



# Hazel M. Bailey Primary School Expansion

## Initial Study – Mitigated Negative Declaration

### **Firebaugh Las-Deltas Union School District**

1734 Saipan Street  
Firebaugh, California 93622  
Contact: Daniel S. Barragan

*prepared with the assistance of*

### **Rincon Consultants, Inc.**

66 Franklin Street  
Oakland, California 94607

**November 2024**



RINCON CONSULTANTS, INC. SINCE 1994



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# Initial Study

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## 1. Project Title

Hazel M Bailey Primary School Expansion

## 2. Lead Agency Name and Address

Firebaugh Las-Deltas Union School District  
1734 Saipan Street  
Firebaugh, California 93622

## 3. Contact Person and Phone Number

Daniel S. Barragan, Maintenance Operations and Transportation Director, 559-659-1088

## 4. Project Location

The Hazel M. Bailey Primary School campus encompasses approximately 14 acres. The school is located east of Q Street and north of Saipan Street in Firebaugh, California. The Hazel M. Bailey Primary School is a multiple-building, public educational property located in the southeastern area of Firebaugh, immediately to the south of Dunkle Park and across S Street to the southwest of the San Joaquin River. The campus is located along the east side of Q Street, within the northeastern portion of the parcel identified as APN 008-020-63T. The campus also includes two smaller parcels, 008-020-66T and 008-020-64T, located between the Hazel M. Bailey School building's northwest side and the south corner of Dunkle Park.

The Project site where project activities including ground disturbance and construction would take place is an approximately 46,000 square-foot area in the southeastern portion of the Hazel M. Bailey Primary School campus. Figure 1 shows the regional location of the Project site and Figure 2 shows an aerial view of the campus location, and Project site within the school campus.

## 5. General Plan Designation and Zoning

The Project site has a City of Firebaugh land use designation of Public/Quasi Public and a zoning designation of Government District.

Firebaugh Las-Deltas Union School District  
Hazel M. Bailey Primary School Expansion

Figure 1 Regional Location



Imagery provided by Esri and its licensors © 2024.

23-15573 EPS  
Fig. 1 Regional Location

★ Project Location



Figure 2 Project Location



## 6. Description of Project

### Project Components

The proposed Project would include the construction of seven new buildings ranging from 2,840 square feet to 5,705 square feet. The seven new buildings would contain 14 new classrooms in total. Figure 3 shows the proposed site plan including existing buildings and the proposed new classroom buildings. The new buildings proposed by the District would be used as transitional kindergarten classrooms to accommodate existing student capacity and would not increase enrollment.

The proposed Project would also include a new fire lane with the addition of two fire hydrants connecting to an offsite fire hydrant and the addition of new concrete walkways throughout the site. Existing turf and planter areas on the Project site would be rehabilitated as part of the Project. The Project would include the installation of new signage and accessibility features including an accessible drinking fountain and accessible chain link gate. Several trees, curb cut ramps and portions of chain link fence would be removed for new construction and site improvements. No existing structures would be demolished as a result of the Project.

### Utilities

Electrical and natural gas service to the Project site are provided by Pacific Gas & Electric (PG&E). The proposed classrooms would be all-electric, and the Project includes adding solar panels to the existing ground-mounted solar array onsite. Water and wastewater service are provided by the City of Firebaugh. Solid waste service is provided by private vendors. The Project also includes installation of two 20-foot- stormwater seepage pits each three feet in diameter, trench drains, and enhanced turf and landscaping with stormwater runoff to continue to be directed to existing City of Firebaugh stormwater drains.

### Site Access

Access to the subject property is available from driveways on Q Street and Saipan Street.

### Construction

Construction is estimated to occur over an approximately 13-month period from August 2025 to September 2026. During site preparation, 4,500 cubic yards of soil would be excavated and exported offsite, and 4,500 cubic yards of soil would be imported from off-site sources. Construction staging would occur onsite in the northeast corner of the Project site. Staging equipment and temporary work areas utilized during Project construction would be located within the Project site and would not require closure of existing roadways in the Project vicinity. Construction would comply with the recommendations provided in the RMA GeoScience report Prepared for the project to accommodate on-site geologic conditions (RMA GeoScience, Inc. 2024).

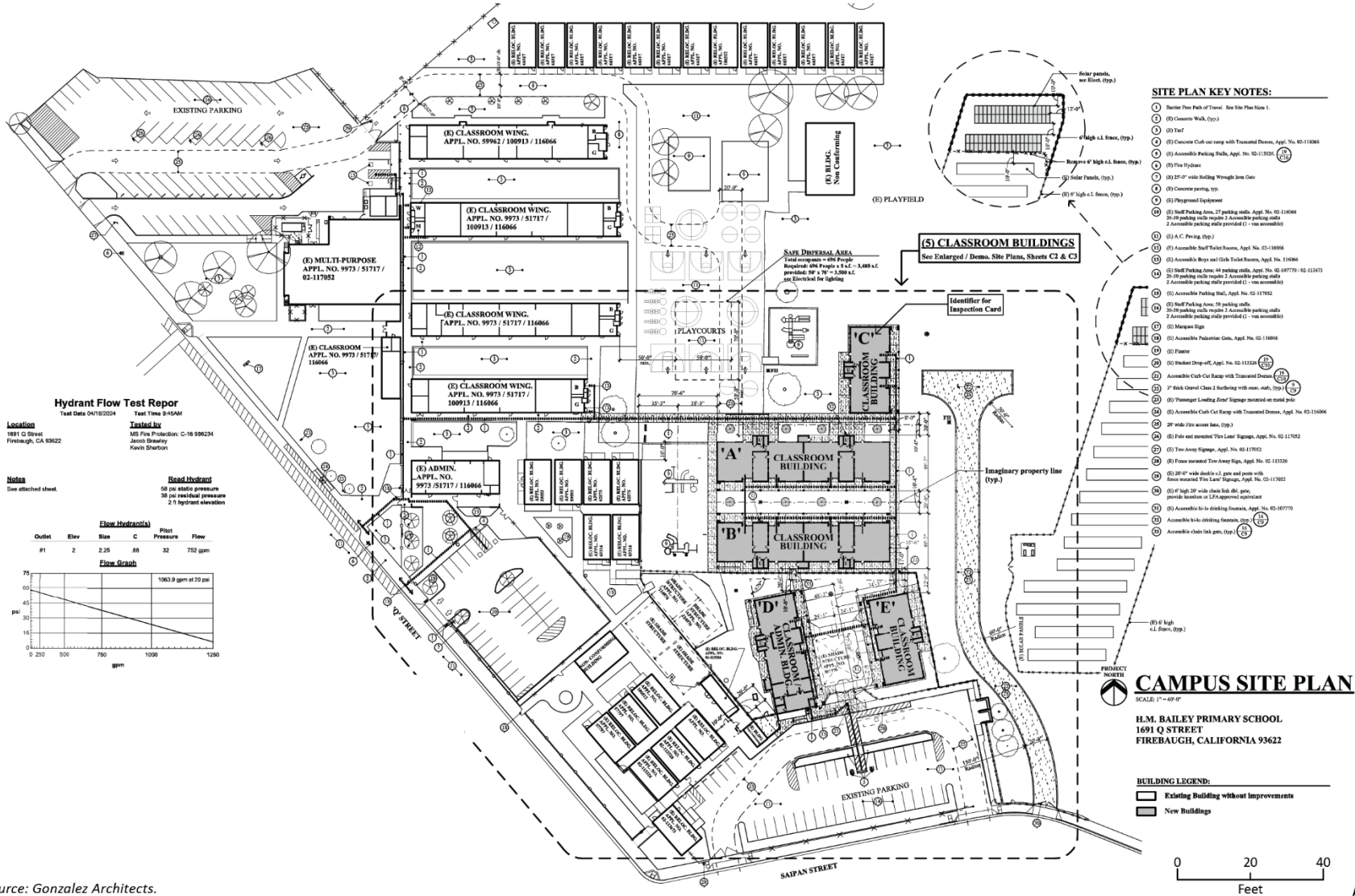
## 7. Existing Setting

As noted under Project Location above, the Project site is an approximately 46,000 square foot portion of the Hazel M. Bailey Primary School campus. Components of the subject property include Bailey Primary School and the Bailey Preschool facilities. These components comprise multiple school administration buildings and classrooms, a playground, recreational fields, three parking lots, and two solar arrays. The Bailey School property features a lawn area along the school's western

border and setback on Q Street. This lawn area features several trees, a linear concrete entrance path that runs east west and extends to the administration building. Additional areas include a paved parking lot located northwest of Bailey School's gym and classroom wings. Paved parking lots are located between the Bailey School and Day School buildings along Q Street and Saipan Avenue. The eastern half of the Bailey School property's interior is grass field, with a several landscape trees.

Firebaugh Las-Deltas Union School District  
 Hazel M. Bailey Primary School Expansion

Figure 3 Proposed Site Plan



Source: Gonzalez Architects.

Two solar panel structures are installed within the property; one is located in the northwest corner and the other in the southeast corner. Figure 2 shows the entire school site for context and the location where Project activities would take place on the school site.

The Project site is in the southeastern portion of the larger campus. It is currently comprised of recreational fields, an existing shade structure and one solar array. The Project site is relatively flat and includes grassy vegetation and several trees.

## 8. Surrounding Land Uses

Surrounding land uses include a park and an unpaved road/trail followed by a solar array and the San Joaquin River to the north, single-family residences to the east, Saipan Street followed by a Firebaugh-Las Deltas Unified School District Maintenance, Operations, and Transportation facility (1657/1666 Saipan Street) to the south, and Q Street followed by Firebaugh Middle School (1600 16th Street) to the west.

## 9. Other Public Agencies Whose Approval is Required

FLDUSD is the lead agency for this Project. Other public agencies whose approval may be required for the Project include the following:

- State Water Resources Control Board (SWRCB) – approval of the SWPPP under the statewide NPDES Construction General Permit and approval of the SWPPP under the statewide NPDES Industrial General Permit
- California Division of State Architects (DSA)
- Office of Public-School Construction (OPSC)

## 10. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

The District has not received notifications from California Native American tribes and, as such, no consultations have been initiated.

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## Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

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

## Determination

Based on this initial evaluation:

- I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to 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 “less than significant with mitigation incorporated” 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.

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- I find that although the proposed Project could have a significant effect on the environment, because all potential 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.

Daniel S. Barragan Digitally signed by Daniel S. Barragan  
Date: 2024.11.21 15:55:10 -08'00'

11/21/2024

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Signature

---

Date

Daniel S. Barragan

MOT Director

---

Printed Name

---

Title

# Environmental Checklist

## 1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
--	--------------------------------	--	--------------------------------	-----------

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

a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state 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"/>

a. *Would the project have a substantial adverse effect on a scenic vista?*

A scenic vista is a view from a public place (roadway, designated scenic viewing spot, etc.) that is expansive and visually notable. It can be obtained from an elevated position (such as from the top of a hillside) or it can be seen from a roadway with a longer-range view of the landscape. One of Firebaugh’s scenic resources is its frontage along the San Joaquin River. The riverfront is characterized by significant open space, supporting stands of riparian vegetation, including trees, shrubs, and grasses, which contribute to the natural beauty and ecological diversity of the area (City of Firebaugh 2006). The Project would be consistent with the visual character of the Elementary School campus and existing facilities on the site and would not block views of the river or other scenic vista from public viewpoints. During construction, views of the river may be temporarily obstructed due to staging and other activities. However, this obstruction would be temporary. Additionally, Firebaugh’s flat topography combined with the dense vegetation surrounding the riverbank results in minimal views in the immediate vicinity. Therefore, the overall visual impact of the construction would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

- b. *Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The nearest officially designated scenic highway is a portion of State Route 168 approximately 40 miles west and a portion of MER 152 approximately 32 miles northeast (Caltrans 2018). Given the distance from these officially designated state highways, the Project site is not visible from a state scenic highway. There would be no impact to scenic resources within a state scenic highway.

**NO IMPACT**

- c. *Would the project, 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?*

According to California Public Resources Code Section 21071(a), Firebaugh is classified as a nonurbanized area because its population is less than 100,000 persons and it is not located adjacent to one or more incorporated cities with populations that would add up to 100,000 persons or more when combined with the population of Firebaugh. The Project site has a City of Firebaugh land use designation of Public/Quasi Public, and is surrounded by the existing school site, beyond which is Dunkle Park to the Northwest, the San Joaquin River to the north, single-family residences to the east, Saipan Street followed by a Firebaugh-Las Deltas Unified School District Maintenance, Operations, and Transportation facility (1657/1666 Saipan Street) to the south, and Q Street followed by Firebaugh Middle School (1600 16th Street) to the west.

The proposed Project would be constructed in the location of the existing school facilities and would be of a similar scale and architecture as the existing Primary School facilities on FLDUSD's property. Therefore, the Project would have a less than significant impact on the existing visual character or quality of public views of the site and its surroundings.

**LESS-THAN-SIGNIFICANT IMPACT**

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The proposed Project would not require lighting during construction. During operation, the Project's buildings would be equipped with security lighting, which would create light while in operation. The lighting would be low level exterior lighting and would be shielded downwards to prevent light from shining outside of the Project site per District standards. The Project would be constructed in the location of the existing school facilities and would be of a similar scale, purpose and architecture as the Primary School facilities on FLDUSD's property. The lighting and glare produced by the Project would be consistent with the existing lighting environment established by the Hazel M. Bailey Primary School and would not add substantial sources of glare. Light and glare from the Project would be consistent with the current visual standards in the vicinity and the Project would not adversely affect daytime or nighttime views. Impacts would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

## 2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
--	--------------------------------	--	--------------------------------	-----------

Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on 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 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?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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

The Project site is designated as urban and built-up land by the department of conservation (Department of Conservation [DOC] 2022a). The Project site is not located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Additionally, the site is not currently being used for agricultural purposes. There would be no impact.

**NO IMPACT**

- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

The Project site is not under a Williamson Act contract, nor is it zoned for agricultural uses and activities (DOC 2022b; City of Firebaugh 2023) The Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

**NO IMPACT**

- c. *Would the project 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))?*

- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The Project site does not meet the definition of a forestry resource, as defined by California Public Resources Code Section 12220(g): “land that can support ten percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.” The Project site does not have a forest land designation. Therefore, the Project would not conflict with existing zoning or cause rezoning of forest land, timberland, timberland zoned Timberland Production, or result in the loss or conversion of forest land. No impact would occur.

**NO IMPACT**

- e. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

The Project site is surrounded by residential neighborhoods to the east and south. Firebaugh Middle School is located west of the site and The San Joaquin River is located north of the site. The Project therefore would not change the existing environment to result in the indirect development of adjacent agricultural lands. No impact would occur.

**NO IMPACT**

### 3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
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 non-attainment under 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Overview of Air Pollution

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for “criteria pollutants” and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide (CO), volatile organic compounds (VOC)/reactive organic gases (ROG),<sup>1</sup> nitrogen oxides (NO<sub>x</sub>), particulate matter with diameters of ten microns or less (PM<sub>10</sub>) and 2.5 microns or less (PM<sub>2.5</sub>), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and NO<sub>x</sub>. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog). Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

<sup>1</sup> CARB defines VOC and ROG similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this ISMND.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

### **Air Quality Standards and Attainment**

The Project site is located in the San Joaquin Valley Air Basin (SJVAB), which is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). As the local air quality management agency, the SJVAPCD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the SJVAB is classified as being in “attainment” or “nonattainment.” In areas designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants, presented in Table 1, are already occurring in that area as part of the environmental baseline condition.

Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The SJVAB is designated a nonattainment area for the state one-hour ozone standard as well as for the federal and state eight-hour ozone standards. The SJVAB is also designated as nonattainment for the state annual arithmetic mean and federal 24-hour PM<sub>2.5</sub> standards as well as the state 24-hour and annual arithmetic mean PM<sub>10</sub> standards. The nonattainment statuses of the SJVAB are the result of several factors, such as increased population and unique topographical and meteorological conditions that exacerbate the formation and retention of high levels of air pollution in the SJVAB (SJVAPCD 2016). The SJVAB is unclassified or in attainment for all other ambient air quality standards (SJVAPCD 2024a).

