
# INITIAL STUDY FOR THE

## SYCAMORE CANYON ACADEMY

(Planning Application 14-0074)

Lead Agency:

**CITY OF WILDOMAR**
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# APPENDICES INCLUDED ON ENCLOSED CD-ROM

1. Project Plans, pjhm Architects, September 2, 2014
2. Air Quality
    a. CalEEMod Version: CalEEMod.2013.2: Summer, September 30, 2014
    b. CalEEMod Version: CalEEMod.2013.2: Winter, September 30, 2014
3. Biological Resources
    a. MSHCP, Paul Principe, October 7, 2014
    b. CNNDB, September 12, 2014
    c. CNPS, September 12, 2014
    d. USFWS, September 12, 2014
    e. Sycamore Academy Species List, October 17, 2014
    f. Offsite Considerations, Paul Principe, October 29, 2014
4. Cultural Resources
    a. Phase I Cultural Resources Assessment, Jean A. Keller, PhD, October 2014
    b. Off-Site Survey Letter, Jean A. Keller, PhD, November 3, 2014
5. Geology
    a. Fault Report, Inland Foundation, June 6, 2014
    b. Riverside County Approval of Fault Report, Juan Perez, October 1, 2014
6. Annual GHG Emissions, CalEEMod Version: CalEEMod.2013.2, September 30, 2014
7. Hazards
    a. Phase 1 Environmental Assessment, All Appropriate Inquiries Corporation, March 27, 2014
    b. Phase 2 Environmental Assessment, All Appropriate Inquiries Corporation, May 1, 2014
8. Hydrology
    a. Preliminary WQMP, Everest Environmental, August 27, 2014
    b. SWPPP, Everest Environmental, September 4, 2014
9. Noise Technical Memo, PlaceWorks, September 18, 2014
10. Traffic
    a. Traffic Impact Analysis, PlaceWorks, September 2014
    b. Traffic Impact Analysis Appendices, PlaceWorks, September 2014

**Note to Reader**: To save natural resources, the appendices are contained on a CD-ROM included with the printed copy of this Initial Study. The appendices are also available on the Environmental Documents Center of the City of Wildomar Planning Department website (http://www.cityofwildomar.org/planning.asp). Printed copies of the appendices are also available as part of the project file and can be reviewed at the following location:

**City of Wildomar City Hall**
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595
Hours: Monday–Thursday, 8 a.m.–5 p.m. (closed Fridays)

## I. INTRODUCTION AND PROJECT DESCRIPTION

### Purpose and Project Overview

The City of Wildomar (City; Wildomar) is processing an application for the Sycamore Academy Project (proposed project), which requests a public use permit (Planning Application 14-0074) for the development of a public K through 8 charter school on a 7.21-acre vacant lot. The purpose of this Initial Study is to evaluate the potential environmental effects associated with construction and operation of the school and to provide mitigation where necessary to avoid, minimize, or lessen those effects.

### Project Location

The project site is located at 23151 Palomar Street, southeast of the Palomar Street/Clinton Keith Road intersection and adjacent to Robin Scott Street in Wildomar, California. The regional and local vicinity of the project site are shown in **Figures 1** and **2**. The project site is identified as assessor's parcel number (APN) 380-170-020. **Figure 3** provides photographs of the existing project site. **Figure 4** provides photographs of the existing access driveway, the adjacent segment of Palomar Street, and the private street at the adjacent church parking lot.

### Project Description

The proposed project consists of an approximately 28,000-square-foot K through 8 public charter school including 22 classrooms arranged in four buildings, a flex-classroom, and an administration building, as well as patio space, parking lots, gardens, an amphitheater, and paved and turf play areas. The proposed buildings are summarized in **Table 1**. As shown in the proposed site plan (see **Figure 5** and **Appendix 1**), the proposed buildings would be located in the northern portion of the project site outside of the required seismic setback line, while the proposed outdoor features would be located in the southern portion of the site. The proposed elevations for the administrative building are shown on **Figure 6**. The other proposed buildings would be of similar design and would have a lesser maximum structure height.

**Table 1**
**Proposed Buildings**

| Proposed Building | Description | Square Feet |
|---|---|---|
| Team 1 | 6 classrooms | 4,795 |
| Team 2 | 6 classrooms, restrooms and custodial closet, storage space and utility room | 5,508 |
| Team 3 | 4 classrooms, restrooms, changing rooms, and storage space | 5,760 |
| Team 4 | 6 classrooms, restrooms and custodial closet, storage space | 6,487 |
| Flex Classroom | Open flex classroom space, restrooms | 2,960 |
| Administrative Building | Office space, staff lounge, restrooms | 2,400 |
| **Total** | | **27,910** |

Operations

The existing Sycamore Academy campus served 401 students in grades K–7 as of November 2014 (Hale, personal comm.). The existing campus is located at 32326 Clinton Keith Road, which is approximately 0.25 miles from the proposed project site (see **Figure 2**). This campus will be closed and the students relocated to the proposed project site once the project is complete. The existing campus currently serves students in grades K–7 and will expand to serve grade 8 at the new site in the 2015–2016 school year. The school expects to serve a maximum of 594 students at this site. The proposed school would operate from 6:00 AM to 5:00 PM on weekdays with a peak of 35 employees on campus at any given time. Campus hours are 7:30 AM to 4:00 PM Monday through Thursday and 7:30 AM to 2:00 PM on Fridays. The proposed playfields would not be lighted and therefore would not be rented out or used at night.

Roadway Access and Parking

The proposed site access plan is provided in **Figure 7**. As shown on this figure, site access would be provided via a driveway on Palomar Street that would allow for full access (right turn in, right turn out, left turn in, and left turn out movements). Left turns in would be provided via a new left turn pocket just south of the project driveway. The access driveway would be in the southeastern corner of the site, approximately 280 feet south of the existing driveway of the adjacent church.

A staff parking lot is proposed along Palomar Street providing 34 parking spaces, including two handicap accessible spaces, per the requirements of City of Wildomar Municipal Code Chapter 17.188. A student drop-off and pick-up area is proposed on-site in the south portion of the site at the overflow/event parking area. The school will "block" access to the parking lot using orange cones during the key drop-off and pick-up periods of the day. There will also be an attendant to encourage parents to drive completely onto the site to avoid blocking the driveway and Palomar Street.

A driveway of approximately 350 feet would run along the southeastern boundary of the site. That driveway would reach an overflow parking area with a driveway approximately 200 feet long at the eastern portion of the parking lot. The drop-off and pick-up route would run counterclockwise along the overflow parking lot just south of the school buildings. Assuming an average length of 25 feet per vehicle, the internal driveways could accommodate up to 22 vehicles before the student drop-off point.

Off-Site Street Improvements

The section of Palomar Street in front of the school will be constructed to a half-section width as an arterial road with a right-of-way of 128 feet from the project's northern boundary and extending 300 feet south of the southern boundary with a taper rate and design standards set by the City of Wildomar. A striped pocket with a minimum length of 100 feet extending from the school's driveway entrance will be created to allow left turns into the project's access driveway. Signage will be provided along the Palomar Street frontage that states "no stopping" or "no loading" to discourage parents from using this roadway as a drop-off point. The proposed street improvements are shown in **Figure 8**.

Water

The proposed project would receive potable water from the Elsinore Valley Municipal Water District (EVMWD) and has received a service commitment letter (#2601-1) from the EVMWD. Connection to the EVMWD water supply would occur at Palomar Street adjacent to the project site. The project's estimated water demand would be approximately 20 acre-feet per year (the reader is referred to Impact 17.b).

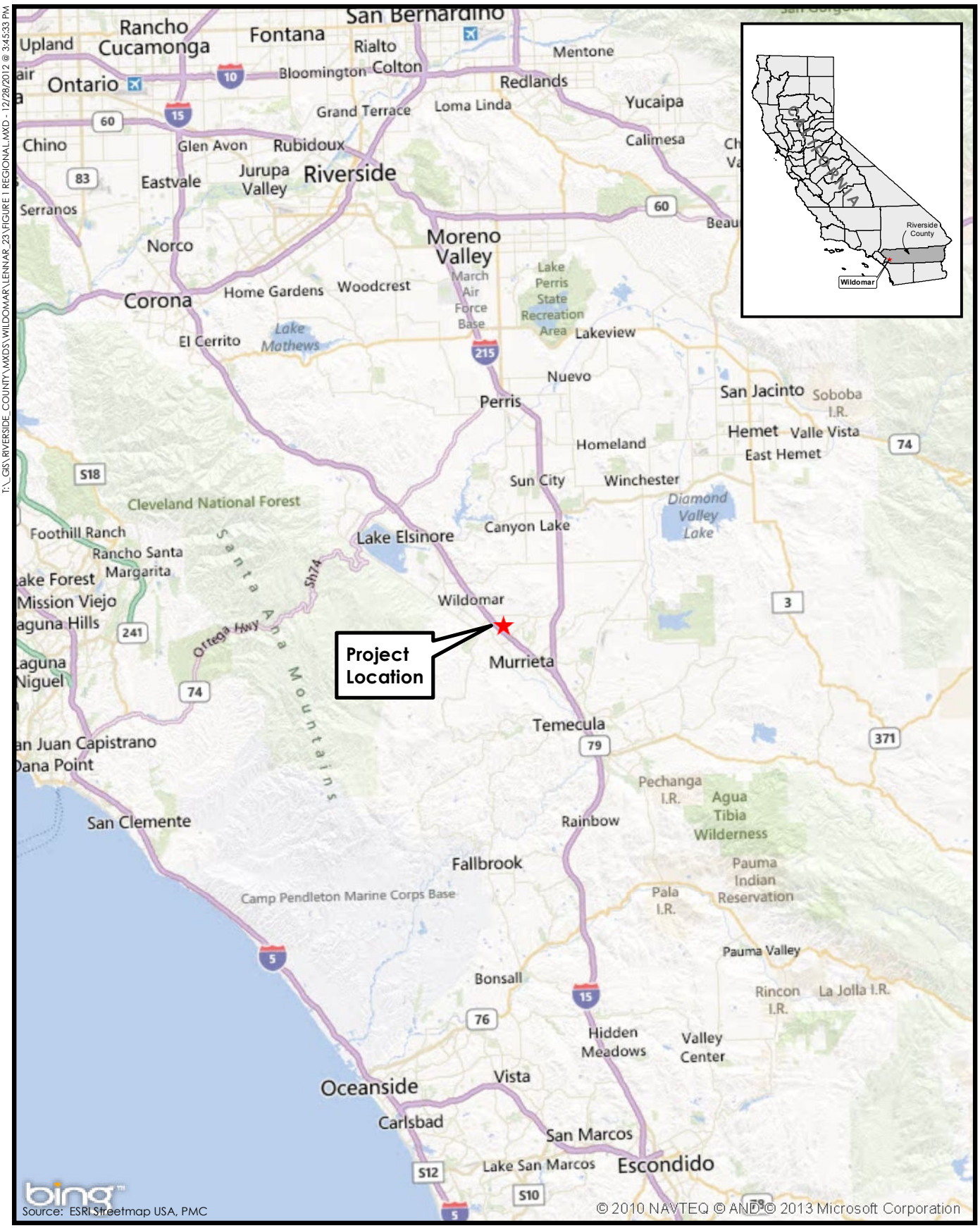


**Figure 1**
Regional Vicinity Map


**Figure 2**
Project Location

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# Sycamore Academy

VIEW OF PROPOSED PARKING AREA

VIEW OF PROPOSED BUILDING AREA

VIEW OF PROPOSED TURF PLAY AREA

VIEW OF RETENTION BASIN TO REMAIN

Source: PJHM Architects

Not to scale

**Figure 3**
**Existing Site Photographs**

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# Sycamore Academy

OVERALL SITE VIEW FROM PALOMAR ST.

VIEW OF ACCESS EASEMENT

VIEW OF ADJACENT PRIVATE DRIVE
(CHURCH PARKING LOT)

Source: PJHM Architects

Not to scale

**Figure 4**
**Existing Site Access**

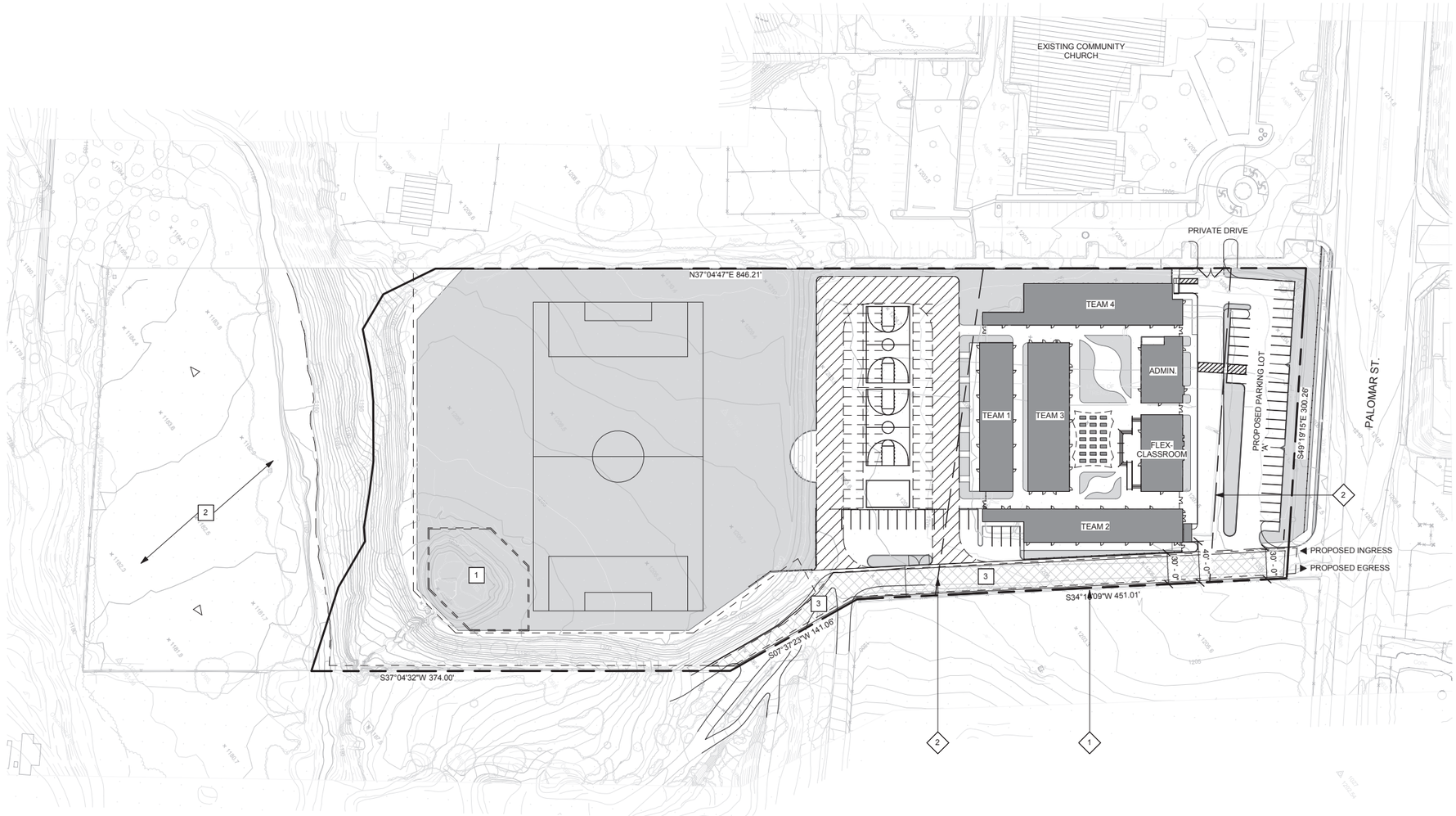
# Sycamore Academy

## SITE AREA CALCULATION

1. CONSTRAINED AREA EXISTING RETENTION/ DETENTION BASIN
2. PORTION OF PROPERTY NO LONGER PART OF THE PROJECT
3. CONSTRAINED AREA DUE TO EASEMENT, SHARED DRIVE

## DEFINED CONSTRAINED AREAS

1. PROPERTY LINE
2. SEISMIC SET BACK LINE
3. EXISTING TURF AREA- NO PROPOSED DEVELOPMENT




## CONSTRAINED AREA PLAN KEYNOTES

- PROPOSED BUILDINGS, EDUCATIONAL USE
- PROPOSED LANDSCAPE, EDUCATIONAL USE
- PROPOSED HARDSCAPE, EDUCATIONAL USE
- CONSTRAINED AREAS

Source: PJHM Architects

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**Figure 5**
**Proposed Site Plan**

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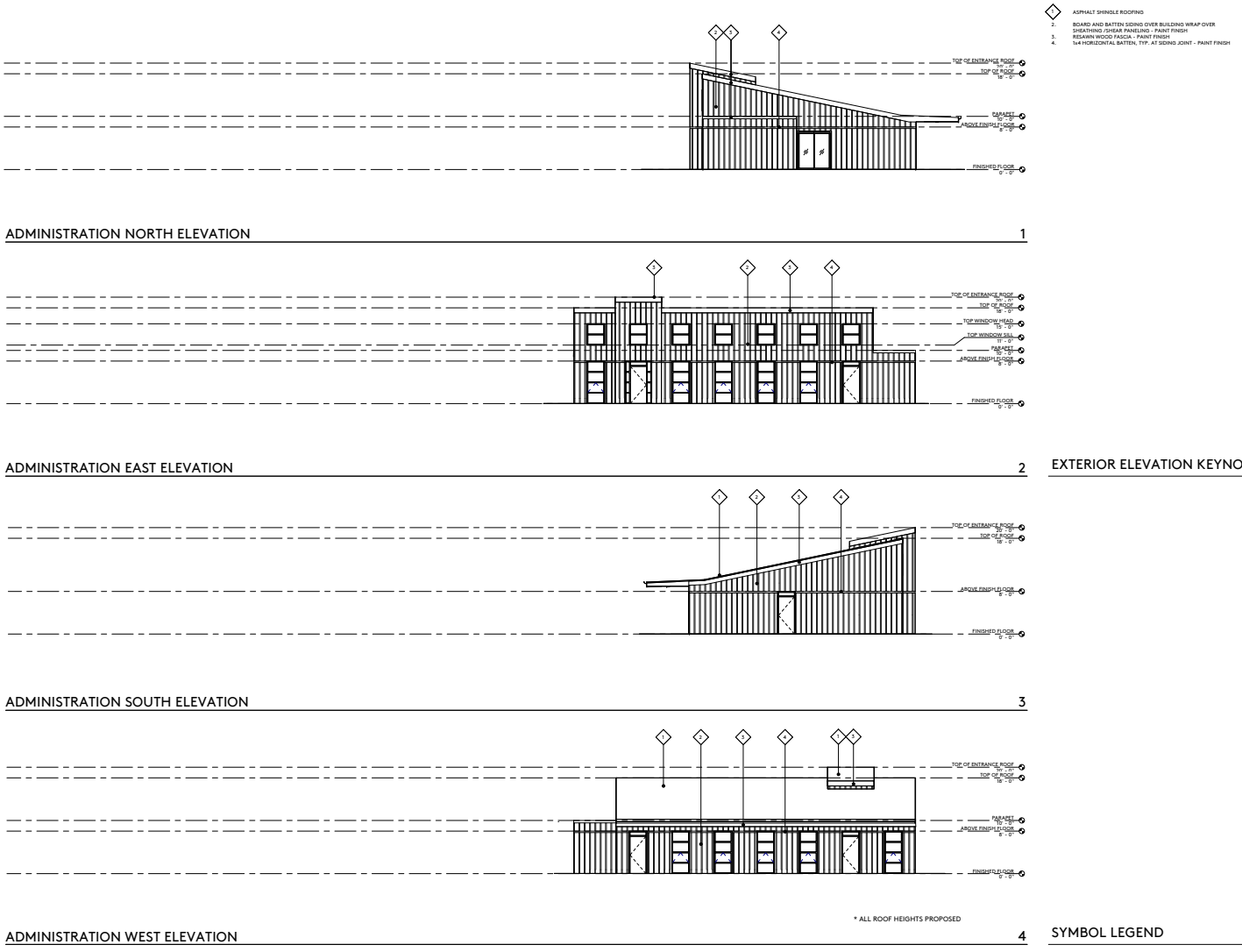
# Sycamore Academy




Source: PJHM Architects

Not to scale

**Figure 6**
**Proposed Building Elevations**

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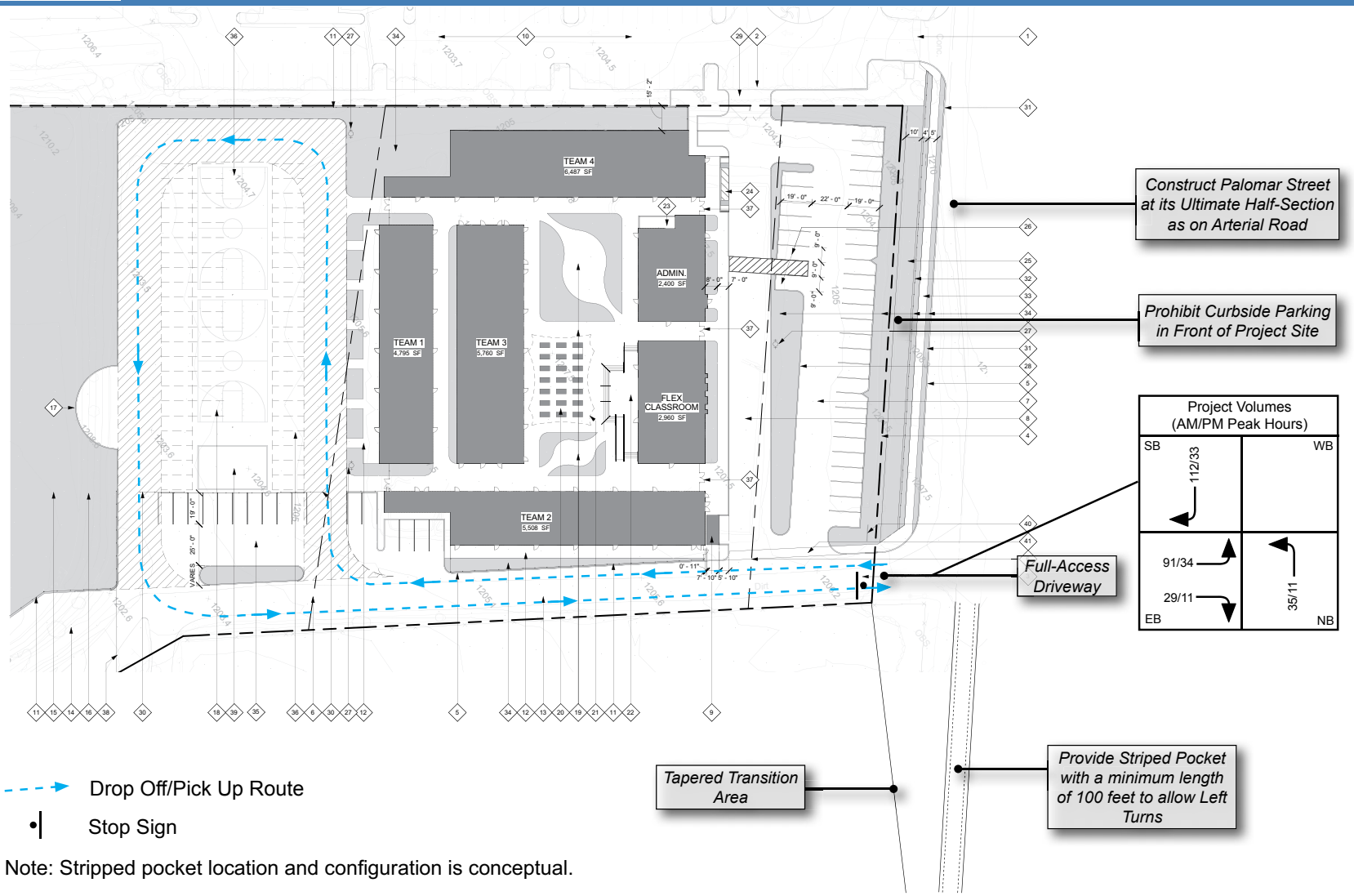
# Sycamore Academy




Note: Stripped pocket location and configuration is conceptual.

