 2010-2011  
Physical Science Technician, Badlands National Park, 2010  
Mudlogger/Geologist, Pason Systems USA, 2006-2009  
Paleontological Field Assistant, ARCADIS US, 2006-2007

### Selected Project Experience

210 Mixed Flow Lane Addition, Highlands, 2020-present  
Reid-Baldwin Adobe, Arcadia, 2019-present  
San Jacinto GP & Update, San Jacinto, 2019-present  
I-5 Widening, Aliso Viejo, 2018-2020  
Sweeny Rd, Lompoc, 2018-2020  
Atlanta Avenue Widening, Huntington Beach, 2018-present  
Ocean Place, Seal Beach, 2018-present  
Lake Forest Civic Center, Lake Forest, 2018-present  
Vanderham Monitoring, Jurupa Valley, 2017-2018  
Gold Flora Farms, Desert Hot Springs, 2017-2019  
I-5 HOV Truck Lanes, Santa Clarita, 2017-2018  
Brasada Homes, San Dimas, 2017-2018  
Indus Light Industrial Building, Chino Hills, 2017-2018  
Murrieta's Hospitality Commons, Murrieta, 2017-2019  
6<sup>th</sup> Street Viaduct, Los Angeles, 2017-present  
I-15 TEL, Riverside and San Bernardino Counties, 2017  
Lewis Street, Anaheim, 2017  
The Crossings, Chino Hills, 2016-2017  
Reata Glen, Mission Viejo, 2016-2018  
Greenville-Banning Channel, Costa Mesa, 2016  
Diamond Valley, Hemet, 2017  
Marywood Residential, Orange, 2016-2017  
Rancho Mission Viejo, Mission Viejo, 2015-2018  
Santa Margarita Water District Tesoro Reservoirs, Mission Viejo, 2015  
Evanston Inn, Pasadena, 2015  
Sycamore to Peñasquitos 230 kV Transmission Line, San Diego, 2015  
Lakeside Temescal Valley, Temescal Valley, 2015-2020  
Vila Borba, Chino Hills, CA, 2013-present  
RP-Outfall Relocation, Ontario, 2014  
Serrano Ridge, Temescal Valley, 2014  
Lago Los Serranos, Chino Hills, 2014  
Baker WTP, Lake Forest, 2014  
Skyridge Residential, Mission Viejo, 2014-present  
Pacific Highlands, San Diego, 2014  
Sol y Mar, Ranchos Palos Verdes, 2013-2014  
Mojave Solar Power, Hinkley, 2013  
Genesis Solar Energy, Blythe, 2012-13



## Edgar Alvarez

GIS Analyst/ Archaeologist



**Years Experience: 5 Years**

**Years with DUKE CRM: 2 Months**

### Expertise

Cultural Resources Management  
California Prehistory  
Section 106 & CEQA Compliance  
Native American Consultation  
GIS Analysis

### Education

CSU, Northridge, B.A., Anthropology,  
Minor in GIS, 2016  
PCIAP, Catalina Island Field School, 2015

### Professional Memberships

Society for California Archaeology  
Society for American Archaeology

### Selected Project Experience

PCH Signal Systems Project, Malibu, 2020  
Indian Wells General Plan, 2020  
Lawndale General Plan, 2020  
Mokelumne Aqueducts Tunnel, Stockton, 2020  
Sunnymead Car Wash, Moreno Valley, 2020  
Vernola Marketplace Project, Jurupa Valley, 2020  
Bluff Street Reservoir Project, Norco, 2020  
Purple Line Extension (Westside Subway), L.A., 2018 - 2019  
Southern California Edison (SCE) EC L.A., 2018 - 2019  
Rincon Band of Luiseno Indians Survey, SD, 2018 - 2019  
Purple Line Extension 2 (Rodeo Subway), Beverly Hills, 2020  
El Centro International Border Wall, El Centro, 2020  
SOCAL Gas Pipeline, Seal Beach, 2020  
(LAWA) Terminal 1.5 Project, L.A., 2018 - 2019  
Desert Trails Preparatory Project, Victorville, 2019  
Florence Mills Apartments Project, L.A., 2019  
Ridge Development Project, Penryn, 2019  
31801 Pacific Coast Highway Project, Malibu, 2018  
Boyle Heights Sports Center Gym Project, L.A., 2018  
Cold Canyon Landfill Expansion, Arroyo Grande, 2018  
Daggett Solar Farm Project, Daggett, 2018  
Roosevelt Park Stormwater Capture Project, L.A., 2018  
Ava Hollywood Mixed Use High-Rise Project, L.A., 2018  
Corona Affordable Housing Project, L.A., 2018  
Elk Creek Bridge Studies (TO 31), Lake Mendocino, 2019  
Carlotta Curve Improvement (TO 56), Lake Mendocino, 2019  
Three Bridges Replacement (TO 57), Lake Mendocino, 2019  
South Eel River Bridge Seismic (TO 60), Lake Mendocino, 2019  
Gualala Shoulders and Rumble (TO 62), Lake Mendocino, 2019  
State Route 132 West Freeway, Modesto, 2020  
CBP Road Improvements, El Centro, 2019  
Yuma International Border Wall, Yuma, 2020  
LAX Police Station, Inglewood, 2019  
Ladera Park Storm Water Capture, L.A., 2019  
Gates Canyon Storm Water Capture, Calabasas, 2020  
PG&E Irrigation Line, Pismo Beach, 2020  
Deep Soil Mixing Project, Malibu, 2020  
CBP Chula Vista INT Border Wall, Chula Vista, 2020  
SCE Woolsey Fire, Malibu, 2018

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