**Table 1 Health Effects Associated with Non-Attainment Criteria Pollutants**

<b>Pollutant</b>	<b>Adverse Effects</b>
Ozone	(1) Short-term exposures: pulmonary function decrements and localized lung edema in humans and animals, and risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures, and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM <sub>10</sub> and PM <sub>2.5</sub> )	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma).

Source: USEPA 2024

## Existing Ambient Air Quality

The SJVAPCD operates a regional monitoring network that measures the ambient concentrations of criteria pollutants. The monitoring stations measure ambient concentrations of pollutants to help SJVAPCD determine if ambient air quality meets the California and federal standards. Current air quality information is obtained from the closest monitoring station to the Project site. The closest monitoring station to the Project site is the Tranquility – 32650 West Adams Avenue station in Tranquility, which is approximately 16 miles south of the Project site. This station monitors 1-hour and 8-hour O<sub>3</sub> and PM<sub>2.5</sub>. The nearest monitoring station that measures NO<sub>x</sub> and PM<sub>10</sub> is the Fresno-Garland monitoring station approximately 38 miles east of the Project site. Table 2 shows a three-year summary of data collected at the Tranquility – 32650 West Adams Avenue and Fresno –Garland monitoring stations and compared to the NAAQS and the CAAQS. As shown in Table 2, the 8-hour O<sub>3</sub> NAAQS and CAAQS was exceeded in 2021. The PM<sub>10</sub> NAAQS was exceeded in 2021, and the CAAQS was also exceeded in all three observation years. The PM<sub>2.5</sub> NAAQS was exceeded in 2021. No other state or federal standards were exceeded at these monitoring stations over this time period.

**Table 2 Ambient Air Quality at the Nearest Monitoring Stations**

Pollutant	2021	2022	2023
<b>8-Hour Ozone (ppm), 8-Hour Average<sup>1</sup></b>	0.080	0.066	0.065
Number of Days of State exceedances (>0.070 ppm)	5	0	0
Number of days of federal exceedances (>0.070 ppm)	5	0	0
<b>Ozone (ppm), Worst Hour<sup>1</sup></b>	0.088	0.074	0.073
Number of days of State exceedances (>0.09 ppm)	0	0	0
<b>Nitrogen Dioxide (ppm) - Worst Hour<sup>2</sup></b>	0.056	0.055	0.048
Number of days of State exceedances (>0.18 ppm)	0	0	0
Number of days of federal exceedances (>0.10 ppm)	0	0	0
<b>Particulate Matter 10 microns, µg/m<sup>3</sup>, Worst 24 Hours<sup>2</sup></b>	281	116	109
Number of days of State exceedances (>50 µg/m <sup>3</sup> )	91	73	54
Number of days above federal standard (>150 µg/m <sup>3</sup> )	1	0	0
<b>Particulate Matter &lt;2.5 microns, µg/m<sup>3</sup>, Worst 24 Hours<sup>1</sup></b>	65.3	33.1	26.2
Number of days above federal standard (>35 µg/m <sup>3</sup> )	7	0	0

<sup>1</sup> Measurements taken from the Tranquility – 32650 West Adams Avenue station in Tranquility.

<sup>2</sup> Measurements taken from the Fresno-Garland station in Fresno.

Source: CARB 2024

## Air Quality Management

The SJVAPCD is required to implement strategies to reduce pollutant levels to achieve attainment of the NAAQS. The SJVAPCD 2022 Ozone Plan and 2024 PM<sub>2.5</sub> Plan include emissions inventories that identify sources of air pollutants, evaluations for feasibility of implementing potential opportunities to reduce emissions, sophisticated computer modeling to estimate future levels of pollution, and a strategy for how air pollution will be further reduced. The plans also include innovative alternative strategies for accelerating attainment through non-regulatory measures. The 2022 Ozone Plan determines that, with implementation of the proposed control strategy, the SJVAB can expect to reach attainment of the 2015 eight-hour ozone NAAQS by the year 2037 (SJVAPCD 2022). On January 28, 2022, USEPA determined that the SJVAB attained the 1997 24-hour PM<sub>2.5</sub> standard of 65

micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) by the attainment date of December 31, 2020. The 2024 PM<sub>2.5</sub> Plan estimates that the majority of the San Joaquin Valley population is currently in attainment of the 2012 standard, 90 percent will be in attainment by 2027, and 100 percent will be in attainment by 2030 (SJVAPCD 2024b).

### Air Emission Thresholds

The SJVAPCD has adopted guidelines for quantifying and determining the significance of air quality emissions in its *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI; SJVAPCD 2015). The SJVAPCD recommends the use of quantitative thresholds to determine the significance of construction-and operational related emissions of criteria air pollutant emissions. SJVAPCD has two sets of significance thresholds for operational emissions depending on whether the activities are for permitted equipment and activities or non-permitted equipment and activities. Project operation does not include permitted equipment or activities such as the use of back-up generators. Therefore, only the operational thresholds for non-permitted equipment and activities and construction activities are appropriate for evaluating project impacts. These thresholds are shown in Table 3.

**Table 3 SJVAPCD Air Quality Thresholds of Significance – Criteria Pollutants**

Pollutant	Construction (tons per year)	Operation (tons per year)
NO <sub>x</sub>	10	10
ROG	10	10
PM <sub>10</sub>	15	15
PM <sub>2.5</sub>	15	15
SO <sub>x</sub>	27	27
CO	100	100

NO<sub>x</sub> = Nitrogen Oxides; VOC = Volatile Organic Compounds; PM<sub>10</sub> = Particulate Matter with a diameter no more than 10 microns; PM<sub>2.5</sub> = Particulate Matter with a diameter no more than 2.5 microns; SO<sub>x</sub> = Sulfur Oxide; CO = Carbon Monoxide

Source: Source: SJVAPCD 2015

In addition to the annual SJVAPCD thresholds outlined above, SJVAPCD has published the *Ambient Air Quality Analysis Project Daily Emissions Assessment* guidance, which is summarized in Section 8.4.2, *Ambient Air Quality Screening Tools*, of the SJVAPCD’s *Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI)*, adopted in March 2015. The *Ambient Air Quality Screening Tools* guidance provides a screening threshold of 100 pounds per day of any of the following pollutants: NO<sub>x</sub>, ROG, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, and CO. The screening threshold was used to evaluate construction activities and operational activities separately. Per SJVAPCD’s GAMAQI, when assessing the significance of project-related impacts on local air quality, the impacts *may* be significant if on-site emissions from construction or operational activities exceed the 100 pounds per day screening level after implementation of all enforceable mitigation measures. If the screening threshold is exceeded for any pollutant, an ambient air quality assessment (AAQA) is conducted following District Rule 2201 *AAQA Modeling* for any phase that has an exceedance. An AAQA uses air dispersion modeling to determine if emission increases from a project’s construction or operational activities would cause or contribute to a violation of the ambient air quality.

SJVAPCD recommends comparing project’s attributes with the following screening criteria as a first step to evaluating whether the Project would result in the generation of CO concentrations that

would substantially contribute to an exceedance of the *Thresholds of Significance*. The Project would result in a less than significant impact to localized CO concentrations if (SJVAPCD 2015):

1. A traffic study for the Project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the Project vicinity will be reduced to LOS E or F; or
2. A traffic study indicates that the Project will substantially worsen an already existing LOS F on one or more streets at more one or more intersections in the Project vicinity.

However, SB 743, which was signed into law in 2013, initiated an update to the CEQA Guidelines to change how lead agencies evaluate transportation impacts under CEQA. As of July 2020, LOS is no longer considered an ideal metric for evaluating transportation impacts. Therefore, for the purposes of this analysis, impacts related to localized CO concentrations are discussed qualitatively.

The SJVAPCD also recommends quantitative thresholds for evaluating a project's air quality impacts related to toxic air contaminants (TACs). Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SJVAPCD recommends a carcinogenic (cancer) risk threshold of 20 in a million. The Chronic Hazard Index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. The SJVAPCD recommends a Chronic Hazard Index significance threshold of 1.0 and an Acute Hazard Index of 1.0.

## Methodology

Air pollutant emissions generated by Project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod) version 2022.1. CalEEMod uses project-specific information, including the project's land uses, location, and construction parameters, to model construction emissions. The analysis reflects the construction of the Project as described under Initial Study Section 6, *Description of Project*.

Construction emissions modeled include emissions generated by onsite construction equipment and onsite vehicle trips associated with construction, such as workers, vendor, and water truck trips. Construction of the proposed Project was analyzed based on the primary school buildout characteristics, a construction schedule, and a list of construction equipment provided by the applicant. Construction is scheduled to start in August 2025 and would last for approximately 14 months. The Project will be divided into five phases: site preparation, grading, building construction, asphalt paving, and trenching. During the site preparation phase, it is expected that about 4,500 cubic yards of soil material will be removed and imported to the site, and all construction equipment will be powered by diesel. This analysis assumes that the Project would comply with all applicable regulatory standards. In particular, the Project would comply with SJVAPCD Regulation VIII Fugitive PM<sub>10</sub> Prohibitions, Rule 8201 Construction, Demolition, Excavation, Extraction, And Other Earthmoving Activities, and Rule 4601 Architectural Coating.

Operational emissions modeled include mobile source emissions, energy emissions, and area source emissions. Mobile source emissions are generated by vehicle trips to and from the Project site. The Project would serve the existing student population and would not increase enrollment; therefore, mobile trips were set to zero to reflect zero additional mobile source emissions compared to existing conditions. Area source emissions are generated by consumer products and architectural coatings. The Project would not consume natural gas; therefore, the Project would not emit energy emissions onsite.

*a. Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Construction and operation of the Project would result in emissions of criteria pollutants including ozone precursors, such as ROG and NO<sub>x</sub>, as well as particulate matter. The SJVAPCD has prepared several air quality attainment plans to achieve ozone and particulate matter standards, the most recent of which include the 2022 Plan for the 2015 8-Hour Ozone Standard and the 2024 Plan for the 2012 PM<sub>2.5</sub> Standards. The SJVAB is in attainment for carbon monoxide, sulfur dioxide, and lead; therefore, the SJVAPCD has not developed attainment plans for these pollutants. The SJVAPCD has determined that projects with emissions above the thresholds of significance for criteria pollutants would conflict with and obstruct implementation of the SJVAPCD’s air quality plans (SJVAPCD 2015). As discussed under item (b) below, the Project would not exceed the SJVAPCD’s significance thresholds for criteria air pollutant emissions. Therefore, the Project would not conflict with applicable air plans, and impacts would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

*b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

Project construction would generate temporary air pollutant emissions associated with fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) and exhaust emissions from heavy construction equipment and construction vehicles. In addition to ROG emissions that would be released during the drying phase of paving. Table 4 summarizes the estimated annual emissions of criteria air pollutants during Project construction. As shown therein, construction-related emissions would not exceed SJVAPCD thresholds. Therefore, Project construction would not result in a cumulatively considerable net increase of a criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard. Impacts would be less than significant.

**Table 4 Estimated Annual Construction Emissions**

Construction Year	Annual Construction Emissions (tons/year)					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2025	<1	2	2	<1	<1	<1
2026	<1	3	3	<1	<1	<1
SJVAPCD Thresholds of Significance	10	10	100	27	15	15
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Lbs./day = pounds per day; ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; PM<sub>10</sub> = particulate matter with a diameter no more than 10 microns; PM<sub>2.5</sub> = particulate matter with a diameter no more than 2.5 microns; SO<sub>x</sub> = sulfur oxide

Source: Table 2.2 “Construction Emissions by Year, Unmitigated” emissions. Annual emissions results are shown in tons per year. See CalEEMod worksheets in Appendix A.

As shown in Table 5, maximum daily emissions associated with Project construction would not exceed the SJVAPCD’s 100-pounds-per-day screening threshold, under *8.4.2 Ambient Air Quality Screening Tools* in SJVAPCD’s Guidance for Assessing and Mitigating Air Quality Impacts. Therefore, an ambient air quality assessment is not required for construction activities.

**Table 5 Maximum Daily Project Construction Emissions**

	Emissions (lbs./day)					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Maximum Daily Emissions	6	50	51	<1	9	5
SJVAPCD Screening Threshold	100	100	100	100	100	100
Screening Threshold Exceeded?	No	No	No	No	No	No

lbs/day = pounds per day; ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; PM<sub>10</sub> = particulate matter with a diameter no more than 10 microns; PM<sub>2.5</sub> = particulate matter with a diameter no more than 2.5 microns; SO<sub>x</sub> = sulfur oxide

Source: Table 2.2 "Construction Emissions by Year, Unmitigated" emissions. Highest of summer and winter emissions results are shown for maximum daily emissions. See CalEEMod worksheets in Appendix A.

Because the SJVAPCD annual and daily thresholds would not be exceeded, Project construction would not result in a cumulatively considerable net increase of a criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard. Impacts would be less than significant.

### Operational Emissions

Operation of the Project would generate criteria air pollutant emissions associated with area sources (e.g., architectural coatings and consumer products) The Project would not increase vehicle trips or involve using natural gas appliances, so mobile or energy source emissions would not be released on-site.. Table 6 summarizes the Project's annual operational emissions by emission source. As shown therein, operational emissions would not exceed SJVAPCD regional thresholds for criteria pollutants. Therefore, Project operation would not result in a cumulatively considerable net increase of a criteria pollutant for which the Project region is in non-attainment, and impacts would be less than significant.

**Table 6 Estimated Annual Operational Emissions**

Emissions Source	Pollutant (tons/year)					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area	<1	<1	<1	<1	<1	<1
<b>Total</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>
SJVAPCD Thresholds	10	10	100	27	15	15
Threshold Exceeded?	No	No	No	No	No	No

lbs/day = pounds per day; ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; PM<sub>10</sub> = particulate matter with a diameter no more than 10 microns; PM<sub>2.5</sub> = particulate matter with a diameter no more than 2.5 microns; SO<sub>x</sub> = sulfur oxide

Source: Table 2.5 "Operations Emissions by Sector, Unmitigated" emissions. Annual emissions are shown in tons per year. See CalEEMod worksheets in Appendix A

Project-related operational emissions must be compared to the SJVAPCD's 100-pounds-per-day ambient air quality screening threshold for ROG, NO<sub>x</sub>, sulfur dioxide, carbon monoxide, PM<sub>10</sub>, and PM<sub>2.5</sub>. As shown in Table 7, maximum daily emissions associated with Project operation would not exceed the SJVAPCD's 100-pounds-per-day screening threshold during construction. Therefore, an ambient air quality assessment is not required for operational activities.

**Table 7 Maximum Daily Project Operational Emissions**

	Emissions (lbs./day)					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Maximum Daily Emissions	1	<1	1	<1	<1	<1
SJVAPCD Screening Threshold	100	100	100	100	100	100
Screening Threshold Exceeded?	<b>No</b>	<b>No</b>	No	<b>No</b>	<b>No</b>	<b>No</b>

lbs/day = pounds per day; ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; PM<sub>10</sub> = particulate matter with a diameter no more than 10 microns; PM<sub>2.5</sub> = particulate matter with a diameter no more than 2.5 microns; SO<sub>x</sub> = sulfur oxide

Source: Table 2.5 “Operations Emissions by Sector, Unmitigated” emissions. The highest of summer and winter emissions results are shown for maximum daily emissions. See CalEEMod worksheets in Appendix A.

Because the SJVAPCD annual and daily thresholds would not be exceeded, the Project’s operational activities would not result in a cumulatively considerable net increase of a criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard. Impacts would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

*c. Would the project expose sensitive receptors to substantial pollutant concentrations?*

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. According to SJVAPCD, sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s). The nearest sensitive receptors to the Project site are students located at the Hazel M Bailey Primary School. Additionally, single-family residences are located approximately 175 feet east of the Project construction. Localized air quality impacts to sensitive receptors typically result in CO hotspot and TACs, which are discussed in the following subsections.