Source: PlaceWorks 2014 B

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**Figure 7**
**Project Site Access**

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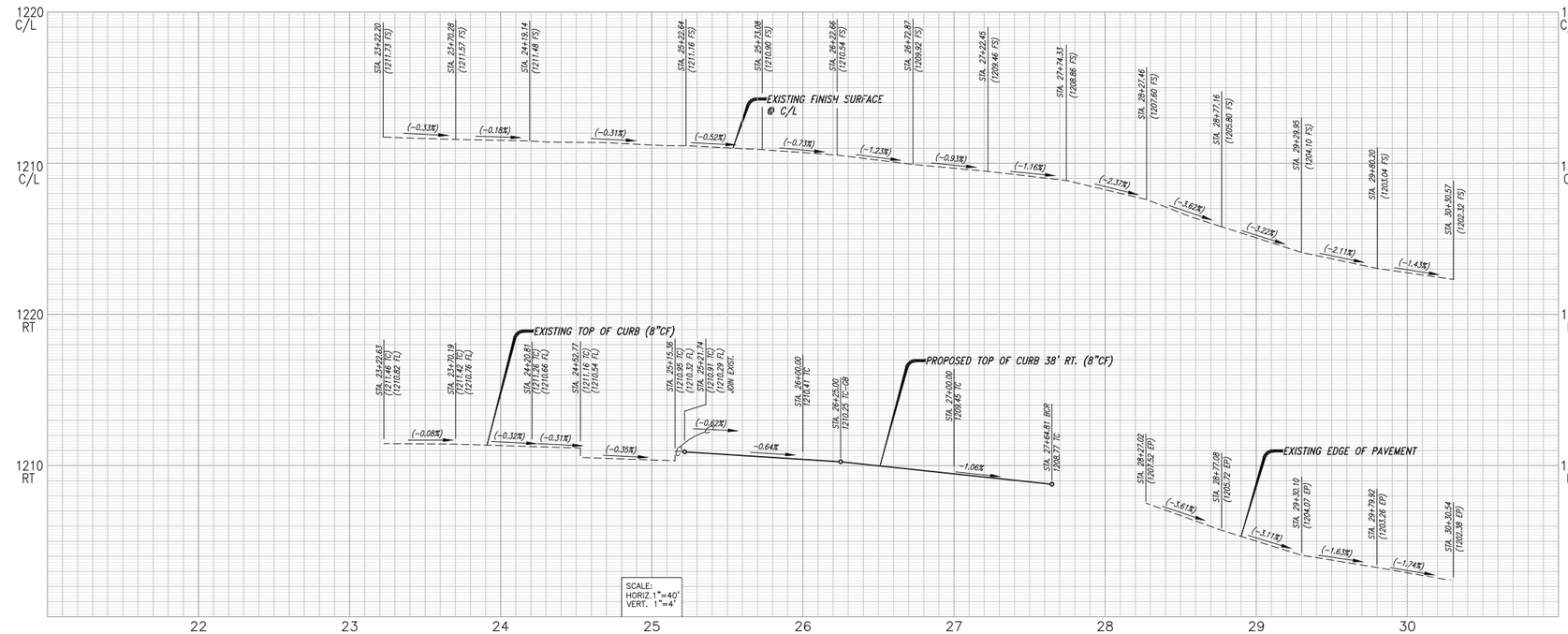
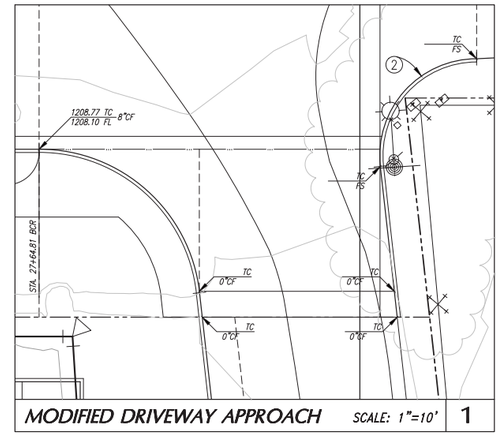
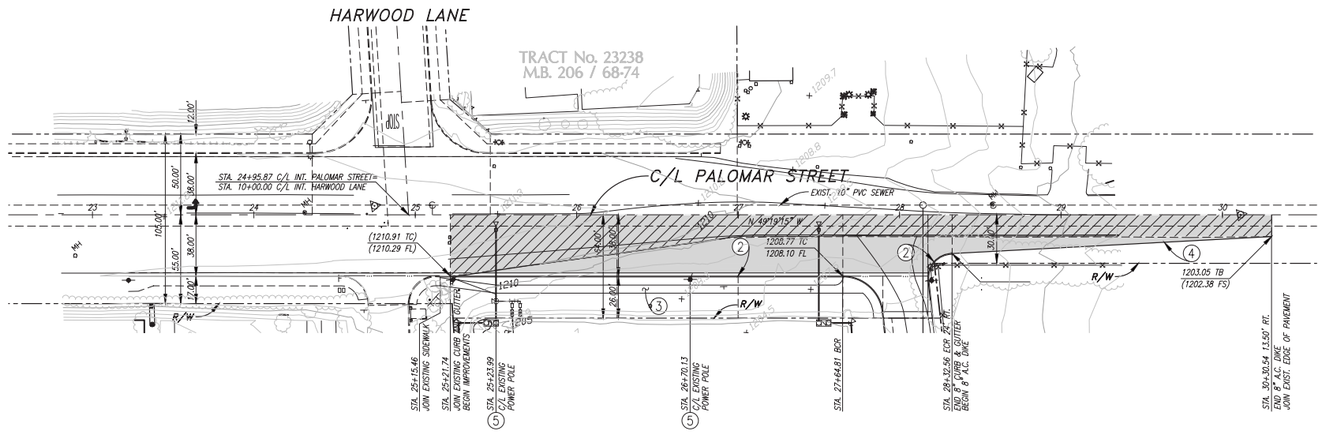
# Sycamore Academy




**CONSTRUCTION NOTES:**

1. CONSTRUCT AC PAVEMENT OVER A.B. CLASS II.
2. CONSTRUCT 8" CURB AND GUTTER TYPE A–8 PER RIVERSIDE COUNTY STANDARD DRAWING No. 201.
3. CONSTRUCT CONCRETE SIDEWALK PER RIVERSIDE COUNTY STANDARD DRAWING No. 401.
4. CONSTRUCT 8" ASPHALT DIKE PER RIVRSIDE COUNTY STANDARD DRAWING No. 212.
5. PROTECT EXISTING POWER POLE IN PLACE.
6. SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT SECTION.
7. REMOVE EXISTING ASPHALT DIKE.
8. CONSTRUCT CONCRETE DRIVEWAY APPROACH PER RIVRSIDE COUNTY STANDARD DRAWING No. 207A. (MODIFIED PER DETAIL No. 1, HEREON).




Source: SLR Civil Engineering, Inc.

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**Figure 8**
**Offsite Street Improvement Plan and Profile**

Sewer

The proposed project would receive wastewater service from the EVMWD and has received a service commitment letter (#2601-1). Connection to the EVMWD wastewater system would occur at Palomar Street adjacent to the project site. The project would generate an estimated 20,000 gallons per day (the reader is referred to Impact 17.a).

Stormwater

Project site drainage would be directed to a series of proposed bioswales in the proposed parking lot, between the southeastern site boundary and Robin Scott Street, and along the western boundary of the proposed paved play area. These proposed bioswales would provide treatment prior to collection in a proposed detention basin located in the southern portion of the site and discharge off-site to the southwest. The existing man-made pond at the southwest corner of the project may be filled to support the proposed turf playfield and may not be part of the proposed drainage system (**Figure 9**).

Other Utilities

Other services available to the proposed project would include cable television, electrical, natural gas, solid waste pickup, and telecommunications. Connection to cable television, natural gas, and telecommunications services would be made underground to existing facilities within Palomar Street. Cable television service would be provided by Verizon or Time Warner, while natural gas would be supplied to the project site by Southern California Gas Company and telecommunications would be provided by Verizon. Connection to electrical service would be made to existing overhead electrical lines along Palomar Street, and the service would be provided by Southern California Edison. Solid waste pickup would be provided by Waste Management.

## II. Existing Conditions

### Regulatory Setting

The City of Wildomar General Plan land use designation for the project site is Commercial Office (CO), which allows for a variety of office-related uses including financial, legal, insurance, and other office services with a floor area ratio (FAR) 0.35 to 1.0. General Plan Policy LU 23.4 allows this land use designation to accommodate community-oriented facilities, such as telecommunication centers, public meeting rooms, daycare facilities, and cultural uses. A charter school, open to anyone in the community, is considered a community-oriented facility. The General Plan land use designations for the properties immediately adjacent to the project site include Medium Density Residential (MDR), Estate Residential (EDR), and Very Low Density Residential (VLDR).

The project site is currently zoned C-O (Commercial Office). The C-O zone district allows for administrative and professional offices such as business, law, medical, engineering, real estate offices, library, banks, daycare centers, churches, and other similar uses in which no activity is carried on catering to retail sales and no stock of goods is maintained for sale. Consistent with Wildomar Municipal Code Section 17.84.020.D, other uses may be considered provided that the Planning Director finds that the proposed use is substantially the same in character and intensity as those listed in Wildomar Municipal Code Section 17.84.020. Zoning for the adjacent properties includes Rural Residential (R-R) and Residential, One Family Dwellings (R-1). Section 17.280.010 of the Wildomar Municipal Code allows educational institutions to be located in any zone in the city subject to a Public Use Permit.

**Physical Setting**

The project site is currently undeveloped but highly disturbed, with evidence of recent clearing and grading activities on the northern portion of the site. The site gently slopes from an elevation of approximately 1,210 feet above mean sea level at the northwestern corner to approximately 1,183 feet at the southwestern corner. The site is characterized as heavily disturbed grassland. An isolated, man-made pond occurs in the southern portion of the site. According to city and county records, a residential structure was located on the site from 1964 until approximately 2006. However, no evidence of any structures is currently present. An unimproved driveway lies along the southeastern boundary of the project site, providing access to the existing residences located to the east and south.

The adjacent properties to the east and south are developed with rural residential uses. North and northwest of the site is a recently constructed residential subdivision. The World Harvest Church is located adjacent to the northwest, and storage buildings and a small orchard are located adjacent to the site to the southwest.

## III. REGULATORY FRAMEWORK

This section lists specific environmental review and consultation requirements and identifies permits and approvals that may need to be obtained from local, state, and federal agencies prior to implementation of the proposed project.

**Federal**

Clean Water Act

Section 401 of the federal Clean Water Act (CWA) requires any applicant for a federal license or permit conducting any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards. The San Diego Regional Water Quality Control Board (RWQCB) regulates Section 401 requirements.

Endangered Species Act

The federal Endangered Species Act (ESA) protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process. Procedures for addressing impacts to federally listed species follow two principal pathways, both of which require consultation with the US Fish and Wildlife Service (USFWS), which administers the Endangered Species Act for all terrestrial species. The first pathway, Section 10(a) incidental take permit, applies to situations where a non-federal government entity must resolve potential adverse impacts to species protected under the ESA. The second pathway, Section 7 consultation, applies to projects directly undertaken by a federal agency or private projects requiring a federal permit or approval.

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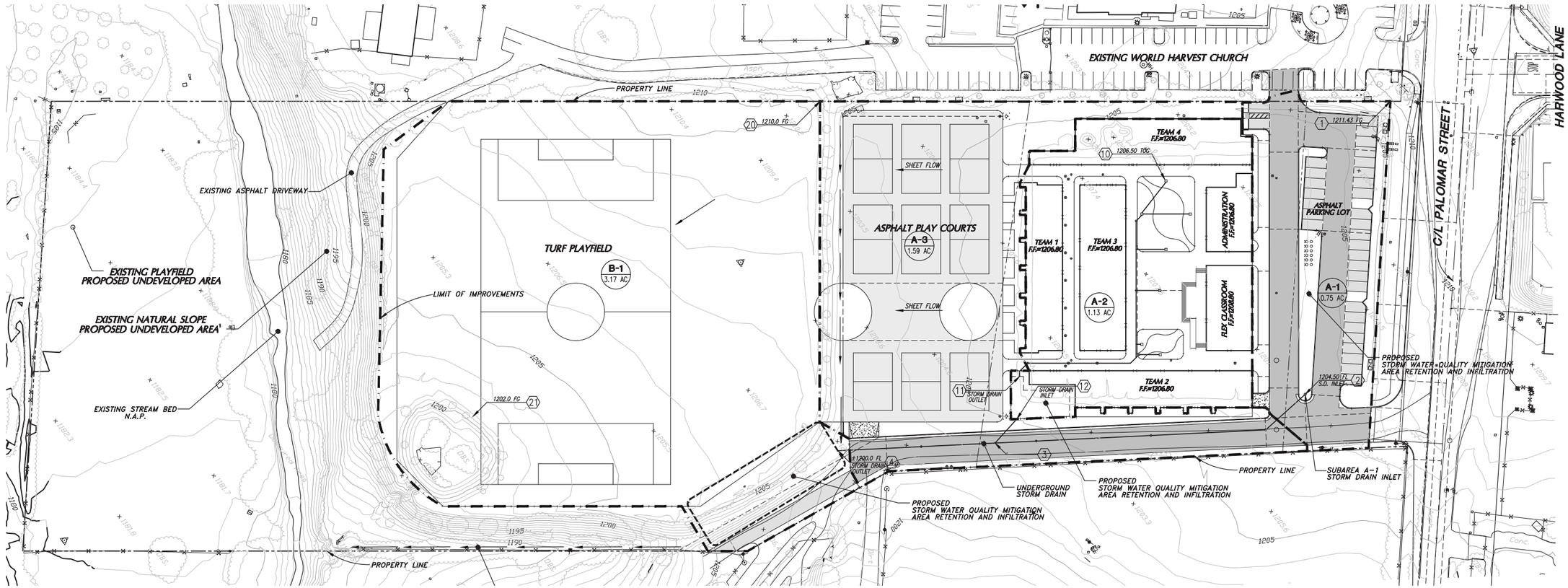
# Sycamore Academy




**LEGEND**

- A-1 / 0.75 AC — SUBAREA DESIGNATION / SUBAREA ACREAGE
- 1 — NODE DESIGNATION
- FLOW PATH
- SUBAREA BOUNDARY

**SUBAREA A–1** (0.75AC)
CONSISTS OF PARKING LOT AND HARDSCAPE EAST OF MULTI-PURPOSE BUILDING AND ADMINISTRATION BUILDING

**SUBAREA A–2** (1.13 AC)
CONSISTS OF CLASSROOM BUILDINGS, ADMINISTRATION BUILDING AND MULTI-PURPOSE BUILDING AND INTERIOR COURTYARDS.

**SUBAREA A–3** (1.59 AC)
CONSISTS OF ASPHALT PLAY COURTS, PAVED ACCESS DRIVE TO ASPHALT COURTS, AND AREAS BETWEEN CLASSROOM TEAM BUILDING 2 AND 4 AND THE PROPERTY LINE.

**SUBAREA B–1** (3.17 AC
CONSISTS OF THE TURF PLAYFIELD AREA SOUTH OF THE ASPHALT PLAY COURTS.

## CONCEPTUAL DRAINAGE NOTES

TOTAL SITE AREA = 9.84 ACRES

DEVELOPED SITE AREA = ±6.7 ACRES

UNDEVELOPED SITE AREA = ± 3.1 ACRES

PROPOSED IMPERVIOUS IMPROVEMENTS = ±3.2 ACRES (33%)

THE EXISTING SITE HAS BEEN PREVIOUSLY ROUGH GRADED IN CONJUNCTION WITH TENTATIVE PARCEL MAP NO. 32159 WHICH HAS BEEN ABANDONED BY THE CURRENT PROPERTY OWNER. THE SITE CURRENTLY SHEET FLOWS TOWARDS AN EXISTING NATURAL SWALE ALONG THE EASTERLY BOUNDARY TO THE EXISTING CREEK THAT RUNS PARALLEL WITH AND APPROXIMATELY 200 FEET NORTH OF THE SOUTHERLY PROPERTY BOUNDARY LINE. THE PROPOSED RUNOFF GENERATED FROM THE PROPOSED SYCAMORE ACADEMY WILL PERPETUATE THE EXISTING DRAINAGE PATTERN OF THE EXISTING PARTIALLY GRADED SITE. ONSITE INFILTRATION AND DETENTION BMPs WILL BE UTILIZED TO MINIMIZE STORMWATER POLLUTANTS FROM ENTERING THE EXISTING CREEK THAT IS ULTIMATELY TRIBUTARY TO MURRIETA CREEK AS SHOWN ON THE "MASTER DRAINAGE PLAN FOR THE MURRIETA CREEK AREA" PREPARED BY THE RIVERSIDE COUNTY FLOOD CONTROL DISTRICT ZONE 7 MASTER DRAINAGE PLAN.
THE AREA LYING SOUTH OF THE PROPOSED TURF PLAYFIELD WILL REMAIN UNDEVELOPED TO PRESERVE AND NOT DISTURB THE EXISTING NATURAL ENVIRONMENT.
EXISTING CREEK THAT IS ULTIMATELY TRIBUTARY TO THE MASTER DRAINAGE PLAN FOR THE MURRIETA CREEK AREA AS DEFINED BY THE RIVERSIDE COUNTY FLOOD CONTROL DISTRICT ZONE 7 MASTER DRAINAGE PLAN.

Source: SLR Civil Engineering, Inc.

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**Figure 9**
**Preliminary Drainage Plan**

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the Fish and Game Code (FGC).

All raptors and their nests are protected from take or disturbance under the MBTA (16 United States Code [USC] Section 703 et seq.) and California statute (FGC Section 3503.5). The golden eagle and bald eagle are also afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC Section 669 et seq.).

Executive Order 13112 – Invasive Species

Executive Order 13112 – Invasive Species directs all federal agencies to refrain from authorizing, funding, or carrying out actions or projects that may spread invasive species. The order further directs federal agencies to prevent the introduction of invasive species, control and monitor existing invasive species populations, restore native species to invaded ecosystems, research and develop prevention and control methods for invasive species, and promote public education on invasive species. As part of the proposed action, the USFWS and the US Army Corps of Engineers (USACE) issue permits and are responsible for ensuring that the proposed action complies with Executive Order 13112 and does not contribute to the spread of invasive species.

**State**

California Endangered Species Act

Under the California Endangered Species Act (CESA), the California Department of Fish and Wildlife (CDFW) has the responsibility for maintaining a list of endangered and threatened species (Fish and Game Code Section 2070). Sections 2050 through 2098 of the FGC outline the protection provided to California's rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under the CESA. Section 2081 established an incidental take permit program for state-listed species. The CDFW maintains a list of "candidate species," which are species that the CDFW formally notices as being under review for addition to the list of endangered or threatened species.

Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the area and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of the CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under FGC Section 206.591. Authorization from the CDFW would be in the form of an incidental take permit.

Native Plant Protection Act

The Native Plant Protection Act of 1977 (FGC Section 1900 et seq.) prohibits the taking, possessing, or sale within the state of any plants with a state designation of rare, threatened, or endangered (as defined by the

CDFW). An exception to this prohibition in the act allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify the CDFW and give that state agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed (FGC Section 1913 exempts from take prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way"). Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife also maintains lists of "species of special concern," which serve as species "watch lists." The CDFW has also identified many species of special concern. Species with this status have limited distribution or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under the California Environmental Quality Act (CEQA) and thereby warrant specific protection measures.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society's (CNPS) Lists 1A, 1B, and 2 would typically be considered under CEQA.

Sections 3500 to 5500 of the FGC outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under FGC Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

State and local public agencies are subject to Section 1602 of the Fish and Game Code, which governs construction activities that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the CDFW. Under Section 1602, a discretionary Streambed Alteration Agreement permit from the CDFW must be issued by the CDFW to the project developer prior to the initiation of construction activities within lands under CDFW jurisdiction. As a general rule, this requirement applies to any work undertaken within the 100-year floodplain of a stream or river containing fish or wildlife resources.

**Local**

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The Western Riverside County MSHCP is a comprehensive, multijurisdictional habitat conservation plan focusing on conservation of species and their associated habitats in western Riverside County. This plan is one of several large, multijurisdictional habitat-planning efforts in Southern California with the overall goal

of maintaining biological and ecological diversity within a rapidly urbanizing region. The MSHCP will allow Riverside County and its cities to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal endangered species acts. The MSHCP serves as a habitat conservation plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973 (16 USC Section 1531 et seq.), as well as a natural communities conservation plan (NCCP) under the NCCP Act of 2001 (FGC Section 2800 et seq.). The MSHCP allows the participating jurisdictions to authorize "take" of plant and wildlife species identified within the Plan Area. The USFWS and the CDFW have authority to regulate the take of threatened, endangered, and rare species. Under the MSHCP, the wildlife agencies have granted "take authorization" for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP conservation area, in exchange for the assembly and management of a coordinated MSHCP conservation area. The MSHCP is a "criteria-based plan" and does not rely on a hard-line preserve map. Instead, within the MSHCP Plan Area, the MSHCP reserve will be assembled over time from a smaller subset of the Plan Area referred to as the Criteria Area. The Criteria Area consists of Criteria Cells (Cells) or Cell Groupings and flexible guidelines (Criteria) for the assembly of conservation within the Cells or Cell Groupings. Cells and Cell Groupings also may be included within larger units known as Cores, Linkages, or Non-Contiguous Habitat Blocks.

City of Wildomar General Plan

The General Plan includes the following policies to address effects of prospective development.

Open Space Policy 5.1: Substantially alter floodways or implement other channelization only as a "last resort," and limit the alteration to: (a) that necessary for the protection of public health and safety only after all other options are exhausted; (b) essential public service projects where or other feasible construction method or alternative project location exists; or (c) projects where primary function is improvement of fish and wildlife habitat.

Open Space Policy 5.2: If substantial modification to a floodway is proposed, design it to reduce adverse environmental effects to the maximum extent feasible, considering the following factors: (a) stream scour; (b) erosion protection and sedimentation; (c) wildlife habitat and linkages; (d) groundwater recharge capability; (e) adjacent property; (f) design (a natural effect, examples could include soft riparian bottoms and gentle bank slopes, wide and shallow floodways, minimization of visible use of concrete, and landscaping with native plants to the maximum extent possible). A site-specific hydrologic study may be required.