**Carbon Monoxide Hotspots**

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal one-hour standard of 35.0 parts per million (ppm) or the federal and state eight-hour standard of 9.0 ppm (CARB 2016).

The entire SJVAB is in conformance with the CAAQS and NAAQS for carbon monoxide, and most air quality monitoring stations no longer report carbon monoxide levels. As shown in Table 7 maximum daily carbon monoxide emissions during Project operations would be ten pounds, which would not exceed the threshold of 100 pounds per day. These thresholds are designed to be protective of public health. Based on the low background level of carbon monoxide in the Project area, ever-improving vehicle emissions standards for new cars in accordance with state and federal regulations, and the Project’s minimal level of operational carbon monoxide emissions, the Project would not create new hotspots or contribute substantially to existing hotspots. Therefore, the Project would not expose sensitive receptors to substantial carbon monoxide concentrations.

## Toxic Air Contaminants

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The following subsections discuss the Project's potential to result in impacts related to TAC emissions during construction and operation.

### *Construction*

Construction-related activities would result in temporary Project-generated DPM exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. Generation of DPM, which was identified as a TAC by CARB in 1998, from construction projects typically occurs in a single area for a short period. The proposed Project's construction would occur in phases over approximately 14 months with sensitive receptors adjacent to the Project site. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has to the substance. Dose is positively correlated with time, and a more extended exposure period would result in a higher exposure level for the maximally exposed individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a more extended period.

The proposed Project would be consistent with the applicable AQMP requirements and control strategies intended to reduce emissions from construction equipment and activities. The proposed Project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction. However, given the construction area's proximity to nearby sensitive receptors off-site, particulate matter emissions during grading could potentially result in substantial TAC exposure and impacts would be potentially significant, requiring mitigation.

### *Operation*

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities). CARB guidelines recommend siting distances both for the development of sensitive land uses in proximity to TAC sources and for the addition of new TAC sources in proximity to existing sensitive land uses. The Project site is not close to the land uses described above that would generate substantial TAC emissions. In addition, educational land uses are not considered land uses that generate substantial TAC emissions based on reviewing the air toxic sources listed in CARB's guidelines. Therefore, the expected hazardous TACs generated on site (e.g., cleaning solvents, paints, landscape pesticides, etc.) for the proposed land uses would be below thresholds warranting further study under the California Accidental Release Program. The Project would not expose off-site sensitive receptors to significant amounts of carcinogenic or TACs. Therefore, operational impacts would be less than significant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

Mitigation Measure AQ-1 would reduce DPM emissions by approximately 92 percent as compared to standard CalEEMod assumptions for engine tier<sup>2</sup>. With these reductions, toxic air contaminant concentrations at sensitive receptors would not be substantial, and the Project would not expose sensitive receptors to substantial construction TAC pollutant concentrations and impacts would be less than significant with mitigation incorporated.

## Mitigation Measure

### *AQ-1 Construction Emissions Reduction*

Prior to issuance of grading permits, the District or City of Firebaugh shall confirm that the grading plan, building plans, and specifications stipulate that the following measures shall be implemented:

- All mobile off-road equipment (wheeled or tracked) used during construction activities shall meet the USEPA Tier 4 Final standards. Tier 4 certification can be for the original equipment or equipment that is retrofitted to meet the Tier 4 Final standards.
- Alternative fuel (natural gas, propane, electric, etc.) construction equipment shall be incorporated where available. These requirements shall be incorporated into the contract agreement with the construction contractor. A copy of the equipment's certification or model year specifications shall be available upon request for all equipment on-site.
- Electricity shall be supplied to the site from the existing power grid to support the electric construction equipment. If connection to the grid is determined to be infeasible for portions of the Project, a non-diesel fueled generator shall be used.

## Significance After Mitigation

*d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be intermittent and temporary and would cease upon completion, and odors disperse with distance. Overall, Project construction would not generate other emissions, such as those leading to odors, affecting a substantial number of people. Construction-related impacts would be less than significant.

SJVACPD has identified some common types of facilities that have been known to produce odors in the SJVAB. Table 6 of SJVAPCD's GAMAQI shows the screening distances that have the potential to generate substantial odor complaints. The uses in the table include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, asphalt batch plant, chemical manufacturing, fiberglass manufacturing, painting/coating operations, food processing facility, feed lot/dairy, and rendering plant (SJVAPCD 2015). The proposed Project is not associated with operational odors in the SJVAB. In addition, solid waste generated by the proposed on-site uses would be properly stored in lidded dumpsters and/or trash cans and collected by a contracted waste hauler, ensuring that on-site waste would be managed and collected in a manner to prevent the proliferation of odors. The SJVAPCD does not have an individual rule or regulation that specifically addresses odors; however, odors would be subject to SJVAPCD's *Rule 4102, Nuisance*. Therefore,

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<sup>2</sup> The default construction equipment engine tier for CalEEMod consists of a mix of all engine tiers.

the proposed Project would not generate other emissions such as those leading to odors affecting a substantial number of people, and impacts would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

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## 4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Wildlife 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 state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, 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. Conflict 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"/>

## Regulatory Setting

### *Federal and State*

Regulatory authority over biological resources is shared by federal, State, and local agencies under a variety of laws, ordinances, regulations, and statutes. Primary authority for biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the FLDUSD).

The U.S. Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (MBTA; 16 United States Code [USC] Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the Federal Endangered Species Act (FESA) (16 USC Section [§] 153 et seq.). Generally, the USFWS implements FESA for terrestrial and freshwater species, while the NMFS implements FESA for marine and anadromous species.

The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the State under CEQA and has direct jurisdiction under the California Fish and Game Code (CFGC). Under the California Endangered Species Act (CESA)), CDFW has direct regulatory authority over species formally listed as threatened, endangered, or rare. Native and/or migratory bird species are protected under the MBTA and CFGC Sections 3503, 3503.5, and 3511.

CDFW also has authority to administer the Native Plant Protection Act (NPPA) (CFGC Section 1900 et seq.). The NPPA requires CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the NPPA, the owner of land where a rare or endangered native plant is growing is required to notify CDFW at least 10 days in advance of changing the land use to allow for salvage of the plant(s).

Laws and regulations found within the Clean Water Act (CWA), CFGC, California Water Code, and California Code of Regulations (CCR) protect wetlands and riparian habitat. The U.S. Army Corps of Engineers (USACE) has regulatory authority over wetlands and other waters of the United States under Section 404 of the CWA. The State Water Resources Control Board and the nine Regional Water Quality Control Boards (RWQCBs) ensure water quality protection in California pursuant to Section 401 of the CWA and Section 13263 of the Porter-Cologne Water Quality Control Act. CDFW regulates certain waters features, such as streams and lakes, under the CFGC Section 1600 et seq.

### *Local*

The City of Firebaugh 2030 General Plan *Conservation, Open Space, Parks and Recreation and Air Quality Element* includes one implementation measure that requires the environmental review process to include the protection of endangered wildlife and their habitats. Additionally, the City of Firebaugh Municipal code limits the removal of trees on public property. Chapter 18-8, *Trimming or Removal of Trees—Approval Required*, states “No person shall cut, trim, prune, plant, remove, injure or interfere with any tree, shrub or plant upon any street, park, pleasure ground, boulevard, alley or public place of the city without prior permission and approval therefor from the park commissioner.” FLDUSD is not required by State law to follow local land use regulations but does attempt to adhere to local requirements to the extent feasible.

## Methodology

### *Literature Review and Field Survey*

Information contained in this section consists of a review of relevant literature and database query results, a reconnaissance-level field survey to determine what sensitive biological resources occur or may occur at the Project site, and an evaluation of the proposed activity in the context of potentially occurring biological resources to determine potentially significant impacts under CEQA. The potential presence of special-status species and other sensitive biological resources is based on the literature review and a field survey designed to assess habitat suitability for special-status species and presence/absence of other sensitive biological resources (e.g., wetlands). The potential for impacts to these resources was evaluated based on this methodology, the proposed Project description, and expected construction activity.

### LITERATURE REVIEW

Rincon reviewed relevant databases and literature for baseline information on biological resources occurring and potentially occurring at the Project site and in the immediate surrounding area prior to conducting a reconnaissance-level field survey. The review included the following sources:

- California Natural Diversity Data Base (CNDDDB; CDFW 2024a) and Biogeographic Information and Observation System (BIOS; CDFW 2024b) for the United States Geological Survey (USGS) 7.5-minute topographic quadrangle encompassing the Project site (*Firebaugh*) and the eight surrounding quadrangles (*Tranquillity, Coit Ranch, Mendota Dam, Firebaugh NE, Poso Farm, Broadview Farms, Chaney Ranch* and *Oxalis*)
- Online Inventory of Rare and Endangered Plants of California (CNPS 2024a)
- Information for Planning and Consultation (IPaC; USFWS 2024a)
- Critical Habitat Portal (USFWS 2024b)
- National Wetlands Inventory (NWI; USFWS 2024c)
- National Hydrography Dataset (NHD; USGS 2024)
- Web Soil Survey (U.S. Department of Agriculture, Natural Resources Conservation Service [USDA, NRCS] 2024)

### FIELD SURVEY

Rincon conducted a reconnaissance-level field survey to assess the potential habitat suitability for special-status species, evaluate and map vegetation communities and land cover types, document and map the presence of sensitive biological resources, identify potential jurisdictional waters or wetlands, document wildlife connectivity/movement features, and record all observation of plant and wildlife species within the Project site. Rincon conducted the site visit on May 4, 2024, between the hours of 0645 and 0800. The temperature was approximately 51 degrees Fahrenheit. A biologist conducted the survey by walking pedestrian transects over the entire Project site, inspecting the site for the potential to support special-status species and other sensitive biological resources.

## Special-Status Species

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS or NMFS under FESA; those listed or proposed for listing as rare, threatened, or endangered by the CDFW under CESA or NPPA; animals designated as “Species of Special Concern,” “Fully Protected,” or “Watch List” by CDFW; and plants with a California Rare Plant Rank (CRPR) of 1 or 2, which are defined as:

- List 1A = Plants presumed extinct in California
- List 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- List 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20-80 percent occurrences threatened)
- List 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (<20 percent of occurrences are threatened or no current threats known)
- List 2 = Rare, threatened or endangered in California, but more common elsewhere

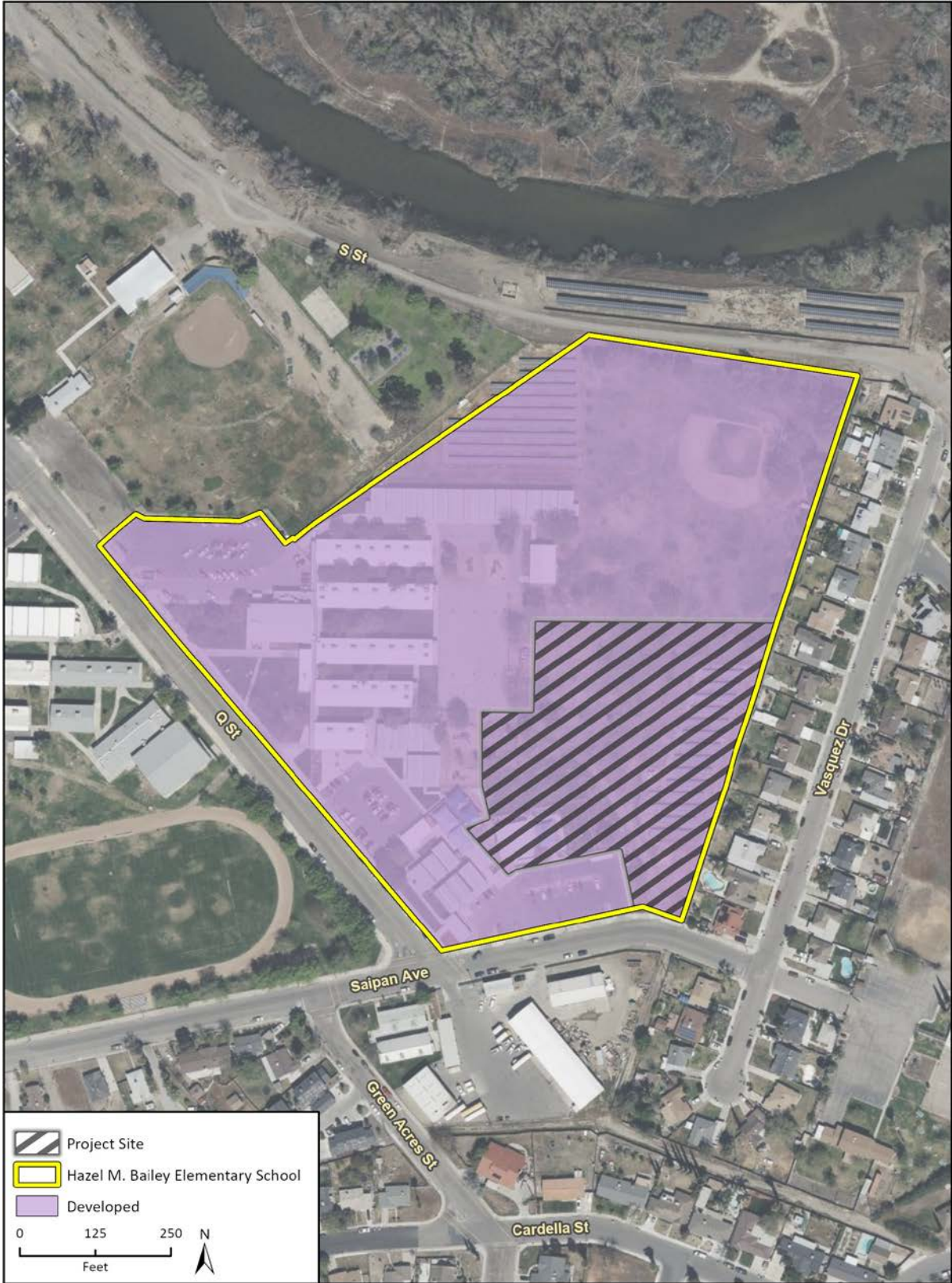
## Results

### *Land Cover Types*

#### **DEVELOPED**

The Project site is fully developed. A landscaped lawn is surrounded by school buildings to the west and south, sports fields to the north and solar arrays to the east and northwest. Vegetation communities and land cover types are shown in Figure 4.

Figure 4 Vegetation Communities and Land Cover Types



Imagery provided by Microsoft Bing and its licensors © 2024.

23-15573-BIO  
Fig X Vegetation

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

### Special-Status Plants

A review of resource agency databases and lists for known special-status plant species occurrences in the nine USGS quadrangles containing and surrounding the Project site identified 17 special-status plant species with potential to occur on the Project site. Based on the disturbed and developed nature of the site and each species' specific habitat requirements, none of these species are expected to occur on the Project site. Specifically, the Project site does not contain vernal pools, alkaline or sandy soils, or native vegetation communities required by special-status plant species and is largely isolated from natural habitats by surrounding development. No impacts to special-status plants would occur.

### Special-Status Wildlife

A review of resource agency databases and lists for known special-status wildlife species occurrences in the nine USGS quadrangles containing and surrounding the Project site identified 33 special-status wildlife species with potential to occur on the Project site. Due to the lack of vernal pools, natural vegetation communities, and burrows at the site as well as the developed and isolated nature of the site, all but one special status wildlife species can be excluded from having potential to occur on site. The presence of large cottonwood trees north of the site provides suitable nesting habitat for Swainson's hawk (*Buteo swainsoni*), a State threatened species. Impacts to Swainson's hawk would be limited to Project activities that would affect an active nest within 0.5-mile of a construction activity. While Swainson's hawks nesting near the Project site would likely be adapted to a higher baseline level of activity, construction noise and disturbance could still alter hawk behavior such that nest abandonment occurs. Therefore, impacts to active Swainson's hawk nests would be significant and Mitigation Measure BIO-1 would be required. Mitigation Measure BIO-1 would lower the impact to a less-than-significant level.