Open Space Policy 5.3: Based upon site-specific study, all development shall be set back from the floodway boundary a distance adequate to address the following issues:

a) Public safety;

b) Erosion;

c) Riparian or wetland buffer;

d) Wildlife movement corridor or linkage; and

e) Slopes.

Open Space Policy 5.5: Development shall preserve and enhance existing native riparian habitat and prevent obstruction of natural watercourses. Incentives shall be utilized to the maximum extent possible.

Open Space Policy 5.6: Identify and, to the maximum extent feasible, conserve remaining upland habitat adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with those wetland and riparian areas.

Open Space Policy 5.7: Where land is prohibited from development due to its retention as natural floodways, floodplains and water courses, incentives should be available to the owner of such the land including density transfer and other mechanisms as may be adopted. These incentives will be provided for the purpose of encouraging the preservation of natural watercourses without creating undue hardship on the owner of properties following these policies.

Open Space Policy 6.1: During the development review process, ensure compliance with the Clean Water Act's Section 404 in terms of wetlands mitigation policies and policies concerning fill material in jurisdictional wetlands.

Open Space Policy 6.2: Preserve buffer zones around wetlands where feasible and biologically appropriate.

Open Space Policy 8.1: Cooperate with Federal and State agencies to achieve the sustainable conservation of forest land as a means of providing open space and protecting natural resources and habitat lands included in the MSHCPs.

Open Space Policy 9.3: Maintain and conserve superior examples of native trees, natural vegetation, stands of established trees, and other features for ecosystem, aesthetic, and water conservation purposes.

Open Space Policy 17.1: Enforce the provisions of applicable MSHCPs, if adopted, when conducting review of development applications.

Open Space Policy 17.2: Enforce the provisions of applicable MSHCPs, if adopted, when developing transportation or infrastructure projects that have been designated as covered activities in the applicable MSHCPs.

Open Space Policy 17.3: Enforce the provisions of applicable MSHCPs, if adopted, when conducting review of possible general plan amendments and/or zoning changes.

Open Space Policy 18.1: Preserve multi-species habitat resources in the County of Riverside through the enforcement of the provisions of applicable MSHCPs, if adopted.

Open Space Policy 18.2: Provide incentives to landowners that will encourage the protection of significant resources in the County beyond the preservation and/or conservation required to mitigate project impacts.

**Noise**

Noise Policy 12.1: Minimize the impacts of construction noise on adjacent uses within acceptable practices.

Noise Policy 12.2: Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.

Noise Policy 12.3: Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses (see policy N 1.3) by requiring the developer to submit a construction-related noise mitigation plan to the City for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as:

a. Temporary noise attenuation fences;

b. Preferential location of equipment; and

c. Use of current noise suppression technology and equipment.

Noise Policy 12.4: Require that all construction equipment utilizes noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

City of Wildomar Municipal Code

The following represent typical conditions and requirements of development in the City of Wildomar. These standards will be applied to the project per ordinance, policy, or county, state, or federal law. The standards also address many environmental impacts and as shown below are divided into the respective environmental sections.

**Exterior Lighting**

Chapter 8.64 of the Wildomar Municipal Code restricts the permitted use of certain light fixtures emitting into the night sky undesirable light rays that have a detrimental effect on astronomical observation and research. The following standards are applicable to all lighting within the city:

- Low-pressure sodium lamps are the preferred illuminating source.
- All nonexempt outdoor light fixtures shall be shielded.
- All nonexempt outdoor light fixtures are subject to the provisions of Section 8.64.080 of the Municipal Code regarding hours of operation.
- Lighting fixtures used to illuminate an outdoor advertising display shall be mounted on the top of the outdoor advertising structure. All such fixtures shall comply with the lamp source and shielding requirements of Section 8.64.060 and the prohibitions of Section 8.64.080 of the Municipal Code.

Additional requirements for light source and shielding apply per Municipal Code Section 8.64.060, and restrictions are not placed on the use of low-pressure sodium lighting of single-family dwellings for security purposes.

**Grading**

Wildomar Municipal Code Chapter 15.12 contains standards for grading, excavation, and earthwork construction, including fills and embankments.

**Public Facilities**

Wildomar Municipal Code Section 3.44.060 requires development projects to pay a development impact fee to finance infrastructures and other public improvements and facilities needed to serve the additional residents.

**Water Efficiency**

Chapter 17.276 of the Wildomar Municipal Code requires new landscape installations of 2,500 square feet or more to be planned, designed, installed, maintained, and managed in a manner that uses water efficiently, encourages water conservation, and prevents water waste.

## IV. ENVIRONMENTAL CHECKLIST FORM

### A. BACKGROUND

1. **Project Title:** Sycamore Academy Project (14-0074)

2. **Lead Agency Name and Address:**

   City of Wildomar, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595

3. **Contact Person and Phone Number:**

   Matthew Bassi, Planning Director; (951) 677-7751, ext. 213

4. **Project Location:**

   The project site is located at 23151 Palomar Street, southeast of the Palomar Street/Clinton Keith Road intersection and adjacent to Robin Scott Street in Wildomar, California; APN 380-170-020; La Laguna-Stearns Land Grant; Latitude 33.583985 and Longitude 117.2478; Murrieta, California, USGS 7.5-minute quadrangle.

5. **Project Sponsor's Name and Address:**

   Sycamore Academy, 32326 Clinton Keith Road, Wildomar, CA 92595

6. **General Plan Designation:** Commercial Office (CO)

7. **Zoning:** C-O (Commercial Office)

8. **Description of Project:**

   A public use permit (PUP) for the development of an approximately 28,000-square-foot K through 8 public charter school consisting of 22 classrooms arranged in four buildings, a flex-classroom building, and an administration building, as well as patio space, parking lots, gardens, an amphitheater, and paved and turf play areas.

9. **Surrounding Land Uses and Setting:**

   North – Zoning: Rural Residential (R-R) and Residential: One Family Dwellings (R-1); General Plan Designation: Medium Density Residential (MDR)

   South – Zoning: Rural Residential (R-R); General Plan Designation: Estate Residential (EDR), Very Low Density Residential (VLDR)

   East – Zoning: Rural Residential (R-R); General Plan Designation: Very Low Density Residential (VLDR)

   West – Zoning: Rural Residential (R-R); General Plan Designation: Very Low Density Residential (VLDR)

**10. Other Public Agencies Whose Approval Is Required:**

- California Department of Fish and Wildlife
- San Diego Regional Water Quality Control Board

**B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The environmental factors checked below would be potentially affected by this project involving at least one impact that is "Less Than Significant Impact With Mitigation Incorporated" as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Greenhouse Gas Emissions | ☐ Population/Housing |
| ☐ Agricultural Resources | ☐ Hazards/Hazardous Materials | ☐ Public Services |
| ☐ Air Quality | ☐ Hydrology/Water Quality | ☐ Recreation |
| ☒ Biological Resources | ☐ Land Use/Planning | ☐ Transportation/Traffic |
| ☒ Cultural Resources | ☐ Mineral Resources | ☐ Utilities/Service Systems |
| ☒ Geology and Soils | ☒ Noise | ☐ Mandatory Findings of Significance |

## V. ENVIRONMENTAL ANALYSIS

### 1. Aesthetics

| Issues, would the proposal: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect on a scenic vista? | | | ✓ | |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | ✓ |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | | | ✓ | |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | ✓ | |

**DISCUSSION**

a) **Less Than Significant Impact**. Scenic vistas in the project vicinity include views of mountain ridgelines to the northeast, south, and southwest. Due to topography and vegetation, the project site is not currently visible from the existing residences located southwest of the project site. Therefore, project implementation would not block or obscure views of the mountain ridgeline from these uses to the northeast. The project site and mountain ridgeline are visible from the residential subdivision located north and northwest of the project site. As shown in **Figure 6**, the proposed structures would have a maximum height of 20 feet, similar to the existing church northwest of the project site. While the structures would be clearly visible from these residences, as evidenced by views of the existing church, the proposed structures would not block views of the mountain ridgeline. The project would alter these views by placing multiple structures on the project site; however, the proposed development would be consistent with the urbanizing character of the surrounding area and would complement the existing and planned residential and commercial development on adjacent properties. Furthermore, the proposed development would be subject to the Riverside County Design Standards and Guidelines (2004), which have been adopted by the City. Compliance with these existing standards would ensure that the proposed school features quality design and architecture and that it is compatible with the character of the adjacent uses. Therefore, implementation of the proposed project would not have a substantial adverse effect on a scenic vista and this impact would be less than significant.

b) **No Impact**. The project site is located 9.1 miles from a section of Interstate 15 (I-15), which is eligible to be designated as a state scenic highway (City of Wildomar 2008, Figure C-9). However, the site is not visible from this segment of I-15 and the segment has not yet been officially designated. Therefore, no impact would occur.

c) **Less Than Significant Impact**. As described previously, the project site is currently undeveloped but highly disturbed grassland (see **Figure 3**).

The proposed project would allow development of a public school consisting of six buildings, a parking lot, and paved and turf play areas. The proposed structures and play areas would be constructed on the north portion of the site, which has been cleared and graded. Because this portion of the site has been heavily disturbed and contains no significant visual resources, the proposed development would not substantially degrade the existing visual character or quality. The southern portion of the project site is not proposed for development of any structures but would be developed as a turf sports field and an overflow parking lot with driveway access. Therefore, the project would not substantially affect the visual character or quality of this portion of the site, which lies along the Murietta Creek corridor.

As described previously, the proposed development would be consistent with the urbanizing character of the surrounding area and would complement the existing and planned residential and commercial development on adjacent properties. Furthermore, the proposed development would be subject to the Riverside County Design Standards and Guidelines (2004). Compliance with these City standards would ensure that the proposed school features quality design and architecture and that it is compatible with the character of the adjacent uses. Therefore, implementation of the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings, and this impact would be less than significant.

d) **Less Than Significant Impact**. The proposed project would create new sources of light and glare on an undeveloped site potentially affecting day or nighttime views in the area. Consistent with the City's lighting standards (Wildomar Municipal Code Section 8.64.090), all proposed exterior light fixtures must have full cutoff so that there is no light pollution created above the 90-degree plane of the light fixtures. Additionally, all light fixtures located along the perimeter would be provided with house-side shields to eliminate light pollution onto streets and neighboring properties. Therefore, project lighting would not adversely affect day or nighttime views in the area and would not contribute to night sky pollution such that it would interfere with nighttime use of the Mount Palomar Observatory. In addition, the project proposes landscaped buffers along the Palomar Street frontage as well as between the site and the existing church to the northwest, which would block any daytime glare created by sun reflecting off of vehicle windshields or building windows. Therefore, this impact would be less than significant.

**STANDARD CONDITIONS AND REQUIREMENTS**

Compliance with the provisions of Wildomar Municipal Code Chapter 8.64, Light Pollution.

**MITIGATION MEASURES**

None required.

## 2. Agricultural Resources

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use? | | | | ✓ |
| b) Conflict with existing zoning for agricultural use or a Williamson Act contract? | | | | ✓ |
| c) Conflict with existing zoning for, or cause rezoning of, forestland (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) Result in the loss of forestland or conversion of forestland to non-forest use? | | | | ✓ |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forestland to non-forest use? | | | | ✓ |

**DISCUSSION**

a, b) **No Impact.** The project site has been designated by the California Department of Conservation Farmland Mapping and Monitoring Program as Farmland of Local Importance and Other Lands (DOC 2014). According to the Riverside County Land Information System (2014), the site is not located within an agricultural preserve and is not subject to a Williamson Act contract. As described previously, the project site is zoned C-O (Commercial Office), which does not allow agricultural uses. Therefore, project implementation would not result in the conversion of Important Farmland to nonagricultural use, would not conflict with existing agricultural zoning or a Williamson Act contract, and would not otherwise adversely impact agriculture in the area. There would be no impact.

c, d, e) **No Impact.** The project site is located in an urbanized area of Wildomar and does not contain forestland. Therefore, project implementation would not result in the loss or conversion of forestland to non-forest use and would not otherwise adversely impact forestland in the area. There would be no impact.

**STANDARD CONDITIONS AND REQUIREMENTS**

None required.

**MITIGATION MEASURES**

None required.

**3. Air Quality**

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | | ✓ |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | | ✓ | |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | | ✓ | |
| d) Expose sensitive receptors to substantial pollutant concentrations? | | | ✓ | |
| e) Create objectionable odors affecting a substantial number of people? | | | | ✓ |

**DISCUSSION**

a) **No Impact.** The project site is located within the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the basin is classified as nonattainment by the US Environmental Protection Agency (EPA) and California Air Resources Board (CARB) (i.e., ozone [$O_3$], coarse particulate ($PM_{10}$), fine particulate matter ($PM_{2.5}$), and lead). These are considered criteria pollutants because they are four of several prevalent air pollutants known to be hazardous to human health. It should be noted that the Riverside County portion of the SoCAB is not classified as nonattainment for lead and the proposed project is not anticipated to generate a quantifiable amount of lead emissions, as these emissions are not associated with typical land use projects such as schools.

In order to reduce emissions for which the SoCAB is in nonattainment, the SCAQMD has adopted the 2012 Air Quality Management Plan (AQMP). The 2012 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2012 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, the Southern California Association of Governments (SCAG), and the EPA. The 2012 AQMP pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The project is subject to the SCAQMD's Air Quality Management Plan.

Criteria for determining consistency with the AQMP are defined by the following indicators:

- Consistency Criterion No. 1: The proposed project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

- Consistency Criterion No. 2: The proposed project will not exceed the assumptions in the 2012 AQMP or increments based on the years of project buildout phase.

The violations to which Consistency Criterion No. 1 refers are the California ambient air quality standards (CAAQS) and the national ambient air quality standards (NAAQS). As evaluated under Impact b) below, the project will not exceed the short-term construction standards or long-term operational standards and in so doing will not violate any air quality standards. Additionally, the analysis for long-term local air quality impacts showed that future carbon monoxide (CO) concentration levels along roadways and at intersections affected by project traffic will not exceed the 1-hour and 8-hour state CO pollutant concentration standards. Thus, a less than significant impact is expected, and the project would be consistent with the first criterion.

Concerning Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed project is consistent with the land use designation and development density presented in the City's General Plan. The SCAG Traffic Allocation Zone (TAZ) that includes the proposed project area is number 43404300. The TAZ is used to determine regional growth that affects issues such as transportation and air quality. The SCAG model assumes that by 2035 there will be 220 new jobs in the TAZ, as well as several additional homes and residents. The proposed project would have a peak of 35 jobs and therefore would not exceed the population or job growth projections used by the SCAQMD to develop the Air Quality Management Plan. No impact would occur.

b) **Less Than Significant Impact**. As discussed previously, the project site is located within the SoCAB. State and federal air quality standards are often exceeded in many parts of the basin. A discussion of the project's potential short-term construction-period and long-term operational-period air quality impacts is provided below.

**Construction Emissions**

The SCAQMD has established methods to quantify air emissions associated with construction activities such as air pollutant emissions generated by operation of on-site construction equipment, fugitive dust emissions related to grading and site work activities, and mobile (tailpipe) emissions from construction worker vehicles and haul/delivery truck trips. Emissions would vary from day to day, depending on the level of activity, the specific type of construction activity occurring, and, for fugitive dust, prevailing weather conditions.

Construction-generated emissions associated with the proposed project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Modeling was based primarily on the default settings in the computer program for Riverside County. Construction equipment requirements and usage rates used in the model are shown in **Appendix 2**.

This assessment includes quantification of net increases of ozone precursor pollutants (i.e., reactive organic gases (ROG) and oxides of nitrogen (NOx)) and airborne particulate matter (i.e., $PM_{2.5}$ and $PM_{10}$) attributable to the proposed project. These quantified emission projections are then compared with SCAQMD significance thresholds (SCAQMD 2011). The quantity, duration, and intensity of construction activity have an effect on the amount of construction emissions, and related pollutant concentrations, occurring at any one time. As such, the emissions forecasts provided herein reflect a specific set of conservative assumptions based on the assumed construction scenario wherein a relatively large amount of construction is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecast. If construction is delayed or occurs over a longer time period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

The unmitigated construction air quality emissions are summarized in **Table 2**.

**Table 2**
**Maximum Short-Term Construction Emissions (Pounds per Day)**

| Construction Phase | ROG | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Construction – Maximum Daily Emissions | 69.33 | 56.92 | 43.72 | 0.05 | 11.41 | 7.36 |
| *SCAQMD Threshold* | *75.00* | *100.00* | *550.00* | *150.00* | *150.00* | *55* |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** | **No** | **NA** |

*Source: CalEEMod (SCAQMD 2013a); see **Appendix 2.** Modeling inputs account for SCAQMD Rule 1113, Architectural Coatings, which places limits on the organic compound content in various coating categories, as well as SCAQMD Rule 403, Fugitive Dust, which requires all construction site roads to be either watered periodically or chemically stabilized. Modeling inputs assume periodic watering. Cut and fill assumed to be balanced on-site.*
*ROG = reactive organic gas*
*$NO_X$ = oxides of nitrogen*
*CO = carbon monoxide*
*$SO_X$ = sulfur oxides*
*$PM_{10}$ = particulate matter equal to or less than 10 microns in diameter*
*$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter*

As shown above, all criteria pollutant emissions would remain below their respective thresholds. While impacts would be considered less than significant, the proposed project would be subject to SCAQMD rules and regulations to reduce specific emissions and to mitigate potential air quality impacts. The following is a list of noteworthy rules that are potentially applicable to the project:

- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury, or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement Best Available Control Measures for all sources and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce $PM_{10}$ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. $PM_{10}$ suppression techniques are summarized below.

    a. Portions of the construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.

    b. All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.

    c. All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

    d. The area disturbed by clearing, grading, earth moving, or excavation operations will be minimized at all times.

    e. Where vehicles leave the construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG/volatile organic compound emissions from the use of these coatings, primarily by placing limits on the ROG/volatile organic compound content of various coating categories.

*Construction Localized Significance Analysis*

As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. SCAQMD staff has developed localized significance threshold (LST) methodology that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (SCAQMD 2008). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). Wildomar is located in SRA 25.

The emissions analyzed under the LST methodology are nitrogen dioxide ($NO_2$), CO, $PM_{10}$, and $PM_{2.5}$. For attainment pollutants $NO_2$ and CO, the LSTs are derived using an air quality dispersion model to back-calculate the emissions per day that would cause or contribute to a violation of any ambient air quality standard for a particular source receptor area. Localized significance thresholds for $NO_2$ and CO are derived by adding the incremental emission impacts from the project activity to the peak background $NO_2$ and CO concentrations and comparing the total concentration to the most stringent ambient air quality standards. The most stringent standard for $NO_2$ is the 1-hour state standard of 18 parts per hundred million and for CO is the 1-hour and 8-hour state standards of 9 parts per million (ppm) and 20 ppm, respectively. For $PM_{10}$ and $PM_{2.5}$, for which the SoCAB is nonattainment, the localized significance thresholds are derived using an air quality dispersion model to back-calculate the emissions that would be necessary to worsen an existing violation in the specific source receptor area, using the allowable change in concentration thresholds approved by the SCAQMD. For $PM_{10}$

and $PM_{2.5}$, the approved 24-hour concentration thresholds for construction and operation are 10.4 $\mu g/m^3$ and 2.5 $\mu g/m^3$, respectively.[1]

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with hauling, vendor trips, and worker trips are mobile source emissions that occur off-site and need not be considered according to the LST methodology. The SCAQMD has provided LST look-up tables and sample construction scenarios to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects 5 acres or smaller.[2] The localized significance thresholds are estimated for each SRA using the maximum daily disturbed area (in acres) and the distance of the project to the nearest sensitive receptors (in meters). Sensitive receptors in the project vicinity include existing residences located approximately 30 meters from the edge of the project site. The closest receptor distance on the LST look-up tables is 25 meters. A receptor distance of 25 meters was used herein for a conservative analysis. The results are summarized below.

The SCAQMD has issued guidance on applying CalEEMod modeling results to localized significance threshold analyses. For the purposes of this analysis, air pollutant emissions associated with demolition as well as grading and site preparation activities were quantified for the entire project site. Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, **Table 3** has been provided by the SCAQMD to determine the maximum daily disturbed acreage for comparison to local significance thresholds.

**Table 3**
**Equipment-Specific Grading Rates**

| Equipment Type | Acres/8-Hour Day |
|---|---|
| Crawler Tractor | 0.5 |
| Graders | 0.5 |
| Rubber-Tired Dozers | 0.5 |
| Scrapers | 1.0 |

*Source: CalEEMod User Guide Appendix A (SCAQMD 2013b)*

The mitigated construction-related air pollutant emissions associated with the grading and site preparation activities of the entire site are summarized in **Table 4**. CalEEMod identifies that two rubber-tired dozers and three excavators (crawler tractor) could be used simultaneously on a peak day during the demolition phase and three rubber-tired dozers and four tractors (crawler tractor) could be used simultaneously on a peak day during the site preparation phase. CalEEMod identifies that one excavator (crawler tractor), one grader, one rubber-tired dozer, and three tractors could be used simultaneously on a peak day during the grading phase.

[1] $\mu g/m^3$ = microgram per cubic meter
[2] Available on the Internet at http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

According to the Offsite Street Improvement Plan and Profile (**Figure 8**), an area equivalent to 0.3 acre of off-site streetscape would be demolished. Based on equipment-specific grading rates as defined by the SCAQMD and shown in **Table 3**, the proposed project will result in a maximum of 3.5 acres disturbed on any one day during the site preparation phase. Based on equipment-specific grading rates as defined by the SCAQMD and shown in **Table 3**, the proposed project will result in a maximum of 3 acres disturbed on any one day during the grading phase. The LST look-up tables account for 1-acre, 2-acre, or 5-acre construction sites. Thus, local significance thresholds for a 5-acre site are applicable to the proposed project.

Sensitive receptors include residences, schools, hospitals, and similar uses. Existing residential uses surround the project site on most sides. **Table 4** shows that the emissions of these pollutants on the peak day of construction would not result in concentrations of pollutants at nearby residences or other sensitive receptors, and less than significant impacts would occur.

**Table 4**
**Construction Local Significance Threshold (LST) Impacts (Pounds per Day)**

| Emissions Source | Nitrogen Oxide | Carbon Monoxide | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|
| Demolition Emissions | 48.31 | 36.04 | 2.59 | 2.30 |
| Site Preparation Emissions | 56.83 | 42.59 | 11.21 | 7.30 |
| On-Site Grading Emissions | 40.37 | 26.64 | 5.21 | 3.64 |
| *LST Threshold* [1] | *371* | *1,965* | *13* | *8* |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** |

[1] *Source: SCAQMD 2008. Modeling inputs account for SCAQMD Rule 403, Fugitive Dust, which requires all construction site roads to be either watered periodically or chemically stabilized. Modeling inputs assume periodic watering.*

**Operational Impacts**

The SCAQMD (1993) has also established significance thresholds to evaluate the potential impacts associated with long-term project operations. Regional air pollutant emissions associated with project operations include area source emissions, energy-use emissions, and mobile source emissions. Area source emissions comprise emissions from fuel combustion from space and water heating, landscape maintenance equipment, evaporative emissions from architectural coatings and consumer products, and unpermitted emissions from stationary sources. Energy-use emissions comprise emissions from on-site natural gas usage, and mobile source emissions comprise emissions from automobiles.

Operational area source emissions, energy-use emissions, and mobile source emissions (e.g., trucks, cars, parking lot sweepers) for the proposed project were calculated using the CalEEMod air quality model (**Appendix 2**). As shown in **Table 5**, the project's net emissions would not exceed SCAQMD thresholds for CO, $NO_X$, sulfur oxides ($SO_X$), ROG, $PM_{10}$, or $PM_{2.5}$. Note that emissions rates differ from summer to winter. This is because weather factors are dependent on the season, and these factors affect pollutant mixing/dispersion, ozone formation, etc. Therefore, regional operations emissions would not result in a significant long-term regional air quality impact.

**Table 5**
**Long-Term Unmitigated Operational Emissions (Pounds per Day)**

| Emissions Source | ROG | NOx | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| *Summer* | | | | | | |
| Area Source Emissions | 7.98 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 |
| Energy Use Emissions | 0.00 | 0.06 | 0.05 | 0.00 | 0.00 | 0.00 |
| Vehicle Emissions | 11.67 | 5.89 | 44.26 | 0.07 | 5.99 | 1.65 |
| **Total** | **19.67** | **5.96** | **44.35** | **0.07** | **6.00** | **1.66** |
| *Winter* | | | | | | |
| Area Source Emissions | 7.98 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 |
| Energy Use Emissions | 0.00 | 0.06 | 0.05 | 0.00 | 0.00 | 0.00 |
| Vehicle Emissions | 12.85 | 6.21 | 40.38 | 0.07 | 5.99 | 1.65 |
| **Total** | **20.85** | **6.28** | **40.47** | **0.07** | **6.00** | **1.65** |
| *SCAQMD Threshold* | *55.00* | *55.00* | *550.00* | *150.00* | *150.00* | *NA* |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** | **No** | **NA** |

*Source: CalEEMod (SCAQMD 2013a)*
*ROG = reactive organic gas*
*$NO_X$ = nitrogen oxides*
*CO = carbon monoxide*
*$SO_X$ = sulfur oxides*
*$PM_{10}$ = particulate matter equal to or less than 10 microns in diameter*
*$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter*

*Operations Localized Significance Analysis*

**Table 6** shows the calculated emissions for the proposed operational activities compared with the appropriate localized significance thresholds. The LST analysis only includes on-site sources; however, the CalEEMod model outputs do not separate on- and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in **Table 6** include all on-site project-related stationary sources and 5 percent of the project-related new mobile sources, which is an estimate of the amount of project-related new vehicle traffic that will occur on-site (SCAQMD 2008). Considering the total trips included in the CalEEMod model, the assumption that 5 percent of them would occur only within the project site is conservative.

**Table 6** shows that the operational emission rates would not exceed the LST thresholds for receptors at 25 meters. Therefore, the proposed operational activity would not result in a localized significant air quality impact.

**Table 6**
**Operational Local Significance Threshold (LST) Impacts (Pounds per Day)**

| Emissions Source | Nitrogen Oxide | Carbon Monoxide | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|
| On-Site Emissions | 0.31 | 2.04 | 0.3 | 0.08 |
| *LST Thresholds* | *371* | *1,965* | *4* | *2* |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** |

Impacts associated with construction and operational air quality would be considered less than significant, as SCAQMD significance thresholds for criteria emissions would not be surpassed (see **Tables 2** through **6**).

c) **Less Than Significant Impact**. The proposed project may contribute to the net increase of ozone precursors and other criteria pollutants. The SCAQMD's approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. In other words, the SCAQMD considers projects that are consistent with the AQMP, which is intended to bring the basin into attainment for all criteria pollutants, to also have less than significant cumulative impacts.[3] The discussion under Impact a) describes the SCAQMD criteria for determining consistency with the AQMP and further demonstrates that the proposed project is consistent.

As such, cumulative impacts would be less than significant per the SCAQMD significance threshold since the project would be consistent with the AQMP.

d) **Less Than Significant Impact.** Sensitive land uses are generally defined as locations where people reside or where the presence of air emissions could adversely affect the use of the land. Typical sensitive receptors include residents, schoolchildren, hospital patients, and the elderly.

As previously stated under Impact b), the SCAQMD has developed a localized significance threshold methodology that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts at its nearest sensitive receptor as part of the SCAQMD's environmental justice program. As shown under Impact b), SCAQMD localized significance thresholds would not be surpassed by the project during construction or operational activities. Therefore, the proposed project would not represent a negative impact to adjacent and nearby sensitive receptors.

[3] CEQA Guidelines Section 15064(h)(3) states, "a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency."

In terms of potential impacts to future sensitive receptors on the project site (students), in April 2005, the California Air Resources Board (CARB) released the *Air Quality and Land Use Handbook: A Community Health Perspective* (Land Use Handbook), which offers guidance on siting sensitive land uses in proximity to sources of air toxics. Sensitive land uses identified in the Land Use Handbook include residential communities, schools and schoolyards, day care centers, parks and playgrounds, and hospitals and medical facilities. Freeways and major roadways are a particular source of air toxics treated in the guidance. These roadways are sources of diesel particulate matter (DPM), which CARB has listed as a toxic air contaminant.

The Land Use Handbook recommends that sensitive land uses be sited no closer than 500 feet from a freeway or major roadway, a buffer area that was developed to protect sensitive receptors from exposure to DPM, which was based on traffic-related studies that showed a 70 percent drop in PM concentrations at a distance of 500 feet from the roadway. Presumably, acute and chronic risks as well as lifetime cancer risk due to DPM exposure are lowered proportionately. Per Google Earth, the project site is approximately 2,715 feet from Interstate 15. Therefore, the site lies outside of the CARB-recommended buffer area, and future receptors would not be negatively affected by toxic air contaminants generated on Interstate 15.

**Carbon Monoxide**

Typically, substantial pollutant concentrations of CO are associated with mobile sources (e.g., vehicle idling time). Localized concentrations of CO are associated with congested roadways or signalized intersections operating at poor levels of service (level of service [LOS] E or lower). High concentrations of CO may negatively affect local sensitive receptors (e.g., residents, schoolchildren, or hospital patients). There are sensitive receptors (existing residential uses) adjacent to the project site in most directions.

A Traffic Impact Analysis (TIA) prepared for the proposed project by PlaceWorks (2014b; **Appendix 10a**) projected the generation of approximately 766 daily vehicle trips on a weekday, 267 of which will occur during the morning peak hour and 89 of which will occur during the evening peak hour. The TIA included five local intersections in an analysis of the proposed project's potential impacts and determined that all study area intersections would operate at acceptable levels of service during the peak hours for Existing Plus Project traffic conditions [see Impact a) in subsection 16, Transportation/Traffic]. Therefore, this impact is considered less than significant since CO concentrations are associated with traffic facilities operating at poor levels of service.

e) **No Impact.** The SCAQMD's (1993) *CEQA Air Quality Handbook* identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed project is a school and will not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, there would be no odor impacts from the proposed project.

**STANDARD CONDITIONS AND REQUIREMENTS**

None.

**MITIGATION MEASURES**

None required.

**4. Biological Resources**

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| 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 US Fish and Wildlife Service? | | ✓ | | |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? | | | ✓ | |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | ✓ |
| 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? | | | ✓ | |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | ✓ |
| 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? | | ✓ | | |

## ENVIRONMENTAL SETTING

A biologist conducted an evaluation of the project to characterize the environmental setting on and adjacent to the proposed project. The evaluation involved a review of a previous Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis (Principe 2014; **Appendix 3a**), as well as a thorough query of available data and literature from local, state, federal, and nongovernmental agencies.

Database searches were performed on the following websites:

- US Fish and Wildlife Service's (USFWS) Information Planning and Conservation (IPaC) System (2014a)
- USFWS's Critical Habitat Portal (2014b)

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (2014)
- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (2014)

A search of the USFWS's IPaC System and Critical Habitat Portal database was performed for the project area to identify federally protected species and their habitats that may be affected by the proposed project. In addition, a query of the CNDDB was conducted to identify mapped and unmapped occurrences for special-status species within the Murrieta, California, US Geological Survey (USGS) 7.5-minute quadrangle and the eight adjacent quadrangles (Wildomar, Winchester, Lake Elsinore, Pechanga, Temecula, Fallbrook, Bachelor Mtn., and Romoland). The CNPS database was also queried to identify special-status plant species with the potential to occur in the aforementioned quadrangles.

The project area is characterized as grassland. Based on a review of historical aerial imagery, the grassland areas have been severely and routinely disturbed (Google Earth 2014). The on-site grassland community is composed of primarily nonnative annual species, including bromes (*Bromus* spp.), filarees (*Erodium* spp.), Russian thistle (*Salsola tragus*), mustards (*Brassica* spp.), and horseweed (*Conyza canadensis*). Native species such as doveweed (*Croton setigerus*), fiddleneck (*Amsinckia menzesii*), and buckwheat (*Eriogonum* spp.) are intermixed with the nonnative vegetation. Numerous Peruvian pepper trees (*Schinus molle*) have been planted in the central portion of the project site.

An isolated man-made pond occurs in the southwestern portion of the project area. According to the Principe report (2014), the pond was constructed in 2009. The pond supports emergent vegetation, such as cattails (*Typha* sp.) and tall umbrella sedge (*Cyperus eragrostis*).

The proposed project site is located in the Elsinore Area Plan of the Western Riverside County MSHCP planning area (RCA 2004). The MSHCP formally determines conservation planning for all of western Riverside County. The MSHCP identifies plants, wildlife, and habitat that need to be preserved or protected. It also outlines procedures for mitigation of future land development and determines under what circumstances an "incidental take" can be permitted.

The project site is not located within an MSHCP Criteria Area. The proposed project is located within the Stephens' Kangaroo Rat Mitigation Fee Area managed by the Riverside County Habitat Conservation Agency. The project is subject to the habitat mitigation fee.

**Special-Status Species**

Candidate, sensitive, or special-status species are commonly characterized as species that are at potential risk or actual risk to their persistence in a given area or across their native habitat. These species have been identified and assigned a status ranking by governmental agencies such as the CDFW, the USFWS, and private organizations such as the CNPS. The degree to which a species is at risk of extinction is the determining factor in the assignment of a status ranking. Some common threats to a species' or population's persistence include habitat loss, degradation, and fragmentation, as well as human conflict and intrusion. For the purposes of this biological review, special-status species are defined by the following codes:

1. Listed, proposed, or candidates for listing under the federal Endangered Species Act (50 Code of Federal Regulations [CFR] 17.11 – listed; 61 Federal Register [FR] 7591, February 28, 1996 candidates)

2. Listed or proposed for listing under the California Endangered Species Act (Fish and Game Code [FGC] 1992 Section 2050 et seq.; 14 California Code of Regulations [CCR] Section 670.1 et seq.)

3. Designated as Species of Special Concern by the CDFW

4. Designated as Fully Protected by the CDFW (FGC Sections 3511, 4700, 5050, 5515)

5. Species that meet the definition of rare or endangered under CEQA (14 CCR Section 15380) including CNPS List Rank 1B and 2

The query of the USFWS, CNPS, and CNDDB databases revealed several special-status species with the potential to occur in the project vicinity. Table 4-1, provided in **Appendix 3e**, summarizes each species identified in the database results, a description of the habitat requirements for each species, and conclusions regarding the potential for each species to be impacted by the proposed project.

## DISCUSSION

a) **Less Than Significant Impact With Mitigation Incorporated.** The project site provides suitable habitat for several special-status species. Please refer to Table 4-1 in **Appendix 3e** for a summary of the general habitat characteristics required by each species, as well as the potential for each species to be impacted by the project. All special-status species with the potential to occur on the project site are covered under the MSHCP.

Though no sign of burrowing owls was found during previous surveys, project implementation may result in the loss of western burrowing owls through destruction of active nesting sites and/or incidental burial of adults, young, and eggs, should they become established on-site. Impacts to burrowing owl would be considered a potentially significant impact; however, implementation of mitigation measures **BIO-1**, **BIO-2**, and **BIO-3** would reduce these impacts to a less than significant level.

Habitats on and adjacent to the project site may provide suitable nesting habitat for birds protected under the Migratory Bird Treaty Act and Section 3503.5 of the California Fish and Game Code that were not identified in **Appendix 3e**. The removal of vegetation during construction activities could result in noise, dust, human disturbance, and other direct/indirect impacts to nesting birds on or in the vicinity of the project site. Potential nest abandonment and mortality to eggs, chicks, or individuals would be considered potentially significant impacts. Incorporation of mitigation measure **BIO-1** would ensure that potential impacts to these species are less than significant with mitigation incorporated.

Other special-status species associated with the project site are identified in **Appendix 3e**. All special-status species associated with the project site are covered by the MSHCP. The MSHCP and the Stephens' Kangaroo Rat Habitat Conservation Plan have been analyzed under CEQA. Project compliance with these plans fully mitigates for impacts for these covered species. Implementation of the avoidance and mitigation measures outlined in the MSHCP would reduce potential impacts to special-status plant and wildlife species to a less than significant level.

b) **Less Than Significant Impact.** Sensitive habitats include (a) areas of special concern to resource agencies; (b) areas protected under CEQA; (c) areas designated as sensitive natural communities by the CDFW; (d) areas outlined in Section 1600 of the Fish and Game Code; (e) areas regulated under Section 404 of the federal Clean Water Act; and (f) areas protected under local regulations and policies (MSHCP). There are no sensitive habitats within the project area. Project-related activities are not anticipated to adversely affect riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations or by the CDFW or the USFWS.

No drainages, stream courses, or other natural water features occur on the project site. A pond was dug in the southwest corner of this pad around 2009 (see **Figure 2**). It is a seasonal feature, as it is not lined with any impermeable materials. Because the church created recreational and picnic areas throughout its properties in the past, it is assumed that this pond was created for the same purposes. It is still present on the site. A 2010 aerial photograph shows that the downstream end of this man-made pond was breached, resulting in the formation of an open gully down to the channel of Murrieta Creek. It is not now nor was it ever associated with Murrieta Creek hydrology. It is not classified as a human-induced wetland. To be considered a wetland, the feature should have indicators of all parameters (hydric soils, hydrophytic vegetation, and hydrology) during the wetter portion of the growing season, but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records. As all three parameters are not met (hydric soils, hydrophytic vegetation, and hydrology), the pond is not classified as a human-induced wetland (see **Appendix 4**). This artificial pond area may be filled as part of the project. The project is anticipated to have a less than significant impact on riparian habitat and sensitive natural communities.

c) **No Impact.** The project area contains a small man-made pond in the southwestern portion of the project area. According to the Principe report (2014), this pond is isolated from nearby Murrieta Creek. The pond supports a mix of emergent and upland vegetation. Although no formal wetland delineation has been conducted for this feature to date, there is no evidence that this pond would be treated as jurisdictional in the professional opinion of the project biologist. The proposed project may fill this man-made feature as part of the grading of the site. The project is anticipated to have no impact on federally protected wetlands.

d) **Less Than Significant Impact.** Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas, such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range.

Available data on movement corridors and linkages was accessed via the CDFW (2014) BIOS 5 Viewer. Data reviewed included the Essential Connectivity Areas [ds623] layer and the Missing Linkages in California [ds420] layer. There are no documented linkages or essential connectivity areas within or adjacent to the project site. In addition, the project is not located within a Special

Linkage Area as defined by the MSHCP. While the project site could occasionally provide opportunity for local wildlife movement, adjacent lands, such as Murrieta Creek, are farther removed from anthropogenic activities and therefore offer more optimal movement opportunities. As a result, impacts to the movements of any native resident or migratory fish or wildlife species, or established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites would be considered less than significant.

e) **No Impact**. The Wildomar Municipal Code (Chapter 16.44) includes a requirement for street trees; however, these provisions are intended for new trees to be planted along roadways and do not address existing native or nonnative trees. The City does not have any other ordinances pertaining to trees or the protection of biological resources. As such, the project would not conflict with any local policies or ordinances protecting biological resources. No impact would occur.

f) **Less Than Significant Impact With Mitigation Incorporated.** The MSHCP is a habitat conservation plan and natural community conservation plan to which the City of Wildomar is a permittee (i.e., signatory). Although the project site is located within the MSHCP Plan Area, it is not located within a Criteria Cell (Exhibit 8). Since the site is not located within a Criteria Cell, there are no conservation requirements on the property. The project site is, however, still subject to be reviewed for consistency with Section 6.1.2–Protection of Species Associated with Riparian/Riverine Areas and Vernal Pool, Section 6.1.3–Protection of Narrow Endemic Plan Species, Section 6.3.2–Additional Survey Needs and Procedures, and Section 6.1.4–Guidelines Pertaining to the Urban/Wildlands Interface of the MSHCP. A discussion of the proposed project's consistency with these MSHCP sections follows.

**Consistency with MSHCP Section 6.1.2:** Section 6.1.2 addresses preservation of riparian, riverine, vernal pool, and fairy shrimp habitats. There are no riverine or riparian habitats within the project site. Furthermore, no vernal pool features or other fairy shrimp habitats occur on-site. According to the consistency analysis (Principe 2014), the man-made pond does not meet MSHCP requirements for riparian or fairy shrimp habitat. Therefore, no impacts to riparian, riverine, vernal pool, or fairy shrimp habitats will occur, and the project is consistent with Section 6.1.2.

**Consistency with MSHCP Section 6.1.3:** Section 6.1.3 sets forth survey requirements for certain narrow endemic plants. The project site is not located within the Narrow Endemic Plant Species Survey Area and therefore would be consistent with Section 6.1.3.

**Consistency with MSHCP Section 6.1.4:** Section 6.1.4 addresses the need for certain projects to incorporate measures to address urban/wildland interfaces in or near the MSHCP conservation area. The project site is not located within or adjacent to any MSHCP conservation areas that would require the need for implementation of the Urban/Wildland Interface Guidelines; therefore, the project is consistent with Section 6.1.4.

**Consistency with MSHCP Section 6.3.2:** Section 6.3.2 sets forth the survey requirements for various plant and animal surveys. The project is not located within a Criteria Area Species Survey Area; however, the project is located in an additional survey area for burrowing owl. A habitat assessment for burrowing owls was conducted on June 11, 2014, in accordance with the Burrowing Owl Survey Instructions for the Western Riverside MSHCP Area (Principe 2014). Suitable burrowing owl habitats consisting of open expanses of sparsely vegetated areas on gentle rolling or level terrain were found on-site. As such, a focused burrow survey was conducted. No

burrows or other structures capable of being used for nesting or roosting by burrowing owls were found on-site; thus, no further focused surveys were required. No burrowing owls or their sign were documented during the focused survey; however, burrowing owls have the potential to become established in the future due to the presence of suitable habitat. As a result, implementation of the proposed project could result in impacts to this species. However, implementation of mitigation measures **BIO-2** and **BIO-3** would ensure through preconstruction survey and avoidance that impacts to burrowing owls will be mitigated to a less than significant level with mitigation incorporated. As such, the project is consistent with Section 6.3.2.

A final component of the MSHCP is mitigation fee areas, which are land areas that occur within the MSHCP and require a fee for development activities to occur. These fees are utilized to fund the minimization of impacts to certain endemic species. The proposed project is located within the MSHCP mitigation fee area. Wildomar Municipal Code Sections 3.42.090 and 3.43.070 require payment of the MSHCP and Stephens' Kangaroo Rat HCP fees prior to issuance of a building permit. Payment of these fees constitutes compliance with the overlying habitat conservation plans and therefore results in no impact to compliance with the habitat conservation plans. Further, implementation of mitigation measures **BIO-1** through **BIO-3** would ensure that the proposed project is consistent with the objectives of the MSHCP and result in a less than significant impact with mitigation incorporated.

**STANDARD CONDITIONS AND REQUIREMENTS**

1. Section 3.42.090 of the Wildomar Municipal Code requires the payment of MSHCP fees at the time of issuance of a building permit.

2. Section 3.43.070 of the Wildomar Municipal Code requires the payment of the Stephens' Kangaroo Rat HCP fee at the time of issuance of a building permit.

**MITIGATION MEASURES**

**BIO-1** The project applicant shall conduct construction and clearing activities outside of the avian nesting season (January 15–August 31) if feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors, migratory birds, and special-status resident birds (e.g., loggerhead shrike) shall be conducted by a qualified biologist, up to 14 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds.

If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The exclusion zones shall remain in force until all young have fledged.

Reference to this requirement and to the Migratory Bird Treaty Act shall be included in the construction specifications.

If construction activities or tree removal are proposed to occur during the non-breeding season (September 1–January 14), a survey is not required, no further studies are necessary, and no mitigation is required.

*Timing/Implementation:* *The project applicant shall incorporate requirements into all rough and/or precise grading plan documents. The project applicant's construction inspector shall monitor to ensure that measures are implemented during construction.*

*Enforcement/Monitoring:* *City of Wildomar Planning and Public Works Departments*

**BIO-2** Per MSHCP Species-Specific Objective 6, preconstruction presence/absence surveys for burrowing owl within the survey area, where suitable habitat is present, will be conducted within 30 days prior to disturbance. Take of active nests will be avoided.

The breeding period for burrowing owls is February 1 through August 31, with the peak being April 15 to July 15, the recommended survey window. Winter surveys may be conducted between September 1 and January 31. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed.

Surveys shall be completed for occupied burrowing owl burrows within all construction areas and within 150 meters (500 feet) of the project work areas (where possible and appropriate based on habitat). All occupied burrows will be mapped on an aerial photo.

*Timing/Implementation:* *Thirty days prior to any vegetation removal or ground-disturbing activities*

*Enforcement/Monitoring:* *City of Wildomar Planning and Public Works Departments*

**BIO-3** If burrowing owls are found to be present on-site, the project applicant shall develop a conservation strategy in cooperation with the CDFW, the USFWS, and the Regional Conservation Authority in accordance with the CDFW's *Staff Report on Burrowing Owl Mitigation* (2012).

*Timing/Implementation:* *Prior to any vegetation removal or ground-disturbing activities*

*Enforcement/Monitoring:* *City of Wildomar Planning and Public Works Departments*

**5. Cultural Resources**

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? | | | | ✓ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | | ✓ | | |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | ✓ | | |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | | ✓ | | |

**BACKGROUND**

A Phase I Cultural Resources Assessment (Keller 2014) was prepared for the proposed project and is provided as **Appendices 4a** and **4b** to this document. The reader is referred to the appendices for a detailed description of the prehistory, ethnography, oral tradition, and history of the project area. The assessment prepared for the proposed project included a records search conducted by staff at the California Archaeological Inventory/California Historical Resources Information System, Eastern Information Center located at the University of California, Riverside, and a Sacred Lands File search conducted by the Native American Heritage Commission, as well as a comprehensive on-foot field survey of the project site.

In reading the subsequent analysis, it will be helpful to understand the definitions of historical resource and archaeological resource as defined by the CEQA Guidelines and the Public Resources Code. Note that the term "cultural resources" is to generally refer to historical, archaeological, and paleontological resources.

Section 15064.5 of the CEQA Guidelines defines "historical resources" as a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources, included in a local register of historical resources, or identified as significant in a historical resource survey. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources:

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

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

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

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

The fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

Public Resources Code Section 21083.2(g) defines "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 meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

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

**DISCUSSION**

a) **No Impact**. Results of the records search indicated that no historical resources have been recorded on the project site or within one-quarter mile of the project site. Furthermore, no historical resources, or features eligible for listing as historic resources, were observed on the project site during the field survey. Therefore, project implementation would have no impact on historical resources.

b) **Less Than Significant Impact With Mitigation Incorporated**. Results of the records search indicated that no archaeological resources have been recorded on the project site. The Sacred Lands File search failed to indicate the presence of Native American traditional sites/places within the boundaries of the project site or within its area of potential effect. Furthermore, no prehistoric (i.e., Native American) cultural resources were observed on the project site during the field survey.