Similarly, trees and buildings on the Project site could be used by migratory birds as nesting habitat. Migratory birds are protected under CFGC Section 3503 and the MBTA. The bird nesting season generally extends from February 1 through August 31 in California but can vary based upon annual climatic conditions. Thus, construction activities could result in direct impacts to active nests during vegetation removal or disturbance-related nest abandonment. Impacts to most non-listed bird species through nest destruction or abandonment would not be significant; however, this would be a violation of CFGC and the MBTA. Impacts to non-listed special-status birds would be potentially significant if those impacts would jeopardize the viability of a local or regional population. Mitigation Measure BIO-1 would be required to reduce the Project's impacts to special-status avian wildlife to a less-than-significant level, thereby avoiding violation of the CFGC and MBTA.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

## Mitigation Measures

### *BIO-1 Nesting Bird Avoidance and Minimization*

To prevent the loss of active special-status and non-special-status bird nests, juveniles or adults, Project activities including vegetation clearing shall be conducted outside of the breeding season of September 1 through January 31, to the extent feasible.

If construction (including staging and mobilization and Project specific activities like demolition, fence installation etc. that may require a preconstruction survey) will occur between February 1 and August 31, a pre-construction nesting bird survey shall be conducted by a qualified biologist within 7 days prior to the activity to survey for special-status and non-special-status bird and raptor nests. The survey area should/shall include the Project footprint and a 100-foot buffer for passerine species, a 300-foot buffer for raptor species, and a 0.5-mile buffer for Swainson's hawk. If a lapse in construction work of 15 days or longer occurs during the nesting season, additional nest surveys should/shall be required before construction may resume. Following the survey, the following will be implemented:

- A nesting bird survey report shall be submitted to the FLDUSD prior to the initiation of Project activities. The report shall detail the results of the survey including identification of the location of any active nests, and make a determination if ongoing monitoring should be conducted and/or no-disturbance buffers should be established.
- If active nests are identified during the survey and/or work is scheduled to take place within 100 feet of active passerine nests, 300-feet of active raptor nests, or 0.5 mile of an active Swainson's hawk nest, a qualified biologist shall determine appropriate no-disturbance buffers. The buffer shall be the minimum distance required to avoid take of the nest and shall be determined based on the species identified, activities proposed, level of existing noise, and line of sight from the disturbance to the nest.
- A qualified biological monitor shall be present at the initiation of Project activities occurring within 100 feet of active passerine nests, 300-feet of active raptor nests, or 0.5 mile of an active Swainson's hawk nest, to ensure that Project activities do not negatively affect the success of the nest. Duration and frequency of monitoring shall be determined at the discretion of the qualified biologist.
- If nesting bird monitoring is conducted, a nesting bird monitoring report should/shall be submitted to FLDUSD detailing the results of monitoring activities. The report will be submitted within 30 days of the completion of the activities or nesting season.

*b. Would the project 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 Wildlife or U.S. Fish and Wildlife Service?*

The review of the resource agency databases for sensitive natural communities within the nine USGS quadrangles containing and surrounding the Project site identified three sensitive natural communities: Coastal and Valley Freshwater Marsh, Valley Sacaton Grassland, and Valley Sink Scrub. Given the Project site's developed nature, none of these sensitive natural communities are present within or adjacent on the Project site, nor are other sensitive natural communities, riparian habitats, or critical habitats. The Project would have no impact on riparian habitat or other sensitive natural communities.

**NO IMPACT**

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

The review of the resource agency databases for wetlands and waters within the Project vicinity did not reveal potentially jurisdictional areas, wetlands or waters within the Project site. The San Joaquin River is approximately 132 feet north of the northern fence line of the Project site. Impacts are not expected to occur to the San Joaquin River since there is an existing berm located between the Project site and the river that would preclude pollutant, erosion or sedimentation impacts to the river, and Project runoff would be directed to the City stormwater system. The Project would have no impact on State or federally protected wetlands.

**NO IMPACT**

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The Project site consists of developed and disturbed areas with primarily non-native vegetation in the middle of the existing school site. Land use in the vicinity is primarily residential. The nearby San Joaquin River contains natural habitats and is expected to support wildlife movement. The Project would involve construction of new classrooms on an existing developed school site, and as such, would not introduce new impediments to wildlife movement. Therefore, impacts to the San Joaquin River would not occur because of this Project. No impacts to wildlife movement corridors would occur as a result of Project activities.

**NO IMPACT**

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Trees present in the Project site that could be removed include Chinese tallow (*Triadica sebifera*) and Chinese elm (*Ulmus parvifolia*). These non-native species are not protected under the City's tree ordinance. FLDUSD is not required to follow local land use regulations and does not have its own policy regarding tree preservation. Therefore, the Project would not conflict with local policies and ordinances.

**NO IMPACT**

- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The Project site is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. As such, the Project would not conflict with the provisions of any such plan. No impact would occur.

**NO IMPACT**

## 5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section provides an analysis of the Project’s impacts on cultural resources, including historical and archaeological resources, as well as human remains. CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be historically significant (*CEQA Guidelines*, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

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, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures would be required (PRC, Section 21083.2[a], [b]).

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

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; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

## Cultural Resources Assessment

Rincon Consultants conducted a Cultural Resources Assessment in June 2024 for the 14-acre Hazel M. Bailey Elementary School site (Appendix B). This assessment includes the methods and results of a cultural resources records search of the California Historical Resources Information System, Sacred Lands File search, pedestrian survey, literature review, geoarchaeological sensitivity analysis, and National Register of Historic Places and California Register of Historical Resources evaluation of the Hazel M. Bailey Primary School.

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

The Cultural Resources Assessment determined that the Project site is recommended ineligible for the National Register of Historic Places and California Register of Historical Resources and is therefore not a historical resource as defined by CEQA. Changes to the subject property under the proposed Project therefore would not result in a substantial adverse change to historical resources. There would be no impact to historic resources.

### **NO IMPACT**

- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The Cultural Resources Assessment did not identify archaeological resources or archaeological deposits in the Project site, and the California Native American Heritage Commission (NAHC) SLF request was returned with negative results in April 2024. The absence of substantial prehistoric or historic-period archaeological remains within the immediate vicinity, along with the existing level of disturbance in the Project site, suggest there is a low potential for encountering intact subsurface archaeological deposits. However, the lack of surface evidence of archaeological materials does not preclude their subsurface existence. This is a potentially significant impact. Consequently, Mitigation Measure CUL-1 is required to ensure adequate procedures are followed in case of unanticipated discovery, reducing potential impacts to archaeological resources to a less than significant level.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

## Mitigation Measure

### *CUL-1 Unanticipated Discovery of Cultural Resources*

In the event that archaeological resources are encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource and identify tribal values associated with the resource. If the qualified archaeologist and/or

Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of the California Code of Regulations (CCR) Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The Firebaugh-Las Deltas Unified School District shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the CHRIS, pursuant to California Code of Regulations Guidelines Section 15126.4(b)(3)(C).

- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

No human remains are known to be present within the Project site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found during ground disturbance, the State of California 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. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify an MLD. The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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## 6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<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 checked="" type="checkbox"/>	<input type="checkbox"/>

### Energy Setting

Energy consumption has a direct effect on environmental quality in that consumption of nonrenewable energy resource releases criteria air pollutant and greenhouse gas emissions on the atmosphere.

As a state, California is one of the lowest per capita energy users in the United States, ranked 49<sup>th</sup> in the nation, due to its energy efficiency programs and mild climates (United States Energy Information Administration [USEIA] 2024a). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, fireplaces, and other uses such as industrial processes and transportation. Energy resources consumed by proposed Project activities would primarily be petroleum fuels. Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (USEIA 2024a). Gasoline, which is used by light-duty cars, pickup trucks, and other vehicles, is the most used transportation fuel in California with 13.6 billion gallons sold in 2022 (California Energy Commission [CEC] 2024d). Diesel, which is used primarily by heavy-duty trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 2.9 billion gallons sold in 2020 (CEC 2024d). Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the Project’s energy consumption are discussed in detail in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, respectively.

#### *Pacific Gas & Electric Co.*

Pacific Gas & Electric Co. (PG&E) supplies electricity to Firebaugh using transmissions infrastructure operated and maintained by PG&E. PG&E is a privately owned power supplier that provides electricity to Madera County residents and businesses. PG&E is one of the nation’s largest electric and gas utility companies, and it maintains 108,000 circuit miles of electric distribution lines and

18,000 circuit miles of interconnected transmission lines (PG&E 2021). According to PG&E’s 2020 Integrated Resource Plan, PG&E anticipates meeting a 2030 gross system usage of 82,306 GWh.

As shown in Table 8 , California used 287,826 gigawatt hours (GWh) of electricity in 2022, of which 54.23 percent were from non-GHG and renewable resources (CEC 2024a; CEC 2024b). California also consumed approximately 11,711 million U.S. therms (MMthm) of natural gas in 2020 (CEC 2024a). Table 8 also shows the total electricity and natural gas consumption for the PG&E service area.

**Table 8 2022 Electricity and Natural Gas Consumption**

Energy Type	Fresno County	Pacific Gas & Electric	California	Proportion of PG&E Consumption	Proportion of Statewide Consumption <sup>1</sup>
Electricity (GWh)	8,384	77,887	287,826	10.8%	2.9%
Natural Gas (millions of therms)	319.4	4,422	11,711	7.2%	2.7%

GWh = gigawatt-hours

<sup>1</sup> For reference, the population of Fresno County (1,017,431 persons) is approximately 2.6 percent of the population of California (39,128,162 persons) (California Department of Finance 2024).

Source: CEC 2024a

## Petroleum and Natural Gas Setting

California is one of the top producers of petroleum in the nation with drilling operations occurring throughout the state but concentrated in Kern and Los Angeles counties. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay area, and the Central Valley. California oil refineries also process Alaskan and foreign crude oil received at ports in Los Angeles, Long Beach, and San Francisco Bay area (CEC 2024c). According to the USEIA, California’s field production of crude oil totaled 112,189 million barrels in 2023 (USEIA 2024b).

As shown in Table 9, Fresno County consumed an estimated 371 million gallons of gasoline and 85 million gallons of diesel fuel in 2022, which was approximately 2.7 percent of statewide gasoline consumption and approximately 3.7 percent of statewide diesel fuel consumption (CEC 2024d).

**Table 9 2022 Annual Gasoline and Diesel Consumption**

Fuel Type	Fresno County (million gallons)	California (million gallons)	Proportion of Statewide Consumption
Gasoline	371	13,640	2.7%
Diesel	85	2,290	3.7%

Source: CEC 2024d

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

## Construction Energy Consumption

Energy use during Project construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and construction worker travel to and from the Project site. Energy use would be typical of similar-sized construction projects in the region. Furthermore, the proposed Project would utilize construction contractors who demonstrate

compliance with the provisions of the California Code of Regulations Title 13 Sections 2449 and 2485, which restrict the idling of heavy-duty diesel vehicles and govern the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. Applicable regulatory requirements such as 2019 California's Green Building Standards Code (CALGreen; California Code of Regulations, Title 24, Part 11), mandate that future infrastructure projects comply with construction waste management practices to divert a minimum of 65 percent of construction and demolition debris. These practices would result in efficient use of energy during construction. Further, in the interest of both environmental awareness and cost efficiency, construction contractors would not be expected to utilize fuel in a manner that is wasteful or unnecessary. As such, construction would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction. This impact would be less than significant.

## Operational Energy Consumption

Operation of the proposed Project would result in the additional consumption of natural gas and electricity. However, new development would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6 of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The California Energy Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances and provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls, and ceilings. The California Energy Code emphasizes saving energy at peak periods and seasons and improving the quality of installation of energy efficiency measures. The California Green Building Standards Code sets targets for energy efficiency; water consumption; dual plumbing systems for potable and recyclable water; diversion of construction waste from landfills; and use of environmentally sensitive materials in construction and design, including ecofriendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels. Operation of the proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. This impact would be less than significant.

### LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The proposed Project would involve the construction of seven new classroom buildings. The City's General Plan Conservation, Open Space, Parks and Recreation Element has several policies in place to reduce emissions related to energy consumption in area sources that the proposed Project would abide by. Such policies include (City of Firebaugh 2005):

- H-1:** Reduce emissions related to energy consumption and area sources.
- H-2:** Encourage the use of energy conservation features and low-emission equipment for all new residential, commercial, and industrial development.
  - a. The City shall cooperate with the local building industry, utilities and the SJVAPCD to promote enhanced energy conservation standards for new construction.

- b. The City shall encourage new residential, commercial, and industrial development to reduce air quality impacts from area sources and from energy consumption.

As described above, the proposed Project would be required to adhere to the California Code of Regulations, Title 24, Part 6 which sets requirements for California's Energy Efficiency Standards for residential and non-residential buildings. As such, the proposed Project would adhere to design standards that govern indoor/outdoor lighting, mechanical systems, solar, electrical power distribution, among other features (CEC 2019). Therefore, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
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Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 on- or off-site 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 Uniform Building Code (1994), 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 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a.1. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*
- a.2. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

There are no major active faults within Fresno County boundaries. The nearest major fault system to the city of Firebaugh is the San Andreas Fault (43 miles southwest). According to the Five County Seismic Safety Element (FCSSE), Firebaugh is most likely to be affected by the San Andreas Fault. However, the distance from the fault to Firebaugh is sufficient enough that the City is somewhat protected from the most severe forms of damage that would result from an earthquake (Firebaugh 2005). There is no indication of active faults on the Project site and the site is not located within a designated Alquist-Priolo Earthquake fault zone (DOC 2024). Additionally, all development is required to comply with the California Building Standards Commission (CBSC), which provides minimum standards to ensure that proposed structures are designed using sound engineering practices and appropriate engineering standards for the seismic area in which a Project site is located. Projects designed in accordance with the CBSC would be able to: 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, as well as non-structural, damage. Although conformance with the CBSC does not guarantee that substantial structural damage would not occur in the event of a maximum magnitude earthquake, conformance with the CBSC can reasonably be assumed to ensure that the proposed structures would be survivable, allowing occupants to safely evacuate in the event of a major earthquake. The Project site is not in a location of known active faults and would be required to comply with the CBCS building codes; thus, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- a.3. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

A geotechnical report was prepared for the Project Site by RMA GeoScience in June 2024 (Appendix C). The report determined that there are no liquefaction hazard zones identified near the site. Additionally, the site is not in a California Geologic Survey Seismic Hazards Program Liquefaction Zone (California Geologic Survey 2022). However, the geotechnical report determined that there could be a risk of liquefaction occurring at the Project site during a design level earthquake in a poorly graded sand layer between 10 and 33 feet below the ground surface. The District would comply with the recommendations provided in the RMA GeoScience report to reduce potential impacts related to liquefaction to a less than significant level and meet State building code requirements. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

The Project site is generally flat and no natural or manmade slopes are present on or directly adjacent to the Project site. The geotechnical report determined that since there are no natural or manmade slopes in the vicinity of the Project site, landslides would not be a hazard. There would be no impact.