However, eight archaeological resources have been recorded within 1 mile of the project site, one of which was recorded within half a mile of the project site. Although the cultural resources assessment concluded that there are no known archaeological resources on the project site, there is potential for such resources to be discovered during earth-disturbing construction activities. The presence of recorded archaeological resources in the surrounding area further indicates the potential for such resources to be present on the project site. Implementation of mitigation measures **CUL-1** through **CUL-7** would ensure that any archaeological resources discovered on the project site would be properly managed, reducing this impact to a less than significant level.

c) **Less Than Significant Impact With Mitigation Incorporated**. Paleontological resources are fossilized remains of vertebrate and invertebrate organisms, fossil tracks and trackways, and plant fossils. A unique paleontological site would include a known area of fossil-bearing rock strata. There is potential for paleontological resources to be discovered on the project site during earth-disturbing construction activities. However, implementation of mitigation measure **CUL-8** would

ensure that any paleontological resources discovered on the project site would be properly managed, reducing this impact to a less than significant level.

d) **Less Than Significant Impact With Mitigation Incorporated**. The cultural resources assessment did not identify any records of formal or informal cemeteries on or near the project site. While it is unlikely that human remains would be disturbed during project implementation, should human remains be encountered during ground-disturbing activities, implementation of mitigation measures **CUL-1** through **CUL-7** would ensure that any human remains discovered on the project site would be properly managed in accordance with state law, thereby reducing this impact to a less than significant level.

**STANDARD CONDITIONS AND REQUIREMENTS**

None required.

**MITIGATION MEASURES**

**CUL-1** If during grading or construction activities, cultural resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by a qualified archeologist and the Pechanga Tribe (Tribe). Any unanticipated archaeological resources that are discovered shall be evaluated and a final report prepared by the qualified archeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. If the qualified archaeologist and the Tribe determine the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Section 15064.5(c) and Public Resources Code Section 21083.2 and the Archaeological Resources Treatment and Monitoring Agreement required by mitigation measure **CUL-2**. This mitigation measure shall be incorporated into all construction contract documentation.

*Timing/Implementation:* *As a condition of project approval, and implemented during ground-disturbing construction activities*

*Enforcement/Monitoring:* *City of Wildomar Building and Planning Departments*

**CUL-2** At least 30 days prior to seeking a grading permit, the project applicants shall contact the Pechanga Tribe to notify the Tribe of the proposed grading and shall coordinate with the City of Wildomar and the Tribe to develop an Archaeological Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for the monitors; and treatment and final disposition of any cultural resources, sacred sites, burial goods and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

*Timing/Implementation:* *Prior to the issuance of a grading permit*

*Enforcement/Monitoring:* *City of Wildomar Engineering and Planning Departments*

**CUL-3** If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant" within 24 hours of receiving notification from the coroner. The most likely descendant shall then have 48 hours to make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. This mitigation measure shall be incorporated into all construction contract documentation.

*Timing/Implementation:* *As a condition of project approval, and implemented during ground-disturbing construction activities*

*Enforcement/Monitoring:* *City of Wildomar Engineering and Planning Departments*

**CUL-4** All cultural resources, with the exception of sacred items, burial goods, and human remains, which will be addressed in the Cultural Resources Treatment and Monitoring Agreement required by mitigation measure **CUL-2**, that are collected during the grading monitoring program and from any previous archeological studies or excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to the Pechanga Tribe's curation facility, which meets the standards set forth in 36 CFR Part 79 for federal repositories.

*Timing/Implementation:* *As a condition of project approval, and implemented during ground-disturbing construction activities*

*Enforcement/Monitoring:* *City of Wildomar Engineering and Planning Departments*

**CUL-5** All sacred sites, should they be encountered within the project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the Pechanga Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Section 15064.5.

*Timing/Implementation:* *As a condition of project approval, and implemented during ground-disturbing construction activities*

*Enforcement/Monitoring:* *City of Wildomar Engineering and Planning Departments*

**CUL-6** If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery. The developer, the project archeologist, and the Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance of or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director. The Planning Director shall make the

determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique as defined by relevant state and local law, avoidance and mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4. This mitigation measure shall be incorporated into all construction contract documentation.

*Timing/Implementation:* *As a condition of project approval, and implemented during ground-disturbing construction activities*

*Enforcement/Monitoring:* *City of Wildomar Engineering and Planning Departments*

**CUL-7** To address the possibility that archaeological resources may be encountered during grading or construction, a qualified professional archeologist shall monitor all construction activities that could potentially impact archaeological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.

*Timing/Implementation:* *As a condition of project approval, and implemented during ground-disturbing construction activities*

*Enforcement/Monitoring:* *City of Wildomar Engineering and Planning Departments*

**CUL-8** Construction personnel involved in excavation and grading activities shall be informed of the possibility of discovering fossils at any location and the protocol to be followed if fossils are found. A professional meeting the Society of Vertebrate Paleontology standards shall provide the preconstruction training. The City shall ensure the grading plan notes include specific reference to the potential discovery of fossils.

If potentially unique paleontological resources (fossils) are inadvertently discovered during project construction, work shall be halted immediately within 50 feet of the discovery, the City shall be notified, and a professional paleontologist shall be retained to determine the significance of the discovery. The paleontologist shall establish procedures for paleontological resource surveillance throughout project construction and shall establish, in cooperation with the project applicant, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of fossils. Excavated finds shall be offered to a State-designated repository such as the Museum of Paleontology at the University of California, Berkeley, or the California Academy of Sciences.

*Timing/Implementation:* *Prior to the issuance of a grading permit, pre-construction, and during ground-disturbing activities*

*Enforcement/Monitoring:* *City of Wildomar Engineering and Planning Departments*

**6. Geology and Soils**

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? | | ✓ | | |
| ii) Strong seismic ground shaking? | | ✓ | | |
| iii) Seismic-related ground failure, including liquefaction? | | | ✓ | |
| iv) Landslides? | | | | ✓ |
| b) Result in substantial soil erosion or the loss of topsoil? | | ✓ | | |
| 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? | | ✓ | | |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | | | ✓ | |
| 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? | | | | ✓ |

**DISCUSSION**

a)

i) **Less Than Significant Impact With Mitigation Incorporated**. According to the State of California, the project site is partially located within an Alquist-Priolo Earthquake Fault Zone. This fault is locally referred to as the Wildomar fault, which is one of the central strands of the Elsinore Fault Zone System (Temecula Segment), which runs from the Los Angeles Basin to the north into Mexico

to the south. The Wildomar fault, which is approximately 26.7 miles in length, is a right-lateral, strike-slip fault capable of producing an earthquake with an estimated maximum moment magnitude of $M_w$ 6.9 and has an associated slip-rate of 5.0 ±2.0 millimeters per year. It is estimated that the Temecula fault segment has a preferred mean recurrence interval of 600 ±150 years (Inland Foundation Engineering 2014, pp. 3–4).

Locally, the main branch of the Wildomar fault is shown on geologic maps to traverse parallel to Palomar Street, which borders the northeastern project site boundary. However, other sources indicate a subparallel fault to traverse the central portion of the site in a northwest–southeast direction, which can be seen on Figures 1 and 2 of **Appendix 5a**. At the time this Initial Study was prepared, the State of California had not yet identified this fault splay on the Earthquake Fault Zone Map as presented on Figure 2 of **Appendix 5a**.

A Surface Fault Rupture Hazard Evaluation was prepared for the proposed project (see **Appendix 5a**), which consisted of a review of published geologic data, field reconnaissance, photogeologic analysis, geophysical survey, and subsurface exploration. The evaluation concluded that active faulting, as defined by the State of California, does traverse the central portion of the site as described above and shown on Plate 1 of **Appendix 5a**. Additionally, this faulting was directly observed within the limits of the exploratory trench locally where excavated. Other faults were encountered within the sedimentary bedrock of the Pauba Formation, which may extend in the overlying Holocene age sediments but locally were difficult to assess due to soil conditions. These faults should also be considered to be active based on proximity and association. Based on these findings, the evaluation concluded that development of the project site for habitable structures within the designated "Buildable-Use Area" appears to be feasible, from a geologic standpoint (Inland Foundation Engineering 2014, p. 8). Therefore, implementation of mitigation measure **GEO-1**, which restricts the construction of structures for human occupancy within the "Restricted-Use Zone" delineated within the northeastern and southwestern portions of the site, would reduce this impact to a less than significant level. (The fault study was also reviewed and approved by the County Geologist as shown in **Appendix 5b**.)

ii) **Less Than Significant Impact With Mitigation Incorporated.** The project site is located in an area of high regional seismicity and may experience horizontal ground acceleration during an earthquake along the Wildomar fault of the Elsinore Fault Zone or other fault zones throughout the region. As described in Impact 6.a.i), the project site is partially located within an Alquist-Priolo Earthquake Fault Zone and the Wildomar fault traverses the central portion of the project site. The project site has been and will continue to be exposed to the potential for strong seismic ground shaking and associated hazards. The development of a school on the project site would therefore expose structures, students, employees, and visitors to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. Implementation of mitigation measure **GEO-1** would minimize the potential for structural damage and associated safety hazards in the event of strong seismic ground shaking and would reduce this impact to a less than significant level.

iii) **Less Than Significant Impact**. Liquefaction occurs when vibrations or water pressure within a mass of soil cause the soil particles to lose contact with one another. As a result, the soil behaves like a liquid, has an inability to support weight and can flow down very gentle slopes. Liquefaction has the potential to damage foundations, roads, and infrastructure. Liquefaction most often occurs

when three conditions are met: (1) loose, granular sediment or fill; (2) saturation by groundwater; and (3) strong shaking.

The proposed project could expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. The Riverside County Land Information System determined that the project site is in a moderate and very low liquefaction zone.

iv) **No Impact.** The proposed project is not expected to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death from landslides. Although the project site is located in an area of high seismic activity, due to the relatively level terrain of the site and surrounding properties, the site is not at risk for landslide, collapse, or rockfall hazards. No impact would occur.

b) **Less Than Significant Impact With Mitigation Incorporated**. Soil erosion may result during construction of the proposed project, as grading and construction can loosen surface soils and make soils susceptible to the effects of wind and water movement across the surface. The City routinely requires the submittal of detailed erosion control plans with any grading plans. The implementation of mitigation measures **GEO-1** and compliance with Wildomar Municipal Code Chapter 15.12 that requires a grading permit will address any erosion issues associated with the grading of the site. As a result, these impacts would be less than significant with mitigation incorporated.

c) **Less Than Significant Impact With Mitigation Incorporated**. See Impact 6.a.iii). As discussed in Impact 6.a.iv), the project site is not at risk for landslide, collapse, or rockfall due to the relatively level terrain of the site and surrounding developed properties. Implementation of mitigation measures **GEO-1** would minimize the potential for damage and safety hazards associated with ground failure such as lateral spreading, subsidence, liquefaction, and collapse. Therefore, these impacts would be less than significant with mitigation incorporated.

d) **Less Than Significant Impact**. Expansive soils possess a “shrink-swell” characteristic, which is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may occur over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils.

The project site is underlain by two soils types: (1) Hanford coarse sandy loam, 2 to 8 percent slopes, and (2) Monserate sandy loam, 8 to 15 percent slopes, eroded. According to the NRCS (2014a), these soil types have a linear extensibility percent of 1.5 and 2.8, respectively, indicating that they have low expansion potential (NRCS 2014b). However, a site-specific geotechnical investigation including soil sampling and laboratory testing is required to confirm site soil types and expansion potential.

e) **No Impact**. The project does not propose the use or construction of a septic tank or alternative wastewater disposal system; therefore, no impact would occur.

**STANDARD CONDITIONS AND REQUIREMENTS**

1. All grading shall conform to Chapter 15.12, Building Code, of the Wildomar Municipal Code, and all other relevant laws, rules, and regulations governing grading in Wildomar. Prior to commencing any grading that includes 50 or more cubic yards, the developer shall obtain a grading permit from the City of Wildomar Building Department.

**MITIGATION MEASURES**

**GEO-1** No structures for human occupancy (i.e., 2,000 person-hours per year, or as defined by local agencies) shall be constructed within the "Restricted-Use Zone" that has been delineated within the northeastern and southwestern portions of the project site. The boundary of the "Restricted-Use Zone" shall be shown on all construction drawings for the project.

*Timing/Implementation:* *As a condition of project approval*

*Enforcement/Monitoring:* *City of Wildomar Planning and Public Works Departments*

## 7. Greenhouse Gas Emissions

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | ✓ | |
| b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | ✓ | |

**DISCUSSION**

a) **Less Than Significant Impact.** Greenhouse gas (GHG) emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contributes substantially to the phenomenon of global climate change and its associated environmental impacts and as such is addressed only as a cumulative impact.

GHG emissions associated with the project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term regional emissions associated with project-related new sources such as electricity usage for lighting and vehicle trips.

Thresholds of significance illustrate the extent of an impact and are a basis from which to apply mitigation measures. On September 28, 2010, the SCAQMD conducted Stakeholder Working Group Meeting #15, which resulted in a recommended screening threshold of 3,000 metric tons of carbon dioxide equivalents ($CO_2e$) for all land uses. Therefore, for the purposes of this evaluation and in the absence of any adopted significance thresholds, a screening threshold of 3,000 metric tons of $CO_2e$ per year is used to assess the significance of GHG emissions. The project would be considered to have a significant impact if the projected emissions would surpass 3,000 metric tons of $CO_2e$ annually.

Construction GHG Emissions

Construction of the proposed project would result in direct emissions of GHGs from construction. The projected quantity of GHG emissions generated by construction equipment has been calculated using the CalEEMod air quality model (**Appendix 6**) and is depicted in **Table 7.**

**Table 7**
**Project Construction GHG Emissions – Metric Tons per Year**

| Construction Phase | $CO_2e$ |
|---|---|
| Construction | 698 |

*Source: CalEEMod (SCAQMD 2013a)*

Operational GHG Emissions

As stated above, there would also be long-term regional emissions associated with project-related new indirect source emissions. In compliance with SCAQMD guidance, total construction-generated GHG emissions were amortized over the estimated life of the project. A project life of 30 years was assumed for the proposed project.

**Table 8**
**Operational GHG Emissions – Metric Tons per Year**

| **Source** | **$CO_2e$** |
|---|---|
| Construction (amortized over 30 years of project life) | 23 |
| Area | 0 |
| Mobile | 741 |
| Energy | 90 |
| Solid Waste | 17 |
| Water | 8 |
| **Total** | **879** |
| *SCAQMD Threshold* | *3,000* |
| **Exceed Threshold?** | **No** |

*Source: CalEEMod (SCAQMD 2013a)*

As shown in **Table 8**, estimated GHG emissions resulting from both construction and operations of the proposed would equal 879 metric tons of $CO_2e$ per year, which is less than the GHG threshold of 3,000 metric tons of $CO_2e$ per year and therefore a less than significant impact.

b) **Less Than Significant Impact.** The City of Wildomar does not have local policies or ordinances with the purpose of reducing GHG emissions. However, the City is subject to compliance with the Global Warming Solutions Act (AB 32), codified at Health and Safety Code Sections 38500, 38501, 28510 (repealed), 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, and 38592–38599. The law instructs CARB to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. The act directed CARB to set a GHG emission limit based on 1990 levels, to be achieved by 2020. The adoption of AB 32 provided a clear mandate that climate change should be included in the environmental review process for development projects. As identified under Impact a) above, the proposed project would not surpass the SCAQMD's recommended GHG significance thresholds, which were prepared with the purpose of complying with the requirements of AB 32. Therefore, the proposed project would not conflict with AB 32.

SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted April 4, 2012. It identifies multimodal transportation investments, including bus rapid transit, light rail transit, heavy rail transit, commuter rail, high-speed rail, active transportation strategies (e.g., bikeways and sidewalks), transportation demand management strategies, transportation systems management, highway improvements (interchange improvements, high-occupancy vehicle lanes, high-occupancy toll lanes), arterial improvements, goods movement strategies, aviation and airport ground access improvements, and operations and maintenance to

the existing multimodal transportation system. SCAG's RTP/SCS identifies that land use strategies which focus new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network, which emphasizes system preservation, active transportation, and transportation demand management measures. The 2012 RTP/SCS incorporates local land use projections and circulation networks from the cities' and counties' general plans. The projected regional development pattern, including location of land uses and residential densities in local general plans, when integrated with the proposed regional transportation network identified in the 2012 RTP/SCS, would reduce per capita vehicular travel-related GHG emissions and achieve the GHG reduction per capita targets for the SCAG region. The proposed school development could serve the surrounding residential communities and potentially reduce vehicle miles traveled. The proposed school would not interfere with SCAG's ability to implement the regional strategies outlined in the 2012 RTP/SCS to achieve the greenhouse gas reduction goals and strategies for passenger vehicles. This impact is less than significant.

**STANDARD CONDITIONS AND REQUIREMENTS**

None required.

**MITIGATION MEASURES**

None required.

**8. Hazards and Hazardous Materials**

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | ✓ | |
| b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | ✓ | |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | ✓ |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | ✓ | |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | ✓ |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | | | | ✓ |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | ✓ |
| h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | | | | ✓ |

**DISCUSSION**

A Phase I Environmental Site Assessment (ESA) (AAIEC 2014a) and a Phase II ESA (AAIEC 2014b) were prepared for the project site by All Appropriate Inquiries Environmental Corporation in March and May 2014, respectively (see **Appendices 7a** and **7b**). The Phase I ESA consisted of historical property use research, a regulatory agency records search, property owner interviews, and site reconnaissance to identify potential recognized environmental conditions on the project site. The Phase II ESA consisted of soil sampling and laboratory testing to evaluate whether the potential chemicals identified in the Phase I ESA have adversely impacted the project site.

a, b) **Less Than Significant Impact**. The proposed project consists of development of a K through 8 public charter school on the project site. The only potential for routine transport, use, disposal, or accidental release of hazardous materials associated with a school use would be during construction. Typical hazardous materials used in the construction of a school would be limited to diesel, gasoline, and oil for equipment, paints, solvents, and other similar materials. The transport and use of hazardous materials are strictly regulated by state and federal agencies to minimize adverse hazards from accidental release. In addition, the Riverside County Environmental Health Department operates an emergency response team to ensure public safety in the event of an accidental release. Therefore, the proposed project would not create a significant hazard to the public or the environment and this impact would be less than significant.

c) **No Impact**. The project site itself is a planned school site. No other schools are located within one-quarter mile of the project site. Regardless, the proposed project would not emit hazardous emissions and, once construction is completed, would not involve the handling of hazardous materials, substances, or waste. Therefore, no impact would occur.

d) **Less Than Significant Impact**. The project site is not located on a list of hazardous materials sites compiled by the California Department of Toxic Substances Control (DTSC) or the State Water Resources Control Board (SWRCB) pursuant to Government Code Section 65962.5 as of October 2014 (DTSC 2014; SWRCB 2014).

According to the Phase I ESA, one mapped hazardous materials site was reported in the agency database records search within 1 mile of the project site. The mapped site, Inland Valley Regional Medical Center, located 0.8 miles northeast of the site, is reported on the California Leaking Underground Storage Tank (LUST) database as having had a diesel release occur from an underground storage tank (UST). According to the database, the cleanup status was identified as closed. No further information regarding the release was provided in the database report. According to the SWRCB's online GeoTracker database, the release was discovered September 7, 2000, during removal of a 20,000-gallon diesel UST. Potential contaminants of concern were identified as diesel. Contaminated soils were removed from the site, and five monitoring wells were installed. Groundwater monitoring continued at the site until 2003. The Regional Water Quality Control Board issued a letter indicating no further action was required for the site on October 13, 2006. Based on distance and the regulatory status of the LUST case (closed), this property is not considered to be a recognized environmental concern (REC) at the project site (AAIEC 2014a, p. 13).

A historic (1938) aerial photograph of the project site shows a small orchard on the project site near the center of the southeast boundary. Additionally, the photo shows evidence of oil well drilling in the central area of the site. Based on the potential for arsenic and pesticide contamination, the presence of the orchard on the site was considered to be a REC. In addition, based on the potential for subsurface contamination, the evidence of oil well drilling activities was considered to be a REC (AAIEC 2014a, pp. 15–19). As such, a Phase II ESA was performed to determine whether any of the suspected substances identified in the Phase I ESA are present on the site at levels exceeding applicable regulatory standards. According to the Phase II ESA (AAIEC 2014b, pp. 9–10), laboratory testing of soil samples taken in the area of the suspected oil well drilling indicated typical geogenic (natural) concentrations or non-detectable concentrations of Title 22 metals at levels below their respective California Human Health Screening Levels. Laboratory results for these samples were also

below the laboratory detection limits for VOCs, PCBs, TPH, and all PAHs.[4] Laboratory testing of one soil sample taken in the area of the former orchard detected 4,4'-DDT at 2.62 µg/kg. This concentration is slightly above the Reporting Limit of 2.00 µg/kg and well below applicable regulatory standards (California Human Health Screening Levels – 1,600 µg/kg) for residential soils. All other samples analyzed had no detections of any pesticides. Based on these laboratory testing results, the Phase II ESA id not recommend any further evaluation of the suspected oil well drilling area or the former orchard area on the project site. No other RECs were identified in the Phase I or Phase II ESAs. Therefore, this impact would be less than significant.

e) **No Impact**. The project site is not located within any airport land use plan. The closest public airport is French Valley Airport, which is located approximately 7 miles east of the project site. Given the distance and because the project is not in the airport land use plan area for French Valley Airport, there is no impact.

f) **No Impact**. The project site is located in proximity to Skylark Field, which is a private airstrip located at the south end of Lake Elsinore, approximately 4.4 miles northwest of the project site. Skylark Field is used primarily by skydiving aircraft, which commonly drop parachutists into the nearby back-bay area south of the lake. The airport is also used for gliding and other recreational uses. As shown in Figure 5, Skylark Airfield Area of Influence, of the Wildomar General Plan, the proposed project site is outside of the area of influence (City of Wildomar 2008). Therefore, there would no impact.

g) **No Impact**. Access to the project site is only from Palomar Street. Development of the proposed project will not require the closure or relocation of any roadways, and operation of the proposed project is not expected to interfere with access to Palomar Street. As a result, the project would have no impact on any plans for emergency evacuation.

h) **No Impact**. According to the California Department of Forestry and Fire Protection (Cal Fire), the project site is not located in an area designated by Cal Fire as a Very High Fire Hazard Severity Zone (VHFHSZ), and the majority of the site has been cleared of vegetation, further minimizing the potential for wildland fire. The area north of the site, across Palomar Street, is designated as a VHFHSZ. However, much of this area in the vicinity of the project site has been developed with residential subdivisions, minimizing the potential for wildland fire. Therefore, implementation of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires and there would be no impact.

**STANDARD CONDITIONS AND REQUIREMENTS**

None required.

**MITIGATION MEASURES**

None required.

[4] VOC = volatile organic compounds; PCB = polychlorinated biphenyl; TPH = total petroleum hydrocarbon; PAH = polycyclic aromatic hydrocarbon

**9. Hydrology and Water Quality**

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Violate any water quality standards or waste discharge requirements? | | | ✓ | |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | ✓ | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | | | ✓ | |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site? | | | ✓ | |
| e) 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? | | | ✓ | |
| f) Otherwise substantially degrade water quality? | | | ✓ | |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | | ✓ |
| h) Place within 100-year flood hazard area structures which would impede or redirect flood flows? | | | | ✓ |
| i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | | ✓ |
| j) Inundation by seiche, tsunami, or mudflow? | | | | ✓ |

A preliminary Water Quality Management Plan (WQMP) and a Storm Water Pollution Prevention Plan (SWPPP) were prepared for the proposed project by Everest Environmental Inc. in 2014 (**Appendices 8a** and **8b**).

**DISCUSSION**

a, f) **Less Than Significant Impact.** City of Wildomar Municipal Code Section 13.12.050 requires that development comply with a Municipal Separate Storm Sewer System (MS4) Permit from the San Diego Regional Water Quality Control Board. Section F.1 of the MS4 Permit specifies requirements for new developments and Section F.1.D provides details on the requirements for standard stormwater mitigation plans (SSMPs, also known as WQMPs). The WQMP for this project is provided as **Appendix 8a** to this IS/MND. The MS4 permit places pollution prevention requirements on planned developments, construction sites, commercial and industrial businesses, municipal facilities and activities, and residential activities. Even though Wildomar is split by two watersheds (Santa Ana and Santa Margarita) that affect some of the properties in the city, the entire city is governed by the MS4 permit for the Santa Margarita region. The project site is not one of the properties split by the jurisdictional boundaries between the Santa Ana and Santa Margarita watersheds. The project site drains entirely into the Santa Margarita watershed.

The Santa Margarita watershed drains the southwest portion of Riverside County, including areas of Menifee, Murrieta, and Wildomar, unincorporated Riverside County, and all of Temecula. Stormwater runoff from these areas collects into Murrieta and Temecula creeks and combines to form the Santa Margarita River in Temecula. The Santa Margarita River flows through the "gorge" and into San Diego County, where it flows past Camp Pendleton into Santa Margarita Lagoon at the Pacific Ocean. The Santa Margarita region is the portion of the watershed within Riverside County.

Construction activities associated with development of a school likely will involve site grading, excavation, and disturbance of the existing vegetation cover and soil. Intense rainfall and associated stormwater runoff during construction activities could result in erosion in areas of exposed or stockpiled soils. If uncontrolled, these soil materials would flow off of the site and into the storm drainage system. Pollutants of concern include trash/debris, oxygen-demanding substances, oil and grease, pesticides, and bacteria and viruses. The project site does not contain any known legacy pollutants or hazardous substances above applicable regulatory standards (see subsection 8, Hazards and Hazardous Materials, and **Appendices 7a** and **b**).

A Storm Water Pollution Prevention Plan has been prepared to comply with California's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (General Permit), including SWRCB Order No. 2009-0009-DWQ for the General Permit. The SWPPP incorporates best management practices (BMPs) to ensure that potential water quality impacts are minimized. Construction and post-construction BMPs include the following:

- Construction
    - Control sediment by preserve existing vegetation where feasible, stabilizing soils with hydraulic mulch where construction activities have been inactive for more than 14 days, and stabilizing soil stockpiles and slopes

- Implement temporary sediment controls such as silt fencing, fiber rolls, gravel bag berms, sediment traps, check dams, sediment sweeping and vacuuming, and storm drain inlet protections
- Reduce sediment tracking onto roadways by stabilizing construction entrances and exits and provide sediment sweeping and vacuuming
- Control dust by preserving existing vegetation, applying hydraulic mulch, stabilizing soil stockpiles and slopes, and applying water to disturbed soils
- Control non-stormwater discharges from paving and grinding operations, accidental releases, irrigation, vehicle and equipment fueling and maintenance, and concrete curing
- Prevent discharges related to waste management by storing waste materials on impervious surfaces, covering stockpiles, storing hazardous materials in watertight containers, disposing of materials off-site at a minimum once per week, and provision of and regular maintenance and off-site disposal of portable toilets.

- Post-construction
  - Hardened and engineered storm drainage systems
  - Permanent erosion control
  - Landscaping
  - Retention/infiltration systems

The proposed SWPPP will be submitted to the Regional Water Quality Control Board and the City for review, and a copy of the approved SWPPP must be kept accessible on the project site at all times. Implementation of the best management practices contained in the SWPPP would minimize erosion and water quality impacts during project construction and operation. This impact would be less than significant.

b) **Less Than Significant Impact**. The proposed project is located in the area subject to the Elsinore Basin Groundwater Management Plan (EVMWD 2005). Adopted on March 24, 2005, under the authority of the Groundwater Management Planning Act (California Water Code Part 2.75, Section 10753), as amended, the Elsinore Basin Groundwater Management Plan addresses the hydrogeologic understanding of the Elsinore Basin, the evaluation of baseline conditions, the identification of management issues and strategies, and the definition and evaluation of alternatives. The primary sources of groundwater recharge in the basin are listed in the Management Plan as:

- Recharge from precipitation – Rainfall directly to the basin.
- Surface water infiltration – Recharge from infiltration of surface waters such as streams. The San Jacinto River is the major surface water inflow. Inflow from Lake Elsinore is considered negligible.
- Infiltration from land use – Direct surface recharge from application of water for irrigation.
- Infiltration from septic tanks – Infiltration in areas serviced by septic systems in the basin.

Murrieta Creek is the closest stream to the proposed project and would be considered a source of recharge for the basin. The proposed project will not affect the recharge capability of Murrieta Creek, as it is outside the project boundaries.

Infiltration is also a source of recharge. The proposed project will cover approximately 3.2 acres with impervious surface. This represents coverage of approximately 44 percent of the site, which is consistent with the range of coverage allowed in the General Plan of 35 to 100 percent of the site (0.35–1.00 floor area ratio). The impervious area will cover less than 50 percent of the project site and will direct stormwater flow to Murrieta Creek. As the stormwater will be allowed to flow to the creek, and the site will still retain approximately half of its permeability, this impact is considered less than significant.

Development on the project site may lead to an increased demand for potable water supply, which is provided by the Elsinore Valley Municipal Water District (EVMWD), in part from groundwater supplies. The EVMWD imports water to ensure that significant overdraft of local groundwater supplies does not occur. Based on the EVMWD's (2011) Urban Water Management Plan, no adverse impacts to groundwater resources were forecast to occur from implementing the approved land uses in the project area as anticipated as part of buildout of the Wildomar General Plan. The proposed project would be consistent with the General Plan and is therefore consistent with the Urban Water Management Plan and would not significantly alter groundwater use in the area. This impact would be less than significant.

c) **Less Than Significant Impact**. The reader is referred to Impact b) in subsection 6, Geology and Soils, for further discussion of erosion. The project site currently drains overland from northeast to southwest to the existing basin and ultimately to Murrieta Creek to the south. The proposed project would not alter this general drainage pattern. The buildings, parking areas, and travel lanes will channel the drainage into underground pipes, leading to retention and infiltration areas before leading to the existing drainage course along the southern property line. The addition of impervious surfaces to the project site would increase flow rates, potentially increasing erosion. However, runoff is proposed to be routed through bioswales (as shown on the Preliminary Drainage Plan, **Figure 9**) prior to reaching the existing detention basin and, ultimately, Murietta Creek. This proposed drainage system would slow runoff velocities, allow sediment to settle out of the water, and capture trash and debris collected in the system. Furthermore, the required SWPPP for the project includes best management practices (BMPs) designed to prevent erosion both during and after construction (see Impact a) above. Therefore, the proposed project would not result in substantial erosion or siltation on- or off-site and this impact would be less than significant.

d, e) **Less Than Significant Impact**. As described in Impact c) above, the project site currently drains overland from northeast to southwest to a man-made pond and ultimately to Murrieta Creek. While the project may fill the man-made pond to allow for the playing field (see **Figure 9**), development of the site would not substantially alter the existing drainage pattern. However, the addition of impervious surfaces to the project site would increase runoff volumes and velocities. The project proposes to construct an on-site drainage system that would collect drainage and route it through a series of bioswales, thereby slowing the velocity of runoff entering the existing channel that drains to Murietta Creek (see **Figure 9**). Implementation of conceptual storm drainage plan shown in **Figure 9** will ensure that the proposed drainage system and existing drainage channel have adequate capacity to manage site runoff during a peak storm event and that no on- or off-site flooding would occur. Therefore, this impact would be less than significant.

g, h) **No Impact.** The project site is designated by the Federal Emergency Management Agency (FEMA) as Zone X, indicating minimal risk of flooding. The Murrieta Creek channel immediately south of the project site is designated Zone AE, indicating that this area is subject to inundation by the 1 percent annual chance flood event. However, the proposed structures would be developed on the northern portion of the project site, removed from the creek channel and well outside of the 100-year flood hazard area. Furthermore, the project does not propose any residential uses. Therefore, the project would not place housing or other structures within a 100-year flood hazard area and would not impede or redirect flood flows. No impact would occur.

i) **No Impact.** The Murrieta Creek channel south of the project site is within the inundation area for Diamond Valley Reservoir. However, the project site is located outside of the inundation area. Furthermore, the proposed structures would be developed on the north portion of the project site, removed from the creek channel, further minimizing the risk of inundation in the event of a dam failure.

j) **No Impact**. The project site is not located in an area that is subject to seiches, mudflows, or tsunamis. As a result, no impacts are anticipated.

**STANDARD CONDITIONS AND REQUIREMENTS**

1. Wildomar Municipal Code Section 13.12.060 requires that new construction and renovation control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. The City shall identify the best management practices (BMPs) that may be implemented to prevent such deterioration. BMPs are identified in the Water Quality Management Plan (see **Appendix 8a**).

**MITIGATION MEASURES**

None required.

**10. Land Use and Planning**

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Physically divide an established community? | | | | ✓ |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | ✓ | |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | | | ✓ | |

**DISCUSSION**

a) **No Impact**. The surrounding land uses are single-family residential to the northeast, rural residential to the southeast, vacant land to the southwest, and a church to the northwest. Currently, the project site is vacant and zoned for Commercial Office (C-O) use. Development of the proposed project would be consistent with the existing and planned development on surrounding properties and would not impede movement through the area. No impact would occur.

b) **Less Than Significant Impact.** As described previously, the project site has been designated by the City of Wildomar General Plan as Commercial Office (CO) and zoned by the City's Zoning Ordinance as Commercial-Office (C-O). General Plan Policy LU 23.4 allows this land use designation to accommodate community-oriented facilities, such as telecommunication centers, public meeting rooms, daycare facilities, and cultural uses. A charter school, open to anyone in the community, is considered a community-oriented facility.

The CO land use designation allows a range of floor area ratios from 35 to 100 percent of land coverage (expressed as 0.35–1.00 FAR in the General Plan). The proposed project will result in a total coverage of approximately 44 percent; however, the total building area is approximately 28,000 square feet, which results in a 0.09 FAR. As neither the total site coverage of 44 percent nor the building coverage of 9 percent exceed the limits established by the CO land use designation, the design of the project is consistent with the General Plan.

Although the proposed use, a public school, is not listed as an allowable use in the C-O zoning district (Wildomar Municipal Code Section 17.84.020), the Zoning Ordinance allows educational institutions to be located in any zone in the city as long as a public use permit (PUP) is obtained (Wildomar Municipal Code Section 17.208.010). The proposed project includes a request for a PUP to allow the proposed use within the C-O zoning district. Therefore, project approval would ensure consistency with the applicable land use plans. This impact would be less than significant.

c) **Less Than Significant Impact.** The reader is referred to Impact f) in subsection 4, Biological Resources, for a discussion of HCP compliance. Wildomar Municipal Code Sections 3.42.090 and 3.43.070 require payment of the MSHCP and Stephens' Kangaroo Rat HCP fees prior to issuance of a building permit. With payment of the fees, the proposed project is consistent with the MSHCP and this impact would be less than significant.

**STANDARD CONDITIONS AND REQUIREMENTS**

1. Section 3.42.090 of the Wildomar Municipal Code requires the payment of MSHCP fees at the time of issuance of a building permit.

2. Section 3.43.070 of the Wildomar Municipal Code requires the payment of the Stephens' Kangaroo Rat Fee at the time of issuance of a building permit.

**MITIGATION MEASURES**

None required.

## 11. Mineral Resources

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state? | | | | ✓ |
| 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? | | | | ✓ |

**DISCUSSION**

a) **No Impact.** The proposed project is located in an area designated as MRZ-3 by the Wildomar General Plan (2008). The MRZ-3 zone includes areas where the available geologic information indicates that while mineral deposits are likely to exist, the significance of the deposit is undetermined. The Phase I Environmental Site Assessment prepared for the project site by All Appropriate Inquiries Environmental Corporation in 2014 (**Appendix 7a**) did not reveal any significant potential for mineral resources at the site or any previous use of the site for mineral resource extraction. As a result, no impacts are anticipated.

b) **No Impact.** There are no known locally important mineral resource recovery sites identified on the project site in the Wildomar General Plan or in a specific plan or other land use plan. As a result, no impacts are anticipated.

**STANDARD CONDITIONS AND REQUIREMENTS**

None required.

**MITIGATION MEASURES**

None required.

**12. Noise**

| Issues, would the project result in: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) The exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | ✓ | |
| b) The exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | | ✓ | | |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | | ✓ | |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | ✓ | | |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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? | | | | ✓ |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | | | | ✓ |

**SETTING**

A noise and vibration technical memorandum was prepared for the proposed project by PlaceWorks on September 18, 2014 (see **Appendix 9**). The reader is referred to this memorandum for detail on the noise and vibration setting, including noise terminology and descriptors, characteristics of sound, psychological and physiological effects of noise, and vibration terminology and descriptors.

The project site is currently undeveloped and vacant. The nearest noise-sensitive uses are single-family residences across Palomar Street along Harwood Lane and Wing Elm Circle to the north, and other scattered surrounding residences to the northeast, east, south, and west. The World Harvest Church is adjacent across the northern property line of the site. The World Harvest Church website notes services at 10:00 AM on Sunday morning and 7:00 PM Tuesday evenings. For the purpose of this analysis, World Harvest Church is not considered noise-sensitive since services and gatherings would take place on Sundays and evenings, outside of construction hours and the hours of operation of Sycamore Academy.

According to the noise measurement results presented in **Appendix 9**, the northern portion of the site adjacent to Palomar Street, during typical weekday afternoon traffic conditions, is exposed to daytime noise levels of up to 64.8 dBA $L_{max}$, with average levels around 52.1 dBA $L_{eq}$.

**DISCUSSION**

a, c) **Less Than Significant Impact.** Long-term noise impact would occur as a result of operational noise from project-related traffic and from stationary noise sources such as outdoor activities and heating, ventilation, and air conditioning (HVAC) units.

Traffic Noise

Traffic noise modeling results are based on average daily traffic volumes on roadway segments from the analysis conducted by PlaceWorks (2014a). For each alternative, traffic noise was evaluated for existing and 2016 conditions. Traffic noise modeling was compiled for the following scenarios, according to the traffic study prepared for this project:

- Existing: existing conditions without the proposed project
- Existing with Project: existing volumes plus the new traffic generated by the proposed project site
- 2016 No Project: corresponds to 2016 conditions without the proposed project
- 2016 with Project: 2016 conditions traffic volumes plus the new traffic generated by the proposed project site

The traffic noise levels for this project were estimated using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (RD-77-108). The FHWA model predicts noise levels through a series of adjustments to a reference sound level. These adjustments account for distances from the roadway, traffic flows, vehicle speeds, car/truck mix, length of exposed roadway, and road width. The distances to the 70, 65, and 60 CNEL contours for selected roadway segments in the vicinity of proposed project site are included in Appendix D of **Appendix 9**.

**Tables 9** and **10** compare the noise levels at 50 feet from the centerline of each roadway segment without and with the project for existing and 2016 conditions. **Tables 9** and **10** show the project's contributions with respect to existing and 2016 conditions, respectively. Traffic noise increases over existing conditions due to the project range from 0.0 to 1.2 dBA. Traffic noise increases over 2016 conditions due to the project range from 0.0 to 1.0 dBA.

Perceptible increases in noise levels generally refer to a change of 3 dBA or more, since this level has been found to be the perceptibility threshold for exterior noise environments. Barely perceptible noise increases refer to a change of between 1 and 3 dBA. This range of noise levels was found to be noticeable to sensitive people in laboratory environments. Noise increases of less than 1 dBA are typically inaudible to the human ear except under very quiet conditions in controlled environments. A noise impact may occur if there is a noise increase of 3 dB or more from project-related traffic over existing conditions and the CNEL is 65 dBA or greater in the vicinity of noise-sensitive land uses. Project-related traffic noise impacts would be well below the thresholds for perceptible noise increases.

**Table 9**
**Project-Related Traffic Noise, Existing Conditions**

| Roadway | Segment | CNEL at 50 Feet (dBA) | | Increase from Existing (dBA) |
|---|---|---|---|---|
| | | No Project | With Project | |
| Palomar Street | North of Clinton Keith Road | 66.0 | 66.3 | 0.3 |
| Palomar Street | from Clinton Keith Road to city south boundary | 66.4 | 67.6 | 1.2 |
| Washington Avenue | from city south boundary to Calle Del Oso Oro/Nutmeg Street | 64.5 | 64.9 | 0.4 |
| Washington Avenue | South of Calle Del Oso Oro/Nutmeg Street | 68.1 | 68.2 | 0.1 |
| Clinton Keith Road | West of Palomar Street | 67.8 | 68.0 | 0.2 |
| Clinton Keith Road | from Palomar Street to Hidden Springs Road | 67.4 | 67.7 | 0.3 |
| Clinton Keith Road | from Hidden Springs Road to I-15 | 68.2 | 68.4 | 0.2 |
| Clinton Keith Road | East of I-15 | 68.0 | 68.0 | 0.0 |
| Calle Del Oso Oro | West of Washington Avenue | 65.8 | 65.8 | 0.0 |
| Nutmeg Street | East of Washington Avenue | 63.0 | 63.1 | 0.1 |

*Source: PlaceWorks 2014a, p. 15*
*Notes: Calculations included in Appendix D of **Appendix 9**.*

**Table 10**
**Project-Related Traffic Noise, 2016 Conditions**

| Roadway | Segment | CNEL at 50 Feet (dBA) | | Increase from Existing (dBA) |
|---|---|---|---|---|
| | | No Project | With Project | |
| Palomar Street | North of Clinton Keith Road | 67.4 | 67.6 | 0.2 |
| Palomar Street | from Clinton Keith Road to city south boundary | 67.0 | 68.0 | 1.0 |
| Washington Avenue | from city south boundary to Calle Del Oso Oro/Nutmeg Street | 67.4 | 67.6 | 0.2 |
| Washington Avenue | South of Calle Del Oso Oro/Nutmeg Street | 70.0 | 70.1 | 0.1 |
| Clinton Keith Road | West of Palomar Street | 66.1 | 67.1 | 1.0 |
| Clinton Keith Road | from Palomar Street to Hidden Springs Road | 68.1 | 68.4 | 0.3 |
| Clinton Keith Road | from Hidden Springs Road to I-15 | 68.7 | 68.9 | 0.2 |
| Clinton Keith Road | East of I-15 | 68.3 | 68.4 | 0.1 |
| Calle Del Oso Oro | West of Washington Avenue | 67.2 | 67.3 | 0.1 |
| Nutmeg Street | East of Washington Avenue | 64.7 | 64.7 | 0.0 |

*Source: PlaceWorks 2014a, p. 16*
*Notes: Calculations included in Appendix D of **Appendix 9**.*

*Cumulative Impacts*

Cumulative noise due to traffic would be significant where the ambient noise increases by 3 dB or more as a result of the proposed project. Cumulative noise increases describe how much noise levels are projected to increase over existing conditions with the development of the proposed project and ambient growth and reasonable foreseeable projects. Cumulative increases in traffic noise levels were estimated by comparing the 2016 with-project scenarios to existing conditions. **Table 11** shows that the cumulative noise increases in CNEL would not exceed 3.1 dBA and the project contribution at any roadway segment would not exceed 1.2 dBA. The cumulative off-site traffic noise contribution for the proposed project would not exceed the 3 dBA criteria for project increases, and impacts would be less than significant.

**Table 11**
**Project Site Cumulative Traffic Noise**

| Roadway | Segment | CNEL at 50 Feet (dBA) | | | |
|---|---|---|---|---|---|
| | | Existing | 2016 With Project | Overall Increase | Project Contribution |
| Palomar Street | North of Clinton Keith Road | 66.0 | 67.6 | 1.6 | 0.3 |
| Palomar Street | from Clinton Keith Road to city south boundary | 66.4 | 68.0 | 1.6 | 1.2 |
| Washington Avenue | from city south boundary to Calle Del Oso Oro/ Nutmeg Street | 64.5 | 67.6 | 3.1 | 0.4 |
| Washington Avenue | South of Calle Del Oso Oro/ Nutmeg Street | 68.1 | 70.1 | 2.0 | 0.1 |
| Clinton Keith Road | West of Palomar Street | 67.8 | 67.1 | 0.6 | 0.2 |
| Clinton Keith Road | from Palomar Street to Hidden Springs Road | 67.4 | 68.4 | 1.0 | 0.3 |
| Clinton Keith Road | from Hidden Springs Road to I-15 | 68.2 | 68.9 | 0.7 | 0.2 |
| Clinton Keith Road | East of I-15 | 68.0 | 68.4 | 0.4 | 0.0 |
| Calle Del Oso Oro | West of Washington Avenue | 65.8 | 67.3 | 1.5 | 0.0 |
| Nutmeg Street | East of Washington Avenue | 63.0 | 64.7 | 1.7 | 0.1 |

*Source: PlaceWorks 2014a, p. 17*
*Notes: Calculations included in Appendix D of **Appendix 9**.*

Outdoor Hard Courts

Noise from outdoor activities would occur from the use of the turf playfield, hard courts, and the quad area. The greatest concentration of students outdoors would be during recess and lunch periods, which will differ for the various grade levels. Noise at the playfields and hard courts would be highly variable during athletic use, recess, and lunch breaks depending on the level of activity at these areas. The field would not be rented out or used at night, since there will be no lights. The nearest existing noise-sensitive receptors are the single-family homes across Palomar Street and other scattered surrounding residences to the east, south, and west. Noise levels for the playfield, hard courts, and quad area shown in **Table 12** were modeled based on collected noise monitoring data.

**Table 12**
**Noise Levels from Outdoor Activities at the Adjacent Residences**

| Outdoor Locations | Distance from Outdoor Areas to Receptor J[1] | $L_eq$ Noise Levels (dBA) at Receptor J |
|---|---|---|
| Open Turf Field | 330 | 29.6 |
| Hard Courts | 510 | 48.4 |
| Play Structure | 450 | 26.3 |
| Combined Noise Levels | n/a | 48.5 |

*Source: PlaceWorks 2014a, p. 17*
*Notes: Reference noise level for open turf field based on noise monitoring of youth soccer game at John A. Murdy Elementary School in the City of Garden Grove. Reference noise levels for hard court and play structure activities based on noise monitoring of playground at San Jose School in the City of West Covina.*
*1. Based on center of general outdoor areas to the nearest residential property line.*

As shown in **Table 12**, the combined noise level generated from use of the proposed school's turf field, hard courts, and play structure at the nearest residences to the southeast of the project site would be 48.5 dBA $L_{eq}$. At other residences farther away, these levels would be less, since noise dissipates by approximately 6 dBA per doubling of distance. Thus, the noise level generated from outdoor activity at the proposed school at the nearest residences would be below the City's daytime exterior noise level standard of 65 dBA. In addition, on-site outdoor activity would occur during the least noise-sensitive part of the day.