**NO IMPACT**

*b. Would the project result in substantial soil erosion or the loss of topsoil?*

Development of the proposed Project would involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities that could result in erosion or the loss of topsoil. Construction activities that disturb one or more acres of land surface are subject to the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board (SWRCB). Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require development of a SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-storm water management controls. Inspection of construction sites before and after storms is also required to identify storm water discharge from the construction activity and to identify and implement erosion controls, where necessary. Adherence to Best Management Practices (BMPs) and the NPDES General Permit would ensure that the Project would be designed to support erosion control. Thus, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

As described above in items *a.3* and *a.4*, the Project site is not located in a landslide zone or a liquefaction zone. The Project site is not located near unstable slopes that would be considered susceptible to lateral spreading. Therefore, the potential for liquefaction and lateral spreading to pose a risk to the proposed development is relatively low. Land subsidence is the gradual, local settling or sinking of the earth's surface with little or no horizontal motion and is typically a result of groundwater depletion. The CBSC building regulations require the preparation of geotechnical reports, which would determine the site's potential for subsidence and recommend necessary design features to ensure the stability of proposed structures. As described under Impact a. above, a geotechnical report was prepared for the Project Site by RMA GeoScience in June 2024. The District would comply with the recommendations provided in the RMA GeoScience report to reduce potential impacts related to unstable soils to a less than significant level. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

Expansive soils are soils that, due to their composition and moisture content, have a potential to undergo significant changes in volume, in the form of either shrinking or swelling. According to the RMA GeoScience geotechnical report for this Project (Appendix C), field exploration indicated that the surface soils of the Project site have a very high expansion potential (Expansion Index of  $\leq 130$  and Plasticity Index of 38 to 50). The geotechnical report recommended 2 options: (1) removal of expansive on-site soils and replacement with approved non-expansive soils compacted to 90 percent relative compaction during earthwork and (2) moisture conditioning to at least 4 percent over optimum moisture (as determined from ASTM D1557) of the upper 2 feet of soils below the finished subgrade, is geotechnically feasible. These measures would mitigate the impact of expansive soils to a less than significant level. The District would comply with the recommendations provided in the RMA GeoScience report to reduce potential impacts from expansive soils to a less than significant level. Impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The construction or operation of septic tanks or other alternative wastewater disposal systems is not included as part of the Project. The new classroom buildings would connect to the City's existing wastewater infrastructure. No impacts from septic or alternative wastewater disposal systems would occur.

#### **NO IMPACT**

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in "soil" but are contained within the geologic deposits or bedrock that underlies the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, and therefore evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they are discovered during construction of a development project.

Rincon evaluated the paleontological sensitivity of the geologic units that underlie the Project site to assess the Project's potential for significant impacts to scientifically important paleontological resources. The analysis was based on the results of a paleontological locality search and a review of existing information in the scientific literature regarding known fossils within geologic units mapped at the Project site. According to the SVP (2010) classification system, geologic units can be assigned

a high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources. Following the literature review, a paleontological sensitivity classification was assigned to each geologic unit mapped within the Project site. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units.

The Project site is located in the Great Valley geomorphic province (California Geological Survey 2002). The Great Valley is an elongate lowland approximately 50 miles wide and 400 miles long. It is bounded to the east by the Sierra Nevada Range and to the west by the Coast Range. A relatively undeformed basin, the Great Valley rises from about sea level to approximately 400 feet in elevation at the north and south ends. The northern portion of the valley, referred to as the Sacramento Valley, is drained by the Sacramento River, while the southern portion of the valley, referred to as the San Joaquin Valley, is drained by the San Joaquin River. Consequently, the Great Valley is predominantly alluvial, flood, and delta plains formed by these two major river systems (Weissmann et al. 2005). Specifically, the Project site lies on the west bank of the San Joaquin River.

The Project site is located within the *Firebaugh, California* United States Geological Survey 7.5-minute topographic quadrangle(s). The geology of the region surrounding the Project site was mapped by Jennings and Strand (1958), who identified two geologic units, Quaternary stream channel deposits and Quaternary basin deposits, underlying the Project site. A geotechnical investigation was conducted for this Project (RMA GeoScience, Inc. 2024). RMA GeoScience, Inc. (2024) focused on the southern portion of the Project site, where the new buildings would be constructed. The investigation represents a much more specific analysis of the Project site's geology than the regional map of Jennings and Strand (1958). RMA GeoScience, Inc. (2024) informs the specific analysis within the context of the broader geological context.

RMA GeoScience, Inc. (2024) noted reworked (i.e., previously disturbed) and fill sediments in some of the test borings from the surface to depths of 1.5 to 2 feet. These sediments varied, consisting of sandy silt, sandy clay, and fine- to medium-grained sand. Previously disturbed or fill sediments are removed from their original stratigraphic context, and therefore, cannot produce scientifically significant paleontological resources. Therefore, previously disturbed or fill sediments have no paleontological sensitivity.

Quaternary basin deposits underlie the majority of the Project site (Jennings and Strand 1958) and the entire area analyzed by RMA GeoScience, Inc. (2024). Quaternary basin deposits consist of black or gray-brown silty clay or brown sandy clay (RMA GeoScience, Inc. 2024). These sediments were found at the surface or directly underlying the surficial previously disturbed sediments and reach maximum depths of 3 to 13 feet below the surface. Quaternary basin deposits represent sediments deposited in floodplains and wetlands and are generally considered too young (i.e., less than 5,000 years old; SVP 2010) to preserve paleontological resources. Therefore, Quaternary basin deposits have low paleontological sensitivity.

Quaternary stream channel deposits underlie portions of the Project site nearest the San Joaquin River. Quaternary stream channel deposits consist of unconsolidated silt, sand, and gravel, deposited by active streams and rivers (Jennings and Strand 1958). RMA GeoScience, Inc. (2024) noted gray-brown, fine- to coarse-grained clayey sand and light gray fine- to coarse-grained sand directly underlying Quaternary basin deposits down to the maximum explored depth of 50 feet below the surface. The coarser-grained nature of these sandy sediments suggests that they were deposited in a higher-energy setting than Quaternary basin deposits that are closer to the surface.

Therefore, these sandy sediments are presumed to represent Quaternary stream channel deposits. Quaternary stream channel deposits are generally considered too young (i.e., less than 5,000 years old; SVP 2010) to preserve paleontological resources. Therefore, Quaternary stream channel deposits have low paleontological sensitivity.

At some depth in the subsurface, Holocene-aged sediments, such as Quaternary basin deposits and Quaternary stream channel deposits, will become old enough (i.e., at least 5,000 years old; SVP 2010) to preserve paleontological resources. Geotechnical borings do not reveal this transition depth because the age at which sediments become old enough to preserve paleontological resources (i.e., 5,000 years old) does not necessarily correspond to an observable change in sediment type. Early Holocene- and Pleistocene alluvial sediments in Fresno County are known to preserve paleontological resources, such as mammoth (*Mammuthus*), ground sloth (*Paramylodon*), and bison (*Bison*) (Jefferson 2010; University of California Museum of Paleontology 2024), and so are considered to have high paleontological sensitivity. The proximity of the Project site to the San Joaquin River suggests that the rate of sediment accumulation is high, so the depth at which the sediments become greater than 5,000 years old may be as little as 10 feet. Therefore, all sediments within the Project site should be considered to have low paleontological sensitivity (or no sensitivity in areas containing previously disturbed or fill sediments) from 0 to 10 feet and undetermined paleontological sensitivity greater than 10 feet below the surface. Ground-disturbing activities within previously undisturbed sediments with high or undetermined paleontological sensitivity could result in significant impacts to paleontological resources. Impacts would be significant if construction activities result in the destruction, damage, or loss of scientifically important paleontological resources and associated stratigraphic and paleontological data. The Project would require grading for building pads and excavation for utility and stormwater infrastructure. The majority of these excavations would not exceed 10 feet in depth. Two stormwater seepage pits would require excavations of up to 20 feet below the surface. Therefore, this Project does have the potential, where disturbances exceed 10 feet in depth, to result in a significant impact to paleontological resources.

The volume of undetermined-sensitivity sediments would be limited, likely less than 10 cubic yards due to the relatively narrow diameter (i.e., 4 feet) of the two 20-foot-deep stormwater seepage pits. Thus, it is unlikely, though still possible, for the Project to significantly impact paleontological resources. Establishing procedures to recover, identify, and curate scientifically significant paleontological resources that are discovered during Project construction, as described in Mitigation Measure GEO-1 would reduce potential impacts to paleontological resources to a less than significant level.

#### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

##### *GEO-1 Unanticipated Discovery of Paleontological Resources*

#### **PALEONTOLOGICAL WORKER ENVIRONMENTAL AWARENESS PROGRAM**

Prior to the start of construction, a Qualified Professional Paleontologist, as defined by the Society of Vertebrate Paleontology (SVP; 2010), or their designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction personnel. The WEAP shall discuss the potential to discover paleontological resources in the Project site, legal obligations to protect paleontological resources, examples of paleontological resources that

may be found in the Project site, procedures in case a paleontological resource is discovered, and contact information for the Qualified Professional Paleontologist.

**UNANTICIPATED DISCOVERY OF PALEONTOLOGICAL RESOURCES**

The District shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If a potential fossil is discovered during Project construction, construction activity within 50 feet of the find shall cease until the discovery is examined by a Qualified Professional Paleontologist, as defined by the Society of Vertebrate Paleontology (SVP 2010). If the find is determined to be significant, the Qualified Professional Paleontologist shall direct salvage, laboratory preparation, and curation of the paleontological resource(s) consistent with the SVP (2010) standards. The Qualified Professional Paleontologist may also recommend full-time or part-time paleontological monitoring for subsequent Project excavations.

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## 8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
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"/>

Climate change is the observed increase in the average temperature of the Earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of Greenhouse Gases (GHG) emissions contributing to the “greenhouse effect,” a natural occurrence which takes place in Earth’s atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth’s surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and from human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO<sub>2</sub>), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO<sub>2</sub>) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as “carbon dioxide equivalent” (CO<sub>2</sub>e), which is the amount of a specific GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO<sub>2</sub> on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).

The United Nations IPCC expressed that the rise and continued growth of atmospheric CO<sub>2</sub> concentrations is unequivocally due to human activities in the IPCC’s Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatons of anthropogenic CO<sub>2</sub> was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Emissions resulting from human activities are thereby contributing to an average increase in Earth’s temperature. Potential climate

change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (California Natural Resource Agency 2019).

## Significance Thresholds

Based on Appendix G of the CEQA Guidelines, impacts related to GHG emissions from the project would be significant if the Project would:

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

The majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (*CEQA guidelines*, Section 15064[h][1]).

According to the state CEQA guidelines, projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the proposed project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP 2016) in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions. The City of Firebaugh nor the County of Fresno has adopted a numerical significance threshold for assessing impacts related to GHG emissions. Neither SJVAPD, California Office of Planning and Research, CARB, CAPCOA, nor any other state or applicable regional agency has adopted a numerical significance threshold for assessing GHG emissions that is applicable to the proposed project.

In the absence of an adopted numeric threshold, the significance of the proposed Project's GHG emissions are evaluated consistent with *CEQA guidelines* Section 15064.4(b) by considering whether the proposed Project complies with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Therefore, the significance of the proposed Project's potential impacts regarding GHG emissions and climate change is evaluated based on consistency with plans and policies adopted for the purposes of reducing GHG emissions and mitigating the effects of climate change. The most directly applicable adopted regulatory plans to reduce GHG emissions are the 2022 Scoping Plan, the Fresno Council of Governments (COG)'s 2022 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and City of Firebaugh 2030 General Plan. GHG emissions from the construction and operation of the proposed Project are provided for informational purposes.

## Methodology

Calculations of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions are provided to identify the magnitude of potential project effects. The analysis focuses on CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O because these make up 98 percent of all GHG emissions by volume and are the GHG emissions the Project would emit in the largest quantities (IPCC 2014). Emissions of all GHGs are converted into their equivalent GWP in terms of CO<sub>2</sub> (i.e., CO<sub>2</sub>e). Minimal amounts of other GHGs (such as chlorofluorocarbons) would be emitted; however, these other GHG emissions would not substantially add to the total GHG emissions. GHG emissions associated with Project construction and operation were estimated using CalEEMod, version 2022.1, with the assumptions described under Section 3, *Air Quality*, in addition to the following:

- The analysis uses CalEEMod default assumptions for water, solid waste, and area sources for elementary school uses.
- In accordance with AEP's recommendation, GHG emissions from construction of the proposed Project were amortized over a 30-year period and added to annual operational emissions to determine the Project's total annual GHG emissions (AEP 2016).

## Impact Analysis

- b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*
- a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Several plans and policies have been adopted to reduce GHG emissions in the SJVAB, including the State's 2022 Scoping Plan, the Fresno COG 2022 RTP/SCS, and the City of Firebaugh 2030 General Plan. The proposed Project's consistency with these plans is discussed in the following subsections.

### 2022 Scoping Plan

There are numerous state plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal State plan and policy is AB 32, the California Global Warming Solutions Act of 2006, as well as SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. In 2022, the State passed AB 1279, which declares the State would achieve net-zero GHG emissions by 2045 and would reduce GHG emissions by 85 percent below 1990 levels by 2045.

The 2022 Scoping Plan identifies plans and regulations and strategies that are to be implemented at the state and project level that will reduce GHG emissions consistent with State policies with a target of 85 percent below 1990 levels by 2045 which is the equivalent of carbon neutrality by 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the state's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities. The 2022 Scoping Plan's strategies that apply to the proposed Project include the following:

- Reducing fossil fuel use, energy demand and VMT.
- Building Carbonization.
- Maximizing recycling and diversion from landfills.

The 2022 Scoping Plan Appendix D, Local Actions, provides suggestions for prioritizing the various types of mitigation, starting with on-site GHG-reducing design features and mitigation measures, such as methods to reduce VMT and support building decarbonization, access to shared mobility services or transit, and EV charging. The 2022 Scoping Plan Building Decarbonization priority area focuses on development projects deployment of renewable energy production, distribution, and energy storage. The proposed Project would add solar panels to the existing ground mounted solar array. In addition, the Project would not include natural gas and would implement all electric appliances. The 2022 Scoping Plan’s VMT Reduction priority area supports infill sites that are surrounded by existing urban uses. The Project is an infill development in an urban area that would not convert natural lands and would contribute to the job and housing balance. Therefore, the proposed Project will not conflict with the 2022 Scoping Plan.

### **Fresno COG 2022 RTP/SCS**

Fresno COG adopted an updated RTP/SCS, *2022 Regional Transportation Plan*, in July 2022. The Fresno COG 2022 RTP/SCS comprehensively assesses all forms of transportation available in Fresno County as well as travel and goods movement needs through 2046. The SCS is reflective of legislation SB 375 to focus land use development around high-quality transit corridors as a means to reduce passenger vehicle GHG emissions. The 2022 RTP/SCS has three central goals aimed at promoting a more sustainable future, including transportation strategies, land use strategies, and other beneficial approaches (Fresno COG 2022). The Project would involve the construction of new classrooms that would serve the existing student population and would not add new vehicle trips. Therefore, the Project would not conflict with the transportation goals of the 2022 RTP/SCS. The 2022 RTP/SCS’s land use strategies would support efficient land use. The proposed classrooms would be all-electric, and the Project would add solar panels to the existing ground-mounted solar array onsite. Therefore, the proposed Project would be consistent with the 2022 RTP/SCS to reduce GHG emissions.

### **City of Firebaugh 2030 General Plan**

While the 2030 General Plan does not contain specific GHG reduction policies, it does contain policies that ensure energy efficiency and multimodal transportation, that would reduce GHG emissions from new development. Table 10 summarizes the Project’s consistency with the City of Firebaugh 2030 General Plan’s policies indirectly related to GHG emissions.