School Bells

The operation of the proposed project may include the use of buzzers or bells to signal the beginning and ending of classes. Bells would not sound before or after school hours. Noise generated by the buzzers or bells would occur a few times per day for a short periods (less than 5 seconds) during the daytime hours and would not substantially elevate average daytime noise levels in the vicinity of the proposed school.

Mechanical Equipment

The City of Wildomar Municipal Code limits intrusive noise in the city. The mechanical equipment on the new facilities would comply with the City of Wildomar noise ordinance. In addition, noise from the equipment would likely be indistinguishable in the ambient noise environment due to traffic noise along Palomar Street and the noise attenuation due to the distance between the HVAC systems and nearby residences. Thus, noise impacts from mechanical equipment would be less than significant.

Parking Lots and Student Drop-Off/Pick-Up

Parking lots typically generate noise from car horns, car engines, brakes and tires, automatic lock beeps, car alarms, car radios, and people talking. Each of the individual noises lasts for a short time, and the highest magnitudes of noise are most likely to occur at the beginning and end of the school day during student drop-off and pick-up when parking lots are most active and cars are driving by. For the majority of the daytime hours, school parking lots have little midday school-related traffic and are therefore quiet throughout a typical school day.

The proposed project would include vehicular access and a parking lot in the northeastern and western areas of the projects site (see **Figure 7**). The western parking area would serve as the "turnaround" for parents picking up and dropping off students at the school. The west parking area will also serve as the hard court portion of the playground. The space would not be used for both purposes simultaneously.

The nearest sensitive receptors to these surface lots would be at distances of approximately 180 feet and 230 feet. Noise monitoring conducted at a community college surface parking lot, which included car drive-bys, engine starts, and door slamming, measured a noise level of 54 dBA $L_{eq}$ within a distance of 50 feet. Since the nearest homes and the primary lot "A" would be along Palomar Street away from the adjacent homes, the proposed surface lot would not exceed the City's noise standards. Noise from traffic on Palomar Street would generally overshadow noise from activities at the school parking lot. The adjacent homes to the south would experience noise increases due to vehicles idling and maneuvering at the parking lots, doors opening and closing, and voices in the parking lot areas and driveways, which would occur for short periods of approximately 10 to 20 minutes during student drop-off in the morning and student pick-up mid-afternoon. However, these periods are short term and would occur only during the daytime. According to measurements taken between during student drop-off at an elementary school, approximately 40 feet from the curb, the average noise level ($L_{eq}$) measured during the measurement period was 55.1dBA $L_{eq}$. These levels would be short term and would not exceed the 65 dBA $L_{eq}$ daytime noise standard. Thus, noise associated with the proposed surface parking lot is not anticipated to substantially increase the ambient noise environment.

Noise and Land Use Compatibility

Noise-land use compatibility is determined by the future noise level forecast on a project site and the proposed land use on that site.

*Traffic Noise*

The project site would be primarily impacted by traffic noise from Palomar Street. To assess long-range future traffic noise conditions, an annual growth rate of 2 percent per year over existing traffic conditions was assumed over the daily traffic count of 5,679 taken in front of the project site on Palomar Street. For the purpose of evaluating buildout traffic conditions, a daily traffic volume of 8,405 was used, with the buildout street configuration of six lanes. **Table 13** shows the traffic noise contours calculated to evaluate long-range noise impacts to the project site.

**Table 13**
**Long-Range Traffic Noise at Project Site**

| Roadway | Segment | Daily Traffic Volumes | Noise Level at 50 Feet (dBA CNEL) | Distance to Noise Contour (ft.) | | |
|---|---|---|---|---|---|---|
| | | | | 70 dBA CNEL | 65 dBA CNEL | 60 dBA CNEL |
| Palomar Street | Project site | 8,405 | 69.7 | 48 | 102 | 221 |

*Source: PlaceWorks 2014a, p. 19*
*Notes: Noise contour calculations included in Appendix D of **Appendix 9**.*

Exterior Noise

The City's Draft Noise Element Policy N-14 requires that an acoustical specialist prepare a study for noise-sensitive areas where existing or projected exterior sound levels exceed 65 dBA CNEL. The Wildomar General Plan strives to achieve 65 dBA CNEL at outdoor use areas such as school playgrounds and ball courts. As shown on the proposed site plan (**Figure 5**), all outdoor play areas would be located in the western portions of the site, behind the school's building structures. The proposed hard courts, quad areas, and fields would be located beyond 400 feet from Palomar Street. The nearest outdoor central courts area would be located approximately 240 feet from Palomar Street, but it would be surrounded by the school building structures that would attenuate noise from traffic on Palomar Street.

As shown in **Table 13** above, the 65 dBA CNEL noise contours from Palomar Street would be located 102 feet from the street centerline. This does not include the attenuation provided by the building structures. It is anticipated that with the attenuation of the school buildings and the distance from the street to the nearest outdoor areas of at least 240 feet, all outdoor activity areas at the school would be well below the required 65 dBA CNEL exterior noise standard. No mitigation would be required to meet the exterior noise standard.

Interior Noise

The provisions of the California Code of Regulations specify a noise standard of 45 dBA CNEL at classrooms. The interior noise level is the difference between the noise level at the building façade facing the road and the attenuation provided by the building structure. New buildings with conventional construction materials typically provide an interior noise reduction of 20 to 25 dBA. The magnitude of reduction is dependent on the size of window and door openings and the noise reduction capability of the windows and doors.

The nearest classroom buildings would be located 180 feet from the street—at this location, the noise level would be approximately 61 dBA CNEL. To meet the 45 dBA interior noise level standard, exterior-to-interior noise levels must be reduced by up to 16 dBA, which is less than the level provided by a new building. To meet the 45 dBA CNEL interior noise standard, the building's windows would have to be closed. The project plans include air conditioning, which will allow the school to keep the windows closed. No upgraded construction materials would be required. Therefore, this impact would be less than significant.

b) **Less Than Significant Impact With Mitigation Incorporated.** A project would normally have a significant effect on the environment if it would result in exposure of persons to or the generation of excessive groundborne vibration or groundborne noise levels. The following evaluates potential vibration during project construction and operation.

Construction activities can generate varying degrees of ground vibration depending on the type of construction and equipment. Construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings near the construction site varies depending on soil type, ground strata, and receptor building construction. Vibration can result in no perceptible effects at the lowest levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight building damage at the highest levels. Ground vibration from construction activities rarely reaches levels that can significantly damage structures, but it can achieve the audible and perceptible ranges in buildings close to a

construction site. Groundborne vibration would be generated during the demolition of existing structures, grading, and building construction phases. Unless there are large generators of vibration—such as pile drivers—or receptors in close proximity to construction equipment, vibration is generally only perceptible at structures when it rattles windows, picture frames, and other interior objects. **Table 14** lists vibration levels for different types of construction equipment.

**Table 14**
**Construction Equipment Vibration Levels**

| Equipment | Approximate RMS Velocity Level at 25 Feet (VdB)[1] | Approximate PPV at 25 Feet (in/sec) |
|---|---|---|
| Vibratory Roller | 94 | 0.210 |
| Large Bulldozer | 87 | 0.089 |
| Caisson Drilling | 87 | 0.089 |
| Loaded Trucks | 86 | 0.076 |
| Jackhammer | 79 | 0.035 |
| Small Bulldozer | 58 | 0.003 |
| FTA Criteria – Human Annoyance (daytime) | 78 | -- |
| FTA Criteria – Architectural Damage | — | 0.200 Wood Framed<br>0.500 Reinforced Masonry |

*Source: PlaceWorks 2014a, p. 12*
*1. RMS velocity calculated from vibration level (VdB) using the reference of 1 microinch/second and a crest factor of 4.*

Vibration Annoyance

Vibration is typically not perceptible in outdoor environments, but it is sensed when objects inside structures generate noise, such as rattling windows or picture frames. Therefore, impacts are evaluated in terms of indoor receptors. The nearest sensitive receptor structures subject to annoyance from construction activities are the single-family homes located approximately 435 feet northeast, 470 feet east, and 690 feet southeast and west from the center of the proposed construction site.

Levels of vibration produced by construction equipment are based on the Federal Transit Administration's (FTA) significance threshold for vibration annoyance of 78 VdB for barely perceptible levels of vibration during the daytime (under the premise that construction would be limited to daytime hours to comply with the City's Municipal Code). **Table 15** shows the potential vibration levels (VdB) that can be generated by heavy construction equipment at receptors 435, 470, and 690 feet away from the center of construction activities and 110 feet away from the edge of construction activities (the closest homes to the project site). For the purpose of this analysis, vibration levels from excavators and loaders would be similar to the levels presented for bulldozers in **Table 14**.

**Table 15**
**Construction Equipment Vibration Levels – Potential for Annoyance**

| Equipment | Vibration VdB at Distance (feet) | | | |
|---|---|---|---|---|
| | Receptors E and F (435 feet from center of construction site) | Receptors E and F (110 feet from edge of construction site) | Receptors G, H, and I (470 feet from center of construction site) | Receptor D and K (690 feet from center of construction site) |
| Vibratory Roller | 69 | **81** | 69 | 65 |
| Caisson Drill | 62 | 74 | 62 | 58 |
| Large Bulldozer | 62 | 74 | 62 | 58 |
| Small Bulldozer | 33 | 45 | 33 | 29 |
| Jackhammer | 54 | 66 | 54 | 50 |
| Loaded Trucks | 61 | 73 | 61 | 57 |

*Source: PlaceWorks 2014a, p. 13*
*Notes: Threshold for vibration annoyance = 78 VdB. Receptor locations shown in Figure 2 of **Appendix 9**.*

As shown in **Table 15**, construction activity at the nearest residential areas would exceed the 78 VdB threshold for vibration annoyance when vibratory rollers are operated at the project site boundary nearest to the closest home. At all other homes, vibration levels would be below levels that are considered annoying. Implementation of mitigation measure **NOI-1**, restricting the use of vibratory rollers during project construction, would reduce this impact to a level that is less than significant.

Vibration-Induced Architectural Damage

In addition to vibration-induced annoyance, project-related construction vibration was evaluated for its potential to cause structural damage based on the FTA's architectural damage criteria. The FTA threshold of 0.2 peak particle velocity (PPV) inches per second is the point at which there is a risk of architectural damage to normal houses with plastered walls and ceilings. **Table 16** shows the potential vibration levels (in PPV in inches per second) that can be generated by heavy construction equipment at the nearest receptor, the existing church, located as near as 70 feet from the project site.

**Table 16**
**Construction Equipment Vibration Levels – Potential for Architectural Damage**

| Equipment | Vibration PPV at Nearest Structure (church building 70 feet) |
|---|---|
| Vibratory Roller | 0.045 |
| Caisson Drill | 0.019 |
| Large Bulldozer | 0.019 |
| Small Bulldozer | 0.001 |
| Jackhammer | 0.007 |
| Loaded Trucks | 0.016 |

*Source: PlaceWorks 2014a, p. 14*
*Notes: Threshold for vibration damage – 0.20 PPV; receptor location shown in Figure 2 of **Appendix 9**.*

Typically, only construction equipment generating extremely high levels of vibration, such as pile drivers, has the potential for vibration-induced structural damage. The project applicant has stated that the construction will not require pile driving. As shown on **Table 16**, project-related construction activities would not result in vibration levels at nearby sensitive structures that exceed the 0.2 PPV inches per second criteria for vibration-induced structural damage. Therefore, this impact would be less than significant.

d) **Less Than Significant Impact With Mitigation Incorporated**. Construction activities in Wildomar are prohibited during the hours between 6:00 PM and 6:00 AM during the months of June through September, and the hours between 6:00 PM and 7:00 AM during the months October through May, if the construction is located within one-quarter mile of an inhabited dwelling (Wildomar Municipal Code Section 9.48.020). The closest inhabited dwelling is approximately 110 feet from the edge of the construction site.

Noise levels generated during construction are based on the type of equipment operating and the amount of equipment operating at the same time. Sensitivity to noise is based on the location of the equipment relative to sensitive receptors, time of day, and the duration of the noise-generation activities. Two types of short-term noise impacts could occur during construction: (1) mobile-source noise from the transport of workers, material deliveries, and debris/soil hauling, and (2) stationary-source noise from use of construction equipment. For the purpose of this analysis and according to estimates provided by the project applicant, development at the site would require construction for approximately eight months.

Temporary noise impacts during construction are mostly related to demolition, grading, and building construction. Construction equipment can be considered to operate in two modes: stationary and mobile. Stationary equipment operates in one location for one or more days; mobile equipment moves around a construction site with variations in power setting and loads. To determine the energy-average $L_{eq}$ sound level from the equipment's operation under varying power settings, the equipment's noise rating at a reference distance while operating at full power is adjusted by considering the duty cycle of the activity. **Table 17** lists maximum construction equipment noise levels from a reference distance of 50 feet and the industry standard duty cycles for typical development activities.

**Table 17**
**Construction Equipment Noise Levels**

| Equipment | Noise Level (dBA) at 50 Feet | Typical Duty Cycle |
|---|---|---|
| Auger Drill Rig | 85 | 20% |
| Backhoe | 80 | 40% |
| Chain Saw | 85 | 20% |
| Clam Shovel | 93 | 20% |
| Compactor (ground) | 80 | 20% |
| Compressor (air) | 80 | 40% |
| Concrete Mixer Truck | 85 | 40% |
| Concrete Pump | 82 | 20% |
| Concrete Saw | 90 | 20% |
| Crane (mobile or stationary) | 85 | 20% |
| Dozer | 85 | 40% |
| Dump Truck | 84 | 40% |
| Excavator | 85 | 40% |
| Front-End Loader | 80 | 40% |
| Generator (25 KVA or less) | 70 | 50% |
| Generator (more than 25 KVA) | 82 | 50% |
| Grader | 85 | 40% |
| Hydra Break Ram | 90 | 10% |
| In situ Soil Sampling Rig | 84 | 20% |
| Jackhammer | 85 | 20% |
| Mounted Impact Hammer (hoe ram) | 90 | 20% |
| Paver | 85 | 50% |
| Pneumatic Tools | 85 | 50% |
| Pumps | 77 | 50% |
| Rock Drill | 85 | 20% |
| Scraper | 85 | 40% |
| Tractor | 84 | 40% |
| Vacuum Excavator (vac-truck) | 85 | 40% |
| Vibratory Concrete Mixer | 80 | 20% |

*Source: PlaceWorks 2014a, pp. 9–10*
*KVA – kilovolt amps*

Each stage of construction has a different equipment mix, depending on the work to be accomplished during that stage. The noise produced at each stage is determined by combining the $L_{eq}$ contributions from each piece of equipment used at a given time. Construction activities at the project site will not include blasting of pile driving. In the construction of development projects, demolition and grading activities generate the highest noise levels since these phases require the use of the largest equipment.

Because of the effects of noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks during each construction phase, construction activities would result in different noise levels at a given sensitive receptor. Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels in excess of 80 dBA at 50 feet from the equipment. Construction equipment noise would diminish at a rate of at least 6 dB per doubling distance as it propagated to off-site receptor locations. This distance attenuation, coupled with the fact that construction equipment noise is intermittent, means that the average noise levels at off-site, noise-sensitive receptors would be lower than the potential maximum levels because mobile construction equipment would move around the site with different load settings and power requirements.

For the purpose of analyzing the average future construction noise, it is assumed that all earthmoving equipment would operate at the center of the project site (center of activity) and at ground level. With the typical maximum noise levels generated by construction equipment and assuming the utilization factors in **Table 17**, the overall noise during each phase when all equipment is operating simultaneously was calculated at the nearest homes. As noted above, because the ministry times of the church are outside of the allowable hours of construction, the existing church northwest of the project site is not included as a noise-sensitive receptor. The nearest church building is approximately 65 feet north of the property line and is equipped with air conditioning to allow a windows-closed environment during construction if necessary. These construction noise calculations are summarized in **Table 18**.

**Table 18**
**Average Construction Noise Impacts (dBA $L_{eq}$)**

| Sensitive Receptors | Demolition + Site Preparation | Demolition + Grading | Demolition + Utility Trenching | Building Construction | Paving + Architectural Finishes + Site Improvements | Site Paving | Finishing/ Landscaping |
|---|---|---|---|---|---|---|---|
| Receptors E and F (435 feet away) | 70 | 70 | 68 | 67 | 70 | 67 | 66 |
| Receptors G, H, and I (470 feet away) | 69 | 69 | 67 | 67 | 69 | 66 | 65 |
| Receptors D and K (690 feet away) | 66 | 66 | 64 | 63 | 66 | 63 | 62 |
| Receptors A, B, and C (1,000 feet away) | 63 | 62 | 60 | 60 | 63 | 60 | 59 |

*Source: PlaceWorks 2014a, p. 11*
*Notes: Calculations in Appendix C of **Appendix 9**. Receptor locations shown in Figure 2 of **Appendix 9**.*

Average noise levels during construction activities would range from 59 to 70 dBA $L_{eq}$. Construction activity would temporarily increase the ambient noise environment at nearby sensitive residential uses during the different construction phases of the project. Sound attenuation provided by topography at sensitive receptor locations, particularly at the homes

north of Palomar Street, was not taken into account. Therefore, these estimates are conservative, since they do not take into consideration the existing attenuation provided. At times, noise from heavy equipment would be above the existing ambient noise and would be readily perceptible. However, noise from construction equipment would, at times, be overshadowed by traffic noise on Palomar Street. The overall construction would last for eight months; however, the loudest and more constant noise would occur during the demolition and grading phases, which would last for approximately two months. Subsequent phases would generate noise that would be sporadic and intermittent. Noise from construction activities at a given receptor would be sporadic and limited during the construction period. In addition, construction activity would occur only during the daytime hours allowed by the City's Municipal Code. Regardless, construction noise levels could exceed applicable standards. Therefore, this impact would be potentially significant. Implementation of mitigation measure **NOI-1** would reduce potential construction noise impacts to a less than significant level with mitigation incorporated.

e, f) **No Impact**. There are no public airport runways within 2 miles of the project site. The nearest public airport is French Valley Airport, approximately 7 miles east of the project site. The nearest private airstrip is Skylark Field Airpark, approximately 4.4 miles northwest of the project site. Therefore, the proposed project would not expose students or staff to excessive noise levels.

**STANDARD CONDITIONS AND REQUIREMENTS**

1. All construction and general maintenance activities shall be limited to the hours and decibel levels described in Wildomar Municipal Code Chapter 9.48.

**MITIGATION MEASURES**

**NOI-1** Development on the project site shall implement the following construction noise mitigation measures to reduce potential construction noise impacts:

- Construction equipment staging and storage areas shall be located as far from residential land uses as possible. Ideally the construction staging will occur on the area planned for the playground and student drop-off, as close as possible to the northern property line.
- All construction equipment shall be properly maintained with operating mufflers and air intake silencers as effective as those installed by the original manufacturer.
- Residents living up to 1,000 feet from the property line shall be provided with a construction schedule and contact information to file a complaint. Timely notification shall accompany any major changes to this schedule.
- Construction shall not include pile driving or blasting activities.
- A temporary noise barrier shall be erected along the project boundaries during all construction activities.
- Use of vibratory rollers shall be avoided within 160 feet of homes.

*Timing/Implementation:* *During construction activities*

*Enforcement/Monitoring:* *City of Wildomar Building and Planning Departments*

## 13. Population and Housing

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

**DISCUSSION**

a) **Less Than Significant Impact.** The proposed project would develop a permanent campus for an existing public K through 6 charter school in the city. The existing school campus has a current enrollment of 342 students who would be relocated to the proposed campus. Sycamore Academy plans to add grade 8 in the 2015–2016 school year. As such, the school's total enrollment would increase accordingly to a projected 594 students. However, as a public school, the campus would serve existing households in the Lake Elsinore Unified School District. Therefore, the proposed project would not be expected to induce population growth beyond the potential to attract a small number of new teachers and other school staff. Such population growth would not be considered substantial and would not require the construction of any new housing or businesses. This impact would be less than significant.

b, c) **No Impact.** Since the project site is currently vacant, no housing units or people would be displaced and the construction of replacement housing is not required. No impacts are anticipated.

**STANDARD CONDITIONS AND REQUIREMENTS**

None required.

**MITIGATION MEASURES**

None required.

**14. Public Services**

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

**DISCUSSION**

a) **Less Than Significant Impact.** The Riverside County Fire Department (RCFD) provides fire protection and safety services to the City of Wildomar. RCFD Fire Station 75 (Bear Creek) is located at 38900 Clinton Keith Road, approximately 1.6 miles southwest of the project site, and would likely respond to calls for service from the proposed project. In addition to Fire Station 75, several other Riverside County and City of Murrieta Fire Department fire stations in the surrounding area would be able to provide fire protection services to the project site if needed.

A standard condition of approval for the proposed project includes compliance with the requirements of the Riverside County Fire Department and the payment of standard development impact fees pursuant to Wildomar Municipal Code Section 3.44.080. The proposed project is not expected to result in activities that create unusual fire protection needs or significant impacts. Any impacts would be considered incremental and less than significant.

b) **Less Than Significant Impact.** Police protection services are provided in the city by the Riverside County Sheriff's Department (RCSD). The nearest sheriff's station is located at 333 Limited Street in Lake Elsinore, approximately 9 miles northwest of the project site. Traffic enforcement is provided for Riverside County in this area by the California Highway Patrol, with additional support from local Riverside County Sheriff's Department personnel.

For the purpose of establishing acceptable levels of service, the Riverside County Sheriff's Department maintains a recommended servicing of 1.2 sworn law enforcement personnel for every 1,000 residents (City of Wildomar 2008). As discussed in Impact a) in subsection 13, Population and Housing, the project involves the relocation of an existing school campus that would serve existing households in the Lake Elsinore Unified School District. It would not be expected to substantially increase the city's population or the demand for police protection services. Furthermore, the project is not expected to result in activities that create unusual police protection needs. Regardless, as a standard condition of approval for the project, the project applicant would be required to pay the

standard development impact fees pursuant to Wildomar Municipal Code Section 3.44.080. Therefore, this impact would be less than significant.

c) **Less Than Significant Impact.** The project is the construction of a new school campus to serve existing students in the Lake Elsinore Unified School District and, as discussed in Impact a) in subsection 13, Population and Housing, would not substantially increase the city's population. Impacts related to the construction and operation of the proposed project are considered throughout this document and mitigated when applicable. Therefore, this impact would be less than significant.

d) **Less Than Significant Impact.** See subsection 15, Recreation. This impact would be less than significant.

e) **Less Than Significant Impact.** As discussed in Impact a) in subsection 13, Population and Housing, the proposed project would serve existing households in the Lake Elsinore Unified School District and would not substantially increase the city's population resulting in increased demand for any other public facilities. Regardless, as a standard condition of approval for the project, the project applicant would be required to pay the standard development impact fees pursuant to Wildomar Municipal Code Section 3.44.080. Therefore, this impact would be less than significant.