**Table 10 Project Consistency with the City of Firebaugh 2030 General Plan**

<b>Policy</b>	<b>Consistency</b>
<p><b>Policy:</b> Create a land use pattern that will encourage people to walk, bicycle, or use alternative transportation for a significant number of their daily trips.</p> <p><b>Policy:</b> Plan development in a way that makes the most efficient use of the land and reduces impacts to the environment.</p>	<p><b>Consistent.</b> New classrooms proposed by the District would be constructed on the existing school site, which is already developed, would be consistent with existing uses, and would not require existing students to travel to alternative locations to receive educational services.</p>
<p><b>Policy:</b> Reduce emissions related to energy consumption and area sources.</p>	<p><b>Consistent.</b> Future development facilitated by the Project would be required to comply with Title 24 standards, which promote energy conservation in new buildings. The Project would add solar panels to the existing mounted solar array. In addition, the Project’s classroom buildings would be all electric, which result in fewer emissions than natural gas. Therefore, the Project would comply with these policies.</p>

Source: City of Firebaugh 2006

In summary, the plan consistency analysis provided above demonstrates that the Project complies with or exceeds the plans, policies, regulations and GHG reduction actions/strategies outlined in the 2022 Scoping Plan, the Fresno COG’s 2022 RTP/SCS and the City of Firebaugh 2030 General Plan. Consistency with the above plans, policies, regulations and GHG reduction actions/strategies would reduce the Project’s incremental contribution of GHG emissions. Therefore, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions. Impacts would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

**GHG Emissions**

Neither the SJVAPCD nor other applicable regional agencies have a numerical threshold to determine significance of the proposed Project’s GHG emissions. Therefore, GHG impacts are determined above, and GHG emissions below are provided for informational purposes at the request of the State Department of Land Use and Climate Innovation. Construction of the proposed Project would generate temporary GHG emissions primarily from the operation of construction equipment as well as from vehicles transporting construction workers to and from the Project site and heavy trucks to transport building materials. As shown in Table 11, construction of the proposed Project would generate an estimated total of 915 MT CO<sub>2</sub>e. Amortized over a 30-year period per AEP guidance, construction of the proposed Project would generate an estimated 31 MT CO<sub>2</sub>e per year.

**Table 11 Estimated Construction GHG Emissions**

<b>Construction Year</b>	<b>Project Emissions (MT/yr CO<sub>2</sub>e)</b>
2025	312
2026	603
<b>Total</b>	<b>915</b>
<b>Amortized over 30 Years</b>	<b>31</b>

MT CO<sub>2</sub>e = metric tons of carbon dioxide equivalent  
Source: Appendix A CalEEMod worksheets.

Operation of the proposed Project would generate GHG emissions associated with area sources, energy and water usage, and wastewater and solid waste generation. Table 12 combines the estimated construction and operational GHG emissions associated with development of the proposed Project. As shown therein, annual emissions from the proposed Project would be approximately 76 MT of CO<sub>2</sub>e per year.

**Table 12 Combined Annual Emissions of Greenhouse Gases**

<b>Emission Source</b>	<b>Annual Emissions (CO<sub>2</sub>e in metric tons)</b>
Construction	31
Operational	45
Area	<1
Energy	35
Water	1
Waste	9
Refrigerant	<1
<b>Total</b>	<b>76</b>

MT CO<sub>2</sub>e = metric tons of carbon dioxide equivalent

<sup>1</sup> Amortized construction related GHG emissions over 30 years

Source: Appendix A CalEEMod worksheets.

# 9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material 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 in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Rincon Consultants, Inc (Rincon) conducted a Phase I Environmental Site Assessment (ESA) (Appendix D) of the Project site in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-21 Standard Practice for ESAs: Phase I Environmental Site Assessment Process guidance documents (Rincon 2024). During the course of this assessment, Rincon identified no evidence of current recognized environmental conditions (RECs), controlled RECs (CRECs) or Historical recognized environmental conditions (HRECs) in connection with the subject site as defined by ASTM E 1527-17.

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Construction of the Project would temporarily increase the transport and use of hazardous materials in the project area through the operation of vehicles and equipment. Such substances include diesel fuel, oil, solvents, and other similar materials brought onto the construction site for use and storage during the construction period. The transport, use, and storage of hazardous materials during construction would be conducted in accordance with applicable federal and State laws, such as the Hazardous Materials Transportation Act, California Hazardous Material Management Act, and California Code of Regulations, Title 22.

Further, the Project would be required to comply with all applicable rules and regulations involving hazardous materials, including the State of California CCR Title 23 Health and Safety Regulations, the California Division of Occupational Safety and Health requirements, the Hazardous Waste Control Act, the California Accidental Release Prevention Program, and the California Health and Safety Code. Regular inspections are conducted of licensed waste transporters by agencies to ensure compliance with requirements that range from the design of vehicles used to transport wastes to the procedures to be followed in case of spills or leaks during transit.

During operation, the Project would not require the routine transport, use, or disposal of hazardous materials. The transport, use, and storage of hazardous materials during construction would be conducted in accordance with applicable federal and State laws as described above. Therefore, the project would not create a hazard to the public or environment through the transportation or use of hazardous materials and impacts would be less than significant.

#### **LESS-THAN-SIGNIFICANT IMPACT**

- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

The use, transport, and storage of hazardous materials during construction of the Project (e.g., diesel fuel, oil, solvents, and other similar materials) could introduce the potential for an accidental spill or release to occur. The presence of hazardous materials during project construction activities, including but not limited to ground-disturbing activities, could also result in an accidental upset or release of hazardous materials if they are not properly stored and secured. No existing structures will be demolished as a result of the project. Therefore, all notable findings identified on the project site from the Phase I ESA would not be disturbed by the project therefore not need to be properly removed and disposed of. Hazardous materials used during project construction would be disposed of off-site in accordance with all applicable laws and regulations, including but not limited to the California Building and Fire Codes as well as regulations of the federal and State Occupational Safety and Health Administrations. Therefore, the project would not 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 during construction, and impacts would be less than significant.

As discussed under item(a) above, the Project would replicate the existing site operations and would not necessitate the transportation of hazardous materials or use during operation. The Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

**LESS-THAN-SIGNIFICANT IMPACT**

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The use, transport, and storage of hazardous materials during construction of the Project (e.g., diesel fuel, oil, solvents, and other similar materials) could introduce the potential for emitting hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of a school. The presence of hazardous materials during project construction activities, including but not limited to ground-disturbing activities, could result in an accidental upset or release of hazardous materials if they are not properly stored and secured. As described above, a Phase I ESA was conducted for the school site by Rincon Consultants in 2024. Rincon identified no evidence of current recognized environmental conditions (RECs), controlled RECs (CRECs) or Historical recognized environmental conditions (HRECs) in connection with the subject site as defined by ASTM E 1527-17. The Phase I ESA recommends asbestos and lead-based-paint surveys for demolition and removal of buildings, and a subsurface investigation for termite impacts for buildings built prior to January 1, 1989. However, no buildings would be demolished or removed during project activities, and documentation has been provided confirming that the previously removed building on the project site was constructed in 1994, after lead based paint was banned from use at schools (Memorandum from Roy Mendiola, Ed.D., Superintendent, Firebaugh Las-Deltas Unified School District, October 1, 2024). Therefore, since the building removed from the site was constructed after January 1, 1993, and no other demolition or removal of buildings is proposed by the District as part of the project, no further action is required for the project site, and impacts would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

- d. *Would the project be located on a site that is included on a list of hazardous material 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?*

The following databases compiled pursuant to Government Code Section 65962.5 were checked for known hazardous materials contamination:

- SWRCB – GeoTracker search for leaking underground storage tanks (LUST) and other cleanup sites (SWRCB 2024);
- DTSC – EnviroStor database for hazardous waste facilities or known contamination sites (DTSC 2024); and
- USEPA Superfund Enterprise Management System Search (USEPA 2024).

There are two SWRCB GeoTracker LUST sites Approximately 700 feet southeast and 1000 feet southwest of the project site along Saipan Avenue. (SWRCB 2024). The cases have been closed since

1996 and 2000 respectively and are not classified as active sites. Therefore, the Project would not create a significant hazard to the public or the environment related to location on a hazardous materials site. No impact would occur.

**NO IMPACT**

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

The Project site is located approximately 1 mile southwest of the Firebaugh Airport. The Fresno County Airport Land Use Compatibility Plan has noise contours and review areas identified for the Firebaugh Airport. The Project would be located outside of the airport's 60 and 65 decibel (dB) Community Noise Equivalent Level (CNEL) noise contours (Fresno ALUC 2023). The existing school buildings are located within the Airport's Vulnerable Occupants Review Area, as identified in the Fresno County Updated Airport Land Use Compatibility Plan (Fresno ALUCP 2023). However, the project site is located east of Q Street and north of Saipan Street, which lies outside of this designated review area. The Project site is not located within an airport land use plan control area and the Project would not result in a safety hazard or excessive noise for people working in the project area associated with an airport.

**LESS-THAN-SIGNIFICANT IMPACT**

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The Fresno County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) was created to safeguard the people and properties within Fresno County, including 17 participating jurisdictions, against various hazard events (Fresno County MJHMP 2018). The MJHMP also plays a crucial role in maintaining eligibility for federal disaster assistance, including programs such as FEMA's Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM) program, and Flood Mitigation Assistance (FMA)(Fresno County MJHMO 2018). This plan details the hazard mitigation process, highlights key hazards and vulnerabilities, and sets forth strategies designed to enhance resilience and reduce risks throughout the County. Through proactive planning and implementation of these strategies, Fresno County aims to mitigate disaster response and recovery costs, protect essential community facilities, reduce liability, and minimize the overall impact of future hazard events.

Project construction or operation would not hinder the County's implementation of its emergency response and emergency evacuation plans. During the construction phase, the staging area would remain on-site and would not block roadways. Once the proposed project is operational, traffic volume would not increase as the school would serve existing student capacity and would not increase enrollment. No impact would occur.

**NO IMPACT**

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The Project is located in a local responsibility area and land classified as medium fire hazard severity zone as outlined by the City of Firebaugh's hazard mitigation plan (Fresno County 2024). The project is not located in a state responsibility area or land classified as very high fire hazard severity zones for wildfires. The nearest state responsibility area is approximately 16 miles southeast of the project site (CALFIRE 2024). The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

**LESS-THAN-SIGNIFICANT IMPACT**

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# 10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
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 the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<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 off-site;	<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; or	<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 checked="" type="checkbox"/>	<input 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"/>

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The project would involve grading on up to approximately 5,705 square feet of the project site. The project would be required to comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the SWRCB. The project site is located within the Central Valley Regional Water Quality Control Board (RWQCB) and would be subject to the Water Quality Control Plan (Basin Plan) for the RWQCB Central Valley Region (RWQCB 2019). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. The NPDES Construction General Permit requires preparation and implementation of a project specific SWPPP, which requires operators to implement pollution prevention controls to minimize the discharge of pollutants from stormwater and spilled or leaked materials. Compliance with applicable regulatory requirements would minimize potential surface water quality impacts associated with sediment erosion during project construction.

Operation of the facility would not change with the addition of the proposed project. Although the proposed project would add classrooms, it does not involve an increase in student enrollment, which means there would be no substantial increase in water usage or wastewater generation when the new facility is in operation. Additionally, the project includes the rehabilitation of existing turf and planter areas, which can enhance natural water filtration and reduce runoff. The installation of new concrete walkways and site improvements would be designed to manage stormwater effectively, minimizing potential erosion or sedimentation. Moreover, the addition of fire hydrants would not substantially alter the existing water infrastructure, as they would connect to an existing offsite hydrant, ensuring that water quality is maintained. Overall, the project incorporates measures to manage water use and stormwater effectively, ensuring that impacts on water quality would be minimal and well within regulatory standards.

Implementation of permit requirements, including the requirements in the Construction General Permit and Industrial General Permit described above would prevent or minimize impacts related to water quality and ensure that the project would not cause or contribute to the degradation of water quality in receiving waters. Additionally, operation of the proposed project will have a minimal impact on water quality due to its lack of increased water use, effective stormwater management, and careful integration with existing infrastructure. Therefore, construction and operation of the project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Water quality impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The City of Firebaugh Public Works Department is the retail water supplier for the City and produces all its water supply through pumping groundwater using wells owned by the City. The project would mainly add classrooms to the project site and would not increase enrollment, so would not substantially increase water usage on site. Because there would not be a substantial increase in water usage, the project would not substantially decrease groundwater supplies. The project would minimally reduce land area available for recharge. Runoff from the school site would continue to be directed to the City's stormwater facilities which are made available for groundwater recharge.

The Sustainable Groundwater Management Act (SGMA) requires all high- and medium-priority basins, designated by Department of Water Resources (DWR), to be sustainably managed. The San Joaquin Valley Groundwater Basin Delta-Mendota Subbasin (Subbasin) is designated as a high-priority basin. As discussed in *item (a)*, the project would be required to comply with NPDES requirements and project would be served by the City of Firebaugh Public Works Department, which helps ensure that it meets SGMA requirements including monitoring and reporting groundwater supplies. The project would comply with SGMA requirements to ensure that groundwater quality and groundwater levels are not significantly impacted. Therefore, the proposed project would not substantially increase water usage or interfere with water quality control plans or sustainable groundwater management plans. Groundwater impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- c. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
- (i) *result in substantial erosion or siltation on- or off-site?*
  - (ii) *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
  - (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?*

The Project would not substantially alter the existing drainage pattern on site or to the surrounding area with the addition of the classrooms. The Project would also be required to comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the SWRCB. The project would be required to comply with the NPDES General Construction Permit, which includes preparing a SWPPP and BMPs to prevent erosion and polluted runoff. Such controls include installation of silt fencing and sandbag barriers, covering of stockpiles, use of desilting basins, and post-construction revegetation and drainage requirements. In addition, pursuant to the NPDES Construction General Permit requirements, inspections would be conducted on the project site once every seven calendar days, or once every 14 calendar days and within 24 hours of a 0.25-inch storm event. Compliance with applicable regulatory requirements would minimize potential surface water quality impacts associated with sediment erosion during project construction. Therefore, impacts related to erosion and siltation on- or off-site would be less than significant.

In addition, the project would include stormwater drainage areas that would accommodate the project site's stormwater flow and would prevent flooding on or off site. The additional classroom buildings would be connected to the existing stormwater facilities at the project site, and minimal additional stormwater capacity would be needed. Compliance with the NPDES permit and the project's drainage basin would reduce impacts related to flooding to less than less than significant.

Operation of the facility includes of the use of rehabilitated turf and planter areas which would enhance natural water filtration and reduce runoff, while the carefully designed concrete walkways and site improvements will minimize potential erosion. As the project does not increase student enrollment, there will be no significant rise in water usage or wastewater generation. Given these design features, the project will not create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems, substantially alter the drainage pattern onsite, or provide substantial additional sources of polluted runoff. Therefore, the potential impacts related to

erosion, surface runoff, flooding, and stormwater drainage during operation are determined to be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- c. (iv) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

The Project would not substantially alter the existing drainage pattern on site or to the surrounding area with the addition of the classrooms. The project site is depicted as being within flood hazard zone AH on Federal Emergency Management Agency (FEMA) maps (FEMA 2024). Flood zone AH is characterized as having flood depths of 1 to 3 feet and usually contains areas of ponding consistent with the location’s base flood elevations. However, although project construction would increase impervious surfaces, the project would not have the potential to redirect or impede flood flows as the project site is located on relatively flat topography, and there is little likelihood of a mudflow occurring as a result of project construction and operation. The proposed project would include two stormwater seepage pits. The City of Firebaugh Municipal code’s Water Efficient Landscape Ordinance also encourages Landscape Design Plans that should identify and install stormwater best management practices. Additionally, the RMA GeoScience report states that the flood zone AH designation must be addressed by requiring the control of surface runoff originating from within and outside the site to be included in the design of the project in accordance with the 2022 CBC. Therefore, the site’s stormwater retention areas and adherence to the Firebaugh Municipal Code would reduce impacts to flood flows to a less than significant level.

**LESS THAN SIGNIFICANT IMPACT**

- d. *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project area is not located in a tsunami inundation area, but the project site is located in FEMA flood hazard zone AH, as described above (FEMA 2024). The project site is located less than 200 feet south of the San Joaquin River (River) and flooding was reported to have occurred in the Firebaugh portion of the river in 1958 and 1969. However, the flooding was localized and did relatively little damage to structures. The most recent river flooding instance occurred in 2006 when the river overtopped its banks, but quick placement of sandbags prevented flooding in certain neighborhoods (Firebaugh 2005).

Recognized environmental conditions (RECs) are hazardous substances or petroleum products on a property that could indicate a past, present, or future release to the environment. The Phase 1 Environmental Site Assessment (ESA) did not identify RECs in connection with the site, and the proposed classroom uses do not involve use or storage of substantial amounts of pollutants or hazardous materials. Therefore, the site’s location in a flood hazard zone would not increase the risk of releasing pollutants/hazardous materials at the site due to inundation. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The Central Valley RWQCB Basin Plan and the Delta-Mendota subbasin groundwater sustainability plan are the main plans that would apply to the proposed project. The Basin Plan identifies beneficial uses for surface water and groundwater and establishes water quality objectives to attain those beneficial uses. The identified beneficial uses and the water quality objectives to maintain or achieve those uses are together known as water quality standards. Compliance with relevant water quality regulations, BMPs, and policies would reduce the risk of water degradation from soil erosion and other pollutants related to project construction and operational activities.

The project would be required to adhere to policies set forth in applicable water quality control plans and sustainable groundwater management plans, therefore the project would not conflict with implementation of the Central Valley Basin Plan or Central Valley RWQCB's water quality regulations, policies, and required BMPs. Impacts would be less than significant.

The San Joaquin River Exchange Contractors Water Authority (SJREC) adopted the comprehensive groundwater sustainability plan for the Delta-Mendota subbasin under its jurisdiction, which was submitted to the California Department of Water Resources in 2022. The plan addresses basin conditions, a water budget, locally defined sustainability criteria, protocols for monitoring sustainability indicators, and a description of projects and/or management actions that will be implemented to achieve or maintain sustainability (SJREC 2022).

The groundwater sustainability plan is meant to guide management of the San Joaquin Valley Subbasin. This long-term management plan sets forth strategies, both currently employed and future plans, that are designed to manage the San Joaquin River and its interaction with groundwater resources within the San Joaquin Valley. The SJREC and associated GSA's will ensure that these wells are able to provide water to serve the City of Firebaugh in perpetuity.

For the existing conditions of the City's groundwater supply, and the effects of groundwater demand from the project, see Section 19, *Utilities and Service Systems* of this Initial Study. As discussed therein, the potable water demand for the project would not exceed the allocations available to the project; therefore, impacts would be less than significant. Therefore, the project would not interfere with sustainable groundwater management planning efforts. Impacts related to sustainable groundwater management would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

*a. Would the project physically divide an established community?*

The project site is currently an existing school and the proposed project would add classroom buildings. Development in this area of the project site would not limit or restrict access for existing uses. No existing structures would be demolished as a result of the project. The project does not include new roads, development, or infrastructure that would divide established communities. No impact would occur.

**NO IMPACT**

*b. Would the project 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?*

The project is an expansion at an existing school which is consistent with the City of Firebaugh General Plan land use designation of Public Facilities, and zoning as Government District. The project is not in conflict with its current zoning and land use designations.

In addition, as described in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, the proposed project would be consistent with the goals and policies of the CARB’s 2022 Scoping Plan and MCTC RTP/SCS. Therefore, the proposed project would not conflict with land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
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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?
- 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"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project 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?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The Hazel M Bailey Primary School Expansion Planning Area does not have known mineral resources, according to the City's General Plan (City of Firebaugh 2005), and the site is not used for mineral extraction. No mineral resources would be altered or displaced by the project and the project would not result in the loss of availability of a known mineral resource recovery site. There would be no impact.

**NO IMPACT**

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# 13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<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, would the project 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"/>

The City of Firebaugh’s noise standards have been used to set a CEQA level of significance standard for this evaluation.

## Overview of Noise and Vibration

### Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

### HUMAN PERCEPTION OF SOUND

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

## SOUND PROPAGATION AND SHIELDING

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions. Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels.

## DESCRIPTORS

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this analysis are the equivalent noise level ( $L_{eq}$ ) and the community noise equivalent level (CNEL).

The  $L_{eq}$  is one of the most frequently used noise metrics; it considers both duration and sound power level. The  $L_{eq}$  is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The  $L_{max}$  is the highest noise level within the sampling period, and the  $L_{min}$  is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA  $L_{eq}$  range; ambient noise levels greater than 65 dBA  $L_{eq}$  can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using CNEL, which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013).

### *Groundborne Vibration*

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as groundborne noise), and may cause windows, items on shelves, and pictures on walls to rattle. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV). The PPV is normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby buildings or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. Vibration limits used in this analysis to determine a potential impact to local land uses from construction activities, such as, vibratory compaction or excavation, are based on information contained in the FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018). Groundborne vibration levels that could induce potential architectural damage to buildings are identified in Table 13. Based on FTA recommendations, limiting vibration levels to below 0.2 in/sec PPV at non-engineered timber and masonry buildings (which would apply to the nearby buildings) would prevent architectural damage.

**Table 13 Groundborne Vibration Architectural Damage Criteria**

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Nonengineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

in/sec = inches per second; PPV = peak particle velocity  
Source: FTA 2018

## Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise sensitive receptors generally include schools, parks, residential areas, hospitals, churches, courts, libraries, and care facilities. The City of Firebaugh 2030 General Plan Noise Element identifies that sensitive receptors include residential development, schools, hospitals, nursing home, churches, and libraries (City of Firebaugh 2009). Noise-sensitive receptors nearest to the project site include on-site existing classrooms to the west, single family residences approximately 170 feet to the east and Firebaugh Middle School approximately 340 feet to the west.

## Existing Noise Setting

The predominant source of noise in Firebaugh, as in most communities, is motor vehicles. Firebaugh has determined that there are several potentially significant sources of community noise within the city. These include traffic on State Highway 33 and other local roads, particularly major streets, including 13<sup>th</sup> Street, Nees Avenue, Clyde Fannon Road, Saipan Street and Morris Kyle Drive, among others. In addition to aircraft operating from Firebaugh Municipal Airport, railroad traffic or industrial operations, which are generally located west of State Highway 33.

## City of Firebaugh Noise Standards

### *Firebaugh 2030 General Plan*

Chapter 6, Noise Element, of the Firebaugh 2030 General Plan establishes quantitative thresholds for unacceptable noise levels and prohibits certain activities that generate excessive, unnecessary, or unusually loud noise and vibration.

**Issue Two: Stationary Noise Sources:**

**Objective 1:** New development of noise-sensitive land uses shall not be permitted where the noise level from existing stationary noise sources exceeds the noise level standards of Table 14.

**Table 14 Maximum Allowable Noise Exposure Levels**

	Maximum Allowable Noise Exposure – Stationary Sources <sup>1</sup>	
	Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 p.m. to 7:00 a.m.
Hourly Leq, dB	50	45
Maximum level, dB	70	65

dBA = A-weighted decibel

<sup>1</sup> As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.

Source: 2030 Firebaugh General Plan Noise Element (Firebaugh 2009)

**Issue Two: Stationary Noise Sources:**

**Objective 2:** Noise created by new proposed stationary noise sources or existing stationary noise sources which undergo modifications that may increase noise levels shall be mitigated so as not to exceed the noise level standards of Table 15 on lands used or designated for noise-sensitive uses.

**Table 15 Maximum Allowable Noise Exposure Levels**

	Maximum Allowable Noise Exposure – Stationary Sources <sup>1</sup>	
	Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 p.m. to 7:00 a.m.
Hourly Leq, dB	55	45
Maximum level, dB	70	65

dBA = A-weighted decibel

<sup>1</sup> As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.

Source: 2030 Firebaugh General Plan (Firebaugh 2009)

*Firebaugh Municipal Code*

Section 3-1, Noise Regulations, of FMC establishes qualitative thresholds for unacceptable noise levels and prohibits certain activities that generate excessive, unnecessary, or unusually loud noise and vibration. Standards that would be considered when determining if noise levels violate this ordinance include but are not limited to volume or intensity of the noise; citizen complaints; proximity of the noise to residential areas; the duration of the noise; and the frequency of the noise. Section 3-1(d) establishes sources of noise that are exempt from this ordinance, including Construction, repair or remodeling work accomplished pursuant to a building, electrical, plumbing, mechanical, or other construction permit issued by the City or other governmental agency, provided such work takes place between the hours of 7:00 a.m. and 10:00 p.m.

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Construction activity would result in temporary noise in the project vicinity, exposing surrounding nearby receptors to increased noise levels. Construction noise would typically be higher during the heavier periods of initial construction (i.e., site preparation and grading) and would be lower during the later construction phases (i.e., building construction and paving). It is assumed that diesel engines would power all construction equipment. Construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 8-hour operating day.

Noise from construction is analyzed separately based on noise generated by construction of additional classrooms. Since the City does not have a quantified construction noise limit, the Federal Transit Administration (FTA) recommends a construction noise limit of 80 dBA  $L_{eq(8-hr)}$  at residential receptors during the daytime (FTA 2018). Project construction would be consistent with the City of Firebaugh's construction hours and there would be no nighttime construction work. For the purposes of this analysis, the FTA threshold of 80 dBA  $L_{eq(8-hr)}$  at residential receptors during the daytime is used to assess potential project construction noise impacts. In terms of onsite classroom receptors, under the CALGreen performance method for non-residential uses, a proposed project must demonstrate that interior noise levels do not exceed 50 dBA  $L_{eq(1hr)}$ . While this criterion is intended for use during design of a new project and not necessarily for the effect of project construction on sensitive receptors, an interior noise threshold of 50 dBA  $L_{eq}$  is reasonable to use to assess the potential impact to the onsite learning environment. This interior noise threshold is also comparable to US EPA recommended limits for potential speech interference of 45 – 60 dBA (USEPA 1974).

The closest sensitive receptors to the proposed school expansion are the on-site classrooms to the west, single-family residences to the east and the Firebaugh Middle School to the west of the project site. Over the course of a typical construction day, construction equipment would be located as close as 55 feet to the nearest classroom sensitive receptors but would typically be located at an average distance further away (e.g., 155 feet) due to the nature of construction where equipment is mobile throughout the day. Table 16 identifies the expected noise levels at the closest sensitive receptors from the center of the specific phase based on the conservatively assumed combined use of the three loudest pieces of construction equipment during each phase of construction.

**Table 16 Estimated Noise Levels by Construction Phase at Sensitive Receptors**

Construction Activity Phase	dBA $L_{eq}$ (8-hour)			
	RCNM Reference Noise Level (50 feet)	Existing On-Site Classrooms (155 feet) <sup>1</sup>	Residences to the East (305 feet)	Firebaugh Middle School to the West (450 feet)
Site Preparation	83	73	67	64
Grading	81	71	65	62
Building Construction	77	67	61	58
Paving	77	67	61	58
Utilities/Trenching	77	67	61	58

$L_{eq}$  = average noise level equivalent; dBA = A-weighted decibel

Notes: Calculations performed with the FHWA’s RCNM software are included in Appendix E.

Noise levels rounded to the nearest whole number.

<sup>1</sup> Distance from the center of construction activity to nearest classroom façade.

Source: FTA 2018

As shown in Table 16, construction noise could be as high as approximately 73 dBA  $L_{eq}$  (8-hour) during the site preparation phase, which would occur approximately 155 feet from the center of the school expansion to the nearest existing classroom. A building’s exterior-to-interior noise transmission loss is typically 25 – 30 dBA with windows closed. Conservatively assuming an exterior-to-interior transmission loss of 25 dBA, interior classroom noise levels would be 48 dBA  $L_{eq}$  (8-hour) or less, which would not exceed the threshold of 50 dBA  $L_{eq}$ . Therefore, temporary construction noise impacts to on-site school receptors would be less than significant. Furthermore, construction noise at the existing Firebaugh Middle School would reach up to 64 dBA  $L_{eq}$  (8-hour). Conservatively assuming an exterior-to-interior transmission loss of 25 dBA, interior classroom noise levels would be 39 dBA  $L_{eq}$  (8-hour) or less, which would not exceed the threshold of 50 dBA  $L_{eq}$ . Temporary construction noise impacts to on-site school receptors would be less than significant.

At off-site uses, construction noise could be as high 67 dBA  $L_{eq}$  (8-hour) during the site preparation phase, which would occur approximately 305 feet from the center of the school expansion to the nearest residential sensitive receptor to the east. Construction of the school expansion would not exceed the significance threshold of 80 dBA  $L_{eq}$  (8-hour).

## Operation

### *HVAC Noise*

The primary on-site operational noise source from the project would be from HVAC units mounted on the rooftops of the various proposed classrooms. Noise-sensitive receptors nearest to the operational HVAC equipment include on-site existing classrooms approximately 70 feet to the west, single family residential approximately 210 feet to the east and Firebaugh Middle School approximately 340 feet to the west. HVAC units would be located as close as approximately 70 feet from the nearest proposed classroom (Building D) to the on-site classrooms to the west. As provided in the architectural plans from Gonzalez Architects (Gonzalez 2024), a rooftop-mounted 6-ton Carrier 50FCQM07 HVAC unit would be used at Building D, with a sound power level of 79 dBA, which is equivalent to a sound pressure level (SPL) of 71 dBA at 3 feet, as shown in Appendix E. Proposed Building D is shown to have three rooftop-mounted HVAC units with a combined noise

level of up to 76 dBA at a distance of 3 feet. At a distance of 70 feet, the combined noise levels from three HVAC units on Building D would attenuate to approximately 49 dBA. As discussed above, conservatively assuming an exterior-to-interior transmission loss of 25 dBA, interior classroom noise levels would be 24 dBA  $L_{eq}$  or less, which would not exceed the threshold of 50 dBA  $L_{eq}$ . Therefore, operational noise impacts from HVAC equipment to on-site school receptors would be less than significant.

HVAC units would be located as close as approximately 210 feet from the nearest proposed classroom (Building E) to the residential sensitive receptors to the east of the building edge. As provided in the architectural plans (Gonzalez 2024), a rooftop-mounted 5-ton Carrier 50GCQJ06 HVAC unit would be used at Building E, with a sound power level of 79 dBA, which is equivalent to a sound pressure level (SPL) of 71 dBA at 3 feet. Proposed Building E is shown to have two rooftop-mounted HVAC units with a combined noise level of up to 74 dBA at a distance of 3 feet. At a distance of 210 feet, the combined noise levels from two HVAC units on Building E would attenuate to approximately 37 dBA. As discussed above, the threshold noise level at residences is 55 dBA. Therefore, HVAC noise would not exceed the residential noise limit of 55 dBA. Operational stationary source noise from the project would not exceed limits at off-site noise-sensitive receptors, and operational noise impacts would be less than significant.

#### **LESS-THAN-SIGNIFICANT IMPACT**

- b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Construction activities known to generate excessive groundborne vibration, such as pile driving, would not be needed for the project. Based on FTA recommendations, limiting vibration levels to below 0.2 in/sec PPV at nonengineered timber and masonry buildings would prevent architectural damage regardless of building construction type (FTA 2018). The greatest anticipated source of vibration during project construction would be from a vibratory roller, which would be used during paving activities.

A vibratory roller may be used within 55 feet of the nearest on-site classrooms to the west of the proposed project. A vibratory roller generates up to approximately 0.064 in/sec PPV at a distance of 55 feet (FTA 2018), which would not exceed the significance threshold of 0.2 in/sec PPV. Furthermore, a vibratory roller may be used within 225 feet of the nearest off-site residential structures to the east of the proposed project. A vibratory roller generates up to approximately 0.008 in/sec PPV at a distance of 225 feet (FTA 2018), which would not exceed the significance threshold of 0.2 in/sec PPV. Construction vibration impacts would be less than significant.

The project does not include substantial vibration sources associated with operation. Therefore, operational vibration impacts would be less than significant.

#### **LESS-THAN-SIGNIFICANT IMPACT**

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

The project site is located approximately 0.6 mile west of Firebaugh Airport. The Fresno County Airport Land Use Compatibility Plan shows noise contours for Firebaugh Airport; the project site

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would be located inside of the airport influence area but would be located outside of the 60, 65 and 70 dBA CNEL noise contours (Fresno County Airport Land Use Commission 2018). Therefore, the project would not expose students or people working or visiting in the project area to excessive airport noise levels. There would be no impact.

**NO IMPACT**

# 14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
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 substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The project would serve the existing school population and surrounding community and would not increase the school's enrollment. The project would not involve residential or commercial development that would directly or indirectly result in population growth. Therefore, the project would not result in substantial unplanned population growth and no impact would occur.

**NO IMPACT**

- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The project site does not currently contain housing or habitable structures, and the project would not result in the removal of housing. Therefore, the project would not displace people or housing. There would be no impact.

**NO IMPACT**

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# 15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The City of Firebaugh Fire Department (FFD) serves the city and its surrounding unincorporated area. The proposed project would not increase the local population or enrollment at the school, and thus would not result in the need for altered or additional fire protection facilities. Therefore, no impact would occur.

**NO IMPACT**

a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

Law enforcement services for the City of Firebaugh are provided by the Firebaugh Police Department (FPD). The station nearest to the project is located at 1575 11<sup>th</sup> Street, approximately 0.6 mile from the project site. As the project would not increase the local population, it would not

result in an increase in demand for police services. Therefore, it would not result in the need for altered/additional facilities. No impact would occur.

**NO IMPACT**

*a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

The project would not induce population growth or demand for schools (see Section 14, *Population and Housing*). The environmental impacts for the construction and operation of the Project are addressed throughout this document, and the project would not result in the need for additional schools. Therefore, there would be no impacts associated with the provision of new or physically altered schools, or the need for new schools. No impact would occur.

**NO IMPACT**

*a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

Demand for parks and open space is directly related to population. The proposed project would not generate population growth and therefore would not increase demand for public facilities such as parks and open space or the need to construct such facilities. Therefore, the Project would not increase demand for park facilities or result in the need for new off-site parks. No impact would occur.

**NO IMPACT**

*a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The proposed project would not result in population growth because the expanded facilities are intended to serve the existing community and school population. Therefore, the project would not result in substantial adverse impacts to existing government facilities or impact the need for additional public facilities, such as libraries, roadways, and infrastructure. No impact would occur.

**NO IMPACT**

# 16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

The proposed project would not result in population growth because the expanded facilities are intended to serve the existing community and school population. Therefore, the project would not lead to population growth that may lead to an increase in use and deterioration of existing recreational facilities. Therefore, there would be no impact.

**NO IMPACT**

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

The proposed project only includes the relocation of recreational facilities but no expansion of other existing recreational facilities. Existing playground equipment would be relocated to make space for a new concrete walk. Therefore, there would be no impact.

**NO IMPACT**

*This page intentionally left blank.*

# 17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
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. Conflict or be inconsistent with CEQA Guidelines section 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 use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

The Project would not increase pedestrian, bicycle, transit or vehicle trips since it would not increase student enrollment or capacity. Several land use plans, policies, and regulations are regionally and locally adopted in the area. These include the City of Firebaugh General Plan Circulation Element, the Fresno County Active Transportation Plan (ATP), and Fresno’s Regional Transportation Plan (RTP).

The proposed Project would not result in the closure of existing roadways. There are no transit stops located in the project vicinity. The nearest bus stop is the Sunset Place Bus Stop for Firebaugh located along Highway 33; two blocks west of the Elementary School. Project implementation would not alter the roadways, transit stops, or sidewalk, increase commercial or residential development, generate growth, or cause an increase in vehicle traffic in the Project vicinity.

The school would remain accessible to pedestrians throughout construction. There are no bike lanes located in the vicinity of the Project. and the Project would not impact bicycle infrastructure. Sidewalks surround the majority of the perimeter of the Elementary School. Sidewalks may be temporarily closed during construction for pedestrian safety. Pedestrian traffic on these sidewalks would be directed to the opposite side of the street with a sidewalk if closure occurs and would not restrict pedestrian access to the area. There are no sidewalks on the north side of the elementary school surrounding the baseball field. Therefore, the Project would not impact the overall use of the roadways, bicycle or pedestrian facilities, or transit facilities in the project vicinity during construction or operation. The Project would not conflict with the goals, objectives, or policies addressing the circulation system in the City of the City of Firebaugh General Plan Circulation

Element, the Fresno County Active Transportation Plan (ATP), and Fresno's Regional Transportation Plan (RTP).

The proposed Project, because it would not increase traffic or school capacity, would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle or pedestrian facilities. This impact would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

- b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

[CEQA Guidelines section 15064.3 requires an analysis of a project's effect on vehicle miles traveled (VMT). The proposed Project would not involve residential or commercial development that would directly or indirectly result in population growth. As the proposed Project would only serve the existing and projected student population in the school district, it would not result in additional vehicle trips in the region. The proposed project would not result in an increase in VMT. This impact would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

- c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

The Project would not increase hazards due to a new geometric design feature as the project does not include changes to local road geometry. Therefore, the proposed Project would not substantially increase hazards due to a geometric design feature.

The Project is not changing the existing use on the school site or surrounding areas. The Project would involve the construction of additional classroom buildings and other site improvements that would serve the existing student population. This function is compatible with the school's existing uses and the City of Firebaugh land use designation of Public/Quasi Public. Therefore, the Project would not substantially increase hazards due to incompatible uses. This impact would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**

- d. Would the project result in inadequate emergency access?*

Staging equipment and temporary work areas utilized during Project construction would be located within the Project site and would not require closure of existing roadways in the Project vicinity. Furthermore, the Project would expand upon the existing school facility, adhering to the same operational standards and procedures, and complying with all established district transportation guidelines. As a result, the Project would not result in inadequate emergency access. This impact would be less than significant.

**LESS-THAN-SIGNIFICANT IMPACT**



1. 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
2. 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 these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

The California Native American tribes traditionally and culturally affiliated with the project are include the Amah Mutsun Tribal Band, Kitanemuk & Yowlumne Tejon Indians, North Fork Rancheria of Mono Indians, Northern Valley Yokut / Ohlone Tribe, Santa Rosa Rancheria Tachi Yokut Tribe, Southern Sierra Miwuk Nation, Table Mountain Rancheria, Tule River Indian Tribe, and Wuksachi Indian Tribe/Eshom Valley.

## Impact Analysis

- a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

Assembly Bill 52 and its implementing regulations, specifically Public Resources Code Section 21080.3.1(b), requires that CEQA lead agencies begin consultation with California Native American tribes prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project that have “requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe.” The District has not received notifications from California Native American tribes and as such no consultations have been initiated. No tribal cultural resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources have been identified and no impacts to such resources are anticipated.

### **NO IMPACT**

- b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

For the reasons described under (a), likewise no tribal cultural resources determined by the lead agency, in its discretion and supported by substantial evidence, to be significant to California Native American tribes have been identified and no impacts to such resources are anticipated.

### **NO IMPACT**

# 19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
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Would the project:

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

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*
- c. *Would the project 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?*

## Wastewater

Wastewater services to the Project site would be provided by the City of Firebaugh. The Project would add classrooms to the project site to serve the existing student population and would not increase enrollment; therefore, the Project would not substantially increase wastewater generation

on site. The Project would connect to existing City wastewater services would not require or result in the relocation or construction of new or expanded wastewater treatment facilities. Because there would not be a substantial increase in wastewater generation, the minor increase would be within the WWTP's capacity for collection and treatment. Therefore, the WWTP would have sufficient capacity to serve the Project, and the Project would not require the construction of wastewater infrastructure. Impacts would be less than significant.

## Water

The City of Firebaugh Public Works Department is the retail water supplier for the City and produces all its water supply through pumping groundwater using wells owned by the City. The Project would add classrooms to the Project site and not increase enrollment would not substantially increase water usage on site. Because there will not be a substantial increase in water usage on site, the Project would not substantially decrease groundwater supplies. The Project would minimally reduce land area available for recharge. The project site would be served by adequate water supplies and therefore, no new facilities would be needed. The Project would connect to existing City water services and would not require or result in the relocation or construction of new or expanded water facilities. Impacts would be less than significant.

## Stormwater

The City's storm drainage system is composed of pipelines that direct about half of the runoff into detention basins while the other half flows by gravity into the San Joaquin River (City of Firebaugh 2009). All runoff from the school site would go into the City's stormwater facilities which are made available for groundwater recharge.

Although project construction would increase impervious surfaces, as discussed in Section 10, *Hydrology and Water Quality*, the Project would have stormwater retention areas. The City of Firebaugh Municipal code's Water Efficient Landscape Ordinance also encourages Landscape Design Plans that should identify and install stormwater best management practices. As required by the Clean Water Act, construction of the proposed improvements would require an approved Stormwater Pollution Prevention Plan (SWPPP) that includes best management practices for grading and preservation of topsoil. The City or contractor is required to submit the SWPPP with a Notice of Intent to the RWQCB to obtain a General Permit. Additionally, the RMA GeoScience report states that the flood zone AH designation to be addressed by requiring the control of surface runoff originating from within and outside the site to be included in the design of the Project in accordance with the 2022 CBC. Therefore, the site's stormwater retention areas and adherence to the Firebaugh Municipal Code would reduce stormwater impacts and the Project would not require or result in the relocation or construction of new or expanded stormwater facilities. Impacts would be less than significant.

## Electricity, Natural Gas, and Telecommunications

Electricity and natural gas service in Firebaugh are provided by PG&E. Long-term operation of development projects, including the proposed Project, would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting and heating of buildings and water. Electricity for the Project would be provided as needed by PG&E and would not require improvements to provide the utilities. Telecommunications in Firebaugh are provided by several service providers including Xfinity and T-Mobile. Telecommunications would be provided as needed and facility upgrades would not be necessary. Accordingly, the Project would be

accommodated adequately by existing electricity, gas, and telecommunication facilities. Therefore, improvement of those facilities, or the provision of new facilities, that could cause significant environmental effects would not occur. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The City of Firebaugh Public Works Department is the retail water supplier for the City and produces all its water supply through pumping groundwater using wells owned by the City. The Project would add classrooms to the Project site to serve the existing student population and would not increase student enrollment. The Project would also add two fire hydrants which would serve the existing school facilities and existing development. Because there would not be a substantial increase in water usage on site, there would be sufficient water supplies available to serve the Project and reasonably foreseeable future development. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project 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?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste*

The City of Firebaugh's municipal solid waste is disposed of at the American Avenue Disposal Site which is operated by the County of Fresno. Mid Valley Disposal provides waste hauling for the School.

The American Avenue Disposal Site is located approximately 28.7 miles southeast of the Project site. The American Avenue Disposal Site has a maximum capacity of 32,700,000 cubic yards or 2,200 tons per day (California Department of Resources Recycling and Recovery [CalRecycle] 2017). The estimated closure for the American Avenue Disposal Site is 2031. Because the project would not increase enrollment, operation of the Project would not produce a substantial amount of additional solid waste which would exceed the landfill's maximum capacity or cause early closure of the landfill. Therefore, the Project would be served by a landfill with sufficient capacity to accommodate its solid waste disposal needs and would not violate a statute or regulation regarding solid waste capacity. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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## 20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<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 downslopes 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"/>

*If located in or near state responsibility areas or lands classified as very high fire hazard severity zones,*

- a. *Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- b. *Would the project, 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?*
- c. *Would the project 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?*
- d. *Would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

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The Project is not located in or near a state responsibility area (CAL FIRE 2024b) or lands classified as very high fire hazard severity zone. The nearest state responsibility area is approximately 16 miles southeast of the project site (CALFIRE 2024). Therefore, no impact would occur.

**NO IMPACT**

# 21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
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Does the project:

a. 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 type="checkbox"/>	<input checked="" type="checkbox"/>
b. 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 type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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?*

As discussed in Section 4, *Biological Resources*, the Project site is unlikely to contain special status-plants. The presence of large cottonwood trees north of the site provides suitable nesting habitat for Swainson’s hawk (*Buteo swainsoni*), a State threatened species. Impacts to Swainson’s hawk would be limited to project activities that would affect an active nest within 0.5-mile of a construction activity. Implementation of Mitigation Measure BIO-1 would reduce potential impacts to less than significant level to Swainson Hawks. With implementation of Mitigation Measures BIO-1, the Project would not 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.

As discussed in Section 5, *Cultural Resources*, Rincon Consultants conducted a survey of the Project site and did not identify archeological resources. A Sacred Lands File search was also conducted and did not identify cultural resources. Upon the completion of the survey and consultation with the NAHC, NRHP, and CRHR, it was determined no historical resources would directly be impacted by the Project. In the event of evidence being found of prehistoric or historic-era subsurface archaeological features, deposits or tribal cultural resources are discovered, the Project would be required to implement Mitigation Measure CUL-1. Therefore, it is unlikely that the Project would eliminate important examples of major periods of California history or prehistory.

#### **NO IMPACT**

- 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)?*

As described in sections 1 through 17 of this Initial Study, with respect to all environmental issues, the proposed Project would not result in significant and unmitigable impacts to the environment. All anticipated impacts associated with project construction and operation would be either less than significant or less than significant with mitigation incorporated. This is largely due to the fact project construction activities would be temporary and project operation would result in minimal changes to the environmental baseline condition.

Cumulatively considerable impacts could occur if the construction of other projects occurs at the same time as the proposed Project and in the same vicinity, such that the effects of similar impacts of multiple projects combine to expose adjacent sensitive receptors to greater levels of impact than would occur under the proposed Project. For example, if the construction of other projects in the area occurs at the same time as construction of the proposed project, potential impacts associated with noise and traffic to residents in the project area may be more substantial. Other projects within the immediate vicinity of the Project site include the future construction of additional classrooms north of the Project site, however, the future planned construction is a separate project. Even with the future construction of additional classrooms, this would not result in cumulative construction-related impacts as the construction would occur at separate times.

The Project is intended to serve the existing student population of FLDUSD and would not increase enrollment. Therefore, the Project would not contribute to cumulative impacts related to direct or indirect population growth, such as impacts to public services, recreation, and population and housing. Impacts related to cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, and tribal cultural resources are inherently restricted to the Project site and would not contribute to cumulative impacts associated with existing and future development in Firebaugh or Fresno County. In addition, air quality and GHG impacts are cumulative by nature, and as discussed in Section 3, Air Quality, and Section 8, Greenhouse Gas Emissions, the Project would not generate air pollutant emissions in excess of SJVAPCD thresholds or GHG emissions that would exceed the SJVAPCD-recommended threshold. Therefore, the Project would not contribute to the existing significant cumulative air quality impacts related to the Basin’s nonattainment status for ozone, PM10, and PM2.5, or the existing significant cumulative climate change impact. Furthermore, Project impacts to resources such as aesthetics, agriculture and forestry resources, biological resources, hydrology and water quality, noise, transportation, and

utilities and service systems were determined to be less than significant or less than significant with mitigation and therefore would not have the potential to constitute a cumulatively considerable contribution to cumulative impacts that may occur due to existing and future development in the region. Therefore, the proposed Project would not result in a cumulatively considerable contribution to a significant impact.

**NO IMPACT**

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Mitigation measures implemented for construction would reduce construction impacts to less than significant levels. The Project itself, during operation, would not have an adverse environmental impact. As discussed in Section 3, *Air Quality*, the project would not expose human beings to substantial air pollutants in excess of SJVAPCD's regional and localized significance thresholds. Potential impacts of TACs to local receptors would be reduced to a less-than-significant level with implementation of AQ-1. As discussed in Section 9, *Hazards and Hazardous Materials*, compliance with federal, state, and local regulations regarding the transport of hazardous materials would prevent the accidental release of hazardous materials during construction. Implementation of mitigation measure HAZ-1 would reduce hazardous material soil and groundwater impacts to a less-than-significant level. Therefore, implementation of the project would not have a substantial adverse effect on human beings. As discussed in Section 13, *Noise*, the project would not generate significant impacts related to ambient noise or ground-borne vibration. As discussed in Section 9, *Hazards and Hazardous Materials*, and Section 20, *Wildfire*, the project is not in a Very High Fire Hazard Severity Zone and would not expose people or structures to a significant risk involving wildland fires. Therefore, the project would not cause substantial adverse effects on human beings.

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