**STANDARD CONDITIONS AND REQUIREMENTS**

1. Prior to issuance of any building permit, the project applicant shall pay the required development impact fees for police, fire, and other governmental services pursuant to Wildomar Municipal Code Section 3.44.080 and in effect at the time of building permit issuance.

**MITIGATION MEASURES**

None required.

**15. Recreation**

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated? | | | | ✓ |
| b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? | | | ✓ | |

**DISCUSSION**

a) **No Impact.** As discussed in Impact a) in subsection 13, Population and Housing, the proposed project would not be expected to result in substantial population growth. Furthermore, as a school campus, the proposed project would provide adequate paved and turf play areas for its students. Therefore, the proposed project would not be expected to increase the use of existing neighborhood or regional parks or other recreational facilities. No impact would occur.

b) **Less Than Significant Impact.** As described in greater detail in the Project Description, the project proposes the construction of paved and turf play areas to serve students attending the proposed school campus. All of these proposed play areas and features would be constructed on the project site. As such, impacts related to their construction are considered throughout the analysis of this document as part of the proposed project and mitigated when applicable. This impact would be less than significant.

**STANDARD CONDITIONS AND REQUIREMENTS**

None required.

**MITIGATION MEASURES**

None required.

**16. Transportation/Traffic**

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | | | ✓ | |
| b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | | | ✓ | |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | | ✓ |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | ✓ | |
| e) Result in inadequate emergency access? | | | ✓ | |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | | | ✓ | |

**DISCUSSION**

A traffic impact analysis was prepared for the proposed project by PlaceWorks (2014b) in September 2014 (see **Appendix 10**). The reader is referred to this analysis for a description of the methodologies used to prepare the analysis as well as a definition of level of service and applicable thresholds.

a) **Less Than Significant Impact**

Study Area Roadway Network

Roadways that would be utilized for project trips include Clinton Keith Road, Palomar Street, Washington Avenue, Nutmeg Street, and Calle Del Oso Oro.

**Clinton Keith Road:** This east–west roadway currently varies from four to six lanes in the study area and is classified as an Urban Arterial in the City of Wildomar General Plan Circulation Element. Its final configuration will be a six-lane divided roadway with a right-of-way of 152 feet.

**Palomar Street:** This north–south roadway currently is two to four lanes in the study area and is classified as an Arterial Highway in the City of Wildomar Circulation Element. Its final configuration will be a six-lane divided roadway with a right-of-way of 128 feet.

**Washington Avenue:** This north–south roadway currently is two lanes undivided in the study area. Washington Avenue is classified in the City of Murrieta General Plan Circulation Element as a four-lane secondary road with a right-of-way of 88 feet.

**Nutmeg Street and Calle Del Oso Oro:** These east–west roadways currently range from two to four lanes in the study area. They are classified in the City of Murrieta General Plan Circulation Element as four-lane secondary roads with a right-of-way of 88 feet.

Study Area Intersections

The study area was defined according to the scoping agreement signed by Dan York, City of Wildomar Public Works Director. The agreement also required that the Riverside County guidelines for the preparation of a traffic impact study be followed. The guidelines require that intersections at streets with a minimum classification of collector or higher where the project adds 50 or more peak-hour trips should be studied. Based on the calculated project trip generation and distribution, the following intersections were analyzed:

1. Clinton Keith Road at I-15 southbound ramps (Caltrans)
2. Clinton Keith Road at I-15 northbound ramps (Caltrans)
3. Clinton Keith Road at Palomar Street (Wildomar)
4. Nutmeg Street at Washington Street (Murrieta)
5. Project access at Palomar Street (Wildomar)

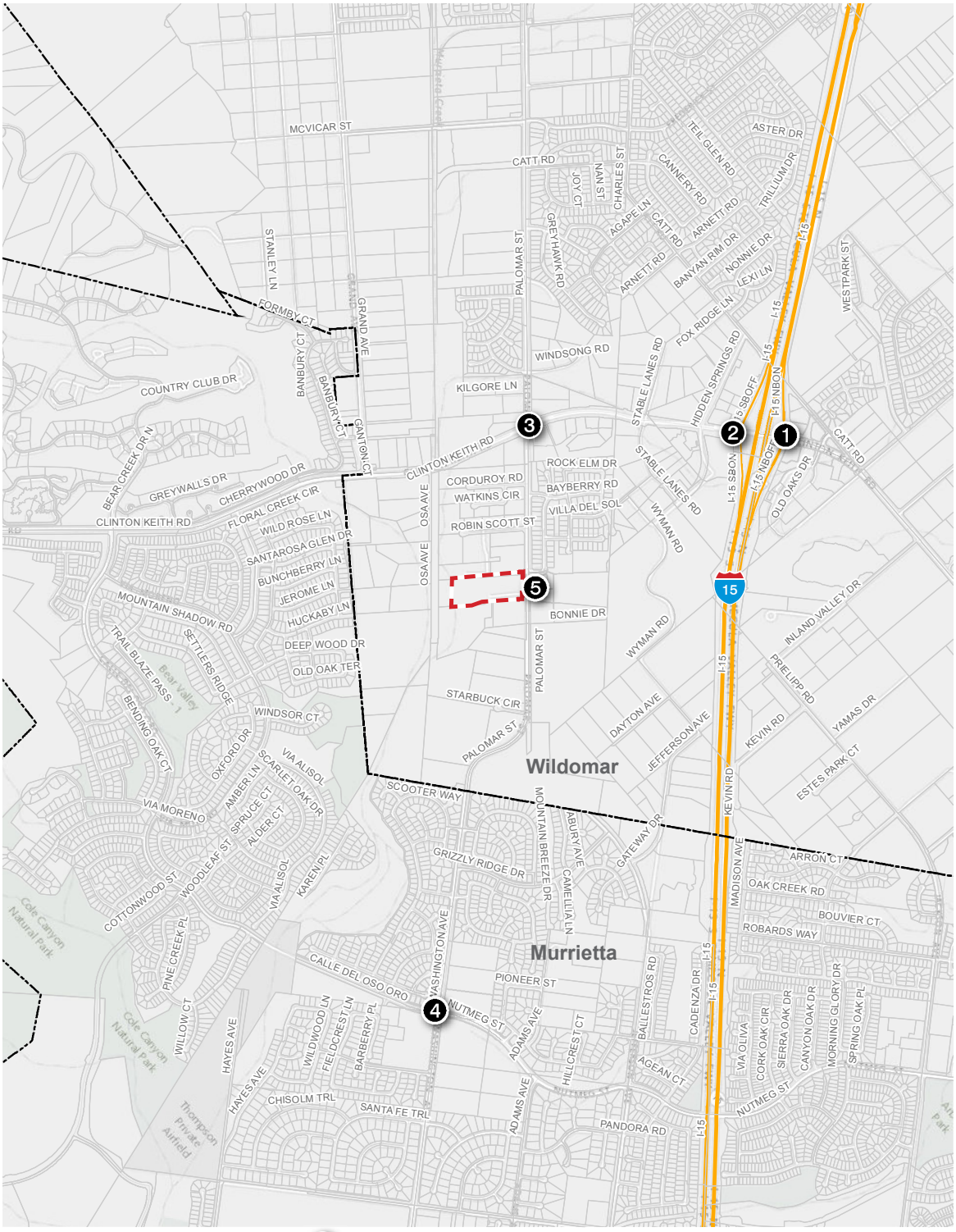
As listed above, intersections 1 and 2 are under the jurisdiction of Caltrans, intersections 3 and 5 in the City of Wildomar, and intersection 4 in the City of Murrieta. Intersection 5 would be the driveway access implemented with the project, which currently does not exist. **Figure 10** presents the study area intersections in the vicinity of the project site.

Existing Travel Lanes and Intersection Controls

The number of through lanes for existing roadways and the existing intersection controls are identified.

T:_CS\Work\Wildomar, City of\Sycamore Canyon\Figures

# Sycamore Academy




Site Boundary

City Boundary

1 Intersection Location Number

Source: Placeworks 2014 B

0 1,000 2,000

FEET

N

**Figure 10**

Study Area Roadway Network and Intersections

Existing Intersection Operations

*Existing Traffic Volumes*

As shown in **Figure 2**, the proposed project relocates the existing Sycamore Academy to a new location approximately 0.25 miles southeast of its current location. The key intersections of Palomar Street and Clinton Keith, as well as the on- and off-ramps at Clinton Keith and Interstate 15 (I-15), already experience school traffic as students are brought to the existing location. This traffic has not been subtracted from the traffic analysis, which essentially results in a double-count of school traffic at these locations.

Weekday AM and PM peak-hour turn movement volumes were collected at the study area intersections. The counts were collected on Wednesday, September 3, 2014. In addition, a 24-hour traffic count was taken at Palomar Street between the project site and Clinton Keith Road.

*Existing Conditions Intersection Operations Analysis*

The intersection operations analysis results are summarized in **Table 19**. All study area intersections currently operate at acceptable level of service (LOS) during the peak hours for existing traffic conditions.

**Table 19**
**Intersection Level of Service Descriptions**

| Intersection | Jurisdiction | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Average Delay (sec/veh) | LOS | Average Delay (sec/veh) | LOS |
| 1. I-15 Southbound Ramps at Clinton Keith Road | Caltrans | 13.7 | B | 14.8 | B |
| 2. I-15 Northbound Ramps at Clinton Keith Road | Caltrans | 14.3 | B | 13.6 | B |
| 3. Palomar Street at Clinton Keith Road | Wildomar | 31.8 | C | 29.5 | C |
| 4. Washington Street at Nutmeg Street/Calle Del Oso Oro | Murrieta | 31.0 | C | 28.4 | C |
| 5. Project Driveway/Palomar Street | Wildomar | N/A | N/A | N/A | N/A |

*Source: PlaceWorks 2014b, p. 3-3*
*Notes: Intersections 1–4 are signalized; Intersection 5 is part of the project and does not exist.*

Project Traffic

*Trip Generation*

Trip generation was calculated based on rates in the ITE Trip Generation Manual (9th edition) for Land Use 520, Elementary School. **Table 20** shows the trip generation rates and project trip generation for the AM and PM peak hours and daily. The project is expected to generate up to 766 vehicle trips on a typical weekday, with 267 trips (147 inbound and 120 outbound) during the AM peak hour and 89 trips (44 inbound and 45 outbound) during the PM peak hour.

The general approach for conducting traffic impact analyses is to evaluate weekday peak-hour traffic during the commute peak traffic conditions that generally occur from 7 to 9 AM and from 4 to 6 PM. The project would generate 75 inbound trips and 91 outbound trips during the school pick-up hour at approximately 3 PM. These volumes are less than the volumes calculated for the AM peak hour, which coincides with the AM peak-hour traffic on the overall street network. However, because the peak traffic in the afternoon occurs earlier than the general traffic in the area, the overall PM peak hour at the circulation network is evaluated in this analysis. This study focuses on the highest volume traffic hour during commute peak hours but also considers on-site drop-off and loading during the period at the end of the school day. The performance of the project access during school drop-off and pick-up times is evaluated in Impact 4) below.

**Table 20**
**Project Trip Generation**

| Land Use | Unit | Trip Generation | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Daily | AM Peak Hour | | | PM Peak Hour | | |
| | | | In | Out | Total | In | Out | Total |
| Elementary School Rates | STU | 1.29 | 0.25 | 0.20 | 0.45 | 0.07 | 0.08 | 0.15 |
| Project Trip Generation | 594 | 766 | 147 | 120 | 267 | 44 | 45 | 89 |

*Source: PlaceWorks 2014b, p. 4-1*
*Notes:*
*1. Units are per student.*
*2. Based on rates for land use code 520 of the ITE's Trip Generation Manual, 9th Edition.*
*3. Commute PM peak hour from 4 to 6 PM.*

*Trip Distribution*

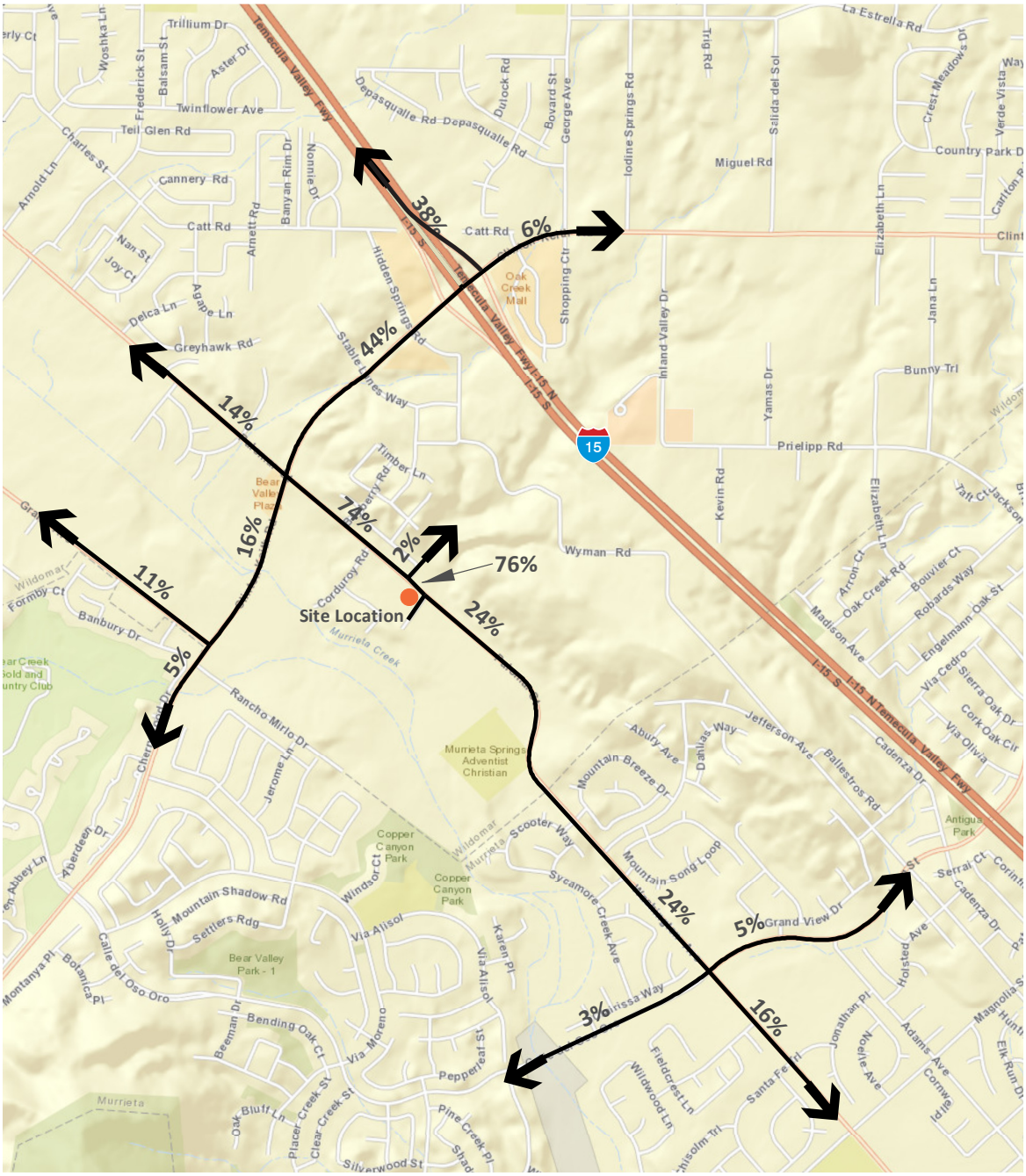
The project's trip distribution is based on data provided by the project applicant for current student enrollment at its current facility less than one-half mile from the project site. The traffic that would be generated by the school was geographically distributed onto the street network by evaluating the layout of the study area roadway network and the distribution of the students' residences. The data was aggregated in zones in GIS to estimate the general direction of travel and likely routes to be utilized to and from the project. **Figure 11** presents the anticipated trip distribution for the school. The data show that approximately 50 percent of the students live in Wildomar, 20 percent in Lake Elsinore, 20 percent in Murrieta, and the remaining in other parts of the county. Appendix C of the traffic impact analysis (**Appendix 10**) shows the student distribution map according to existing enrollment data.

*Modal Split and Trip Assignment*

The trip distribution percentages are applied to the project trip generation to determine the traffic volumes forecast to be added at each intersection (i.e., trip assignment).

T:_CS\Work\Wildomar, City of\Sycamore Canyon\Figures

# Sycamore Academy




Route from Project

XX% Percent from Project

NOTE: Inbound trip distribution utilizes I-15 freeway soutbound off-ramp

Source: PlaceWorks 2014 B

0 1,000 2,000
FEET

N

**Figure 11**
**Project Trip Distribution**

Existing Plus Project Traffic Conditions

To assess Existing Plus Project traffic conditions, existing traffic is combined with project traffic. The intersection operations for the Existing Plus Project traffic conditions have been calculated and are shown in **Table 21**.

**Table 21**
**Intersection Delay and LOS, Existing Plus Project Conditions**

| Intersection | Jurisdiction | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Average Delay (sec/veh) | LOS | Average Delay (sec/veh) | LOS |
| 1. I-15 Southbound Ramps at Clinton Keith Road | Caltrans | 14.3 | B | 15.0 | B |
| 2. I-15 Northbound Ramps at Clinton Keith Road | Caltrans | 14.4 | B | 13.7 | B |
| 3. Palomar Street at Clinton Keith Road | Wildomar | 35.7 | D | 28.5 | C |
| 4. Washington Street at Nutmeg Street/Calle Del Oso Oro | Murrieta | 31.1 | D | 28.5 | C |
| 5. Project Access at Palomar Street | Wildomar | 20.9 | C | 18.8 | C |

*Source: PlaceWorks 2014b, p. 4-2*
*Notes: Intersections 1–4 are signalized; project access would be unsignalized.*

All study area intersections would operate at acceptable levels of service during the peak hours for Existing Plus Project traffic conditions. Significant impacts are determined by comparing with and without project scenarios for each traffic condition. Impacts could only occur at intersections where there is a deficiency (LOS E or F). No impacts would occur during Existing Plus Project conditions.

Future Traffic Conditions

Ambient growth was added to daily and peak-hour traffic volumes on surrounding roadways in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies. The ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Future year traffic forecasts for 2016 traffic conditions have been based on two years of ambient growth at 2 percent per year. The total ambient growth is the compounded growth of 2 percent per year over two years, which results in a total growth of 4 percent.

For the purposes of this analysis, a list of cumulative projects anticipated to contribute traffic to any study area facility by project opening year 2016 was developed through consultation with staff from the Cities of Wildomar and Murrieta. The list consists of cumulative projects that are reasonably and foreseeably anticipated to be constructed and operational by 2016. The trip generation rates are given in **Table 22**, and a summary of cumulative development land uses and resulting trips is in **Table 23**. The cumulative development projects assumed in this traffic analysis are estimated to generate 9,984 trip-ends per day during a typical weekday, with approximately 682 vehicle trips during the AM peak hour and 1,022 vehicle trips during the PM peak hour.

**Table 22**
**Cumulative Projects Trip Generation Rates**

| Land Use | ITE Land Use Code | Trip Generation[2] | | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|
| | | Units[1] | AM Peak Hour | | | PM Peak Hour | | | |
| | | | In | Out | Total | In | Out | Total | |
| Single-Family Residential | 210 | DU | 0.19 | 0.56 | 0.75 | 0.63 | 0.37 | 1.00 | 9.52 |
| Residential Condominium/Townhouse | 230 | DU | 0.07 | 0.37 | 0.44 | 0.35 | 0.17 | 0.52 | 5.81 |
| Shopping Center | 820 | TSF | 0.60 | 0.36 | 0.96 | 1.78 | 1.93 | 3.71 | 42.70 |
| Apartments | 220 | DU | 0.08 | 0.43 | 0.51 | 0.42 | 0.2 | 0.62 | 6.63 |
| Day Care | 565 | TSF | 6.46 | 5.72 | 12.18 | 5.80 | 6.54 | 12.34 | 74.06 |

*Source: PlaceWorks 2014b, p. 5-3*
*Notes:*
*1. DU – dwelling units, TSF = thousand square feet*
*2. Based on rates from the ITE's Trip Generation Manual, 9th Edition*

**Table 23**
**Cumulative Projects Trip Generation**

| City | Project ID | City of Wildomar Project # | Project Name | Land Use | Quantity | Units | AM Peak Hour | | | PM Peak Hour | | | Daily |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | In | Out | Total | In | Out | Daily | |
| **Wildomar** | W1 | 12-0392 | Lesle (Tract 36519) | SFR | 10 | DU | 2 | 6 | 8 | 6 | 4 | 10 | 95 |
| | W2 | 12-0395 | C.V. Communities (Tract 25122 & Tract 32078) | SFR | 157 | DU | 30 | 88 | 118 | 99 | 58 | 157 | 1,495 |
| | W3 | 13-0033 | C.V. Communities (Tract 32535) | SFR | 84 | DU | 16 | 47 | 63 | 53 | 31 | 84 | 800 |
| | W4 | 12-0015 | Lennar Homes Andalusia (Tract 30839 & Tract 30939) | SFR | 55 | DU | 10 | 31 | 41 | 35 | 20 | 55 | 524 |
| | W5 | 11-0099 | Meritage Homes (Tract 31499) | SFR | 74 | DU | 14 | 41 | 55 | 47 | 27 | 74 | 704 |
| | W6 | 12-0401 | Andalusia I (Tract 31837) | SFR | 44 | DU | 8 | 25 | 33 | 28 | 16 | 44 | 419 |
| | W7 | 08-0166 | Stable Lanes Retail Center | Retail | 20,894 | SF | 13 | 8 | 21 | 37 | 40 | 77 | 892 |
| | | | | Day Care | 9,305 | SF | 60 | 53 | 113 | 54 | 61 | 115 | 689 |
| | | | | Subtotal | 30,199 | SF | 73 | 61 | 134 | 91 | 101 | 192 | 1,581 |
| | W8 | 08-0072 | Wildomar Square Retail Center (PM 36080) | Retail | 46,600 | SF | 28 | 17 | 45 | 83 | 90 | 173 | 1,990 |
| | W9 | 13-0083 | Rancon 51 Development Agreement (Tract 31479) | SFR | 51 | DU | 10 | 29 | 39 | 32 | 19 | 51 | 486 |
| **Murrieta** | M1 | | Nutmeg Apartments (Tract 28333-2) | MFR | 210 | DU | 17 | 90 | 109 | 88 | 42 | 130 | 1,392 |
| | M2 | | Bear Creek (TTM 36328) | SFT | 52 | DU | 10 | 29 | 39 | 33 | 19 | 52 | 498 |
| **Total Cumulative Projects** | | | | | | | **218** | **464** | **682** | **595** | **427** | **1,022** | **9,984** |

*Source: PlaceWorks 2014b, pp. 5-3 to 5-4*
*Notes: Project ID corresponds to Cumulative Developments Location Map in Appendix 10.*
*Trip generation for Wildomar projects were calculated based on rates from the ITE Trip Generation Manual, 9th Edition.*
*Trip generation for Murrieta projects were obtained from respective traffic studies provided by the City of Murrieta.*

2016 No Project Traffic Conditions

To assess future background traffic conditions at the time of project opening year, existing traffic is combined with the anticipated ambient growth and the traffic from cumulative development anticipated to be operational in 2016. The intersection operations for the 2016 No Project traffic conditions have been calculated and are shown in **Table 24**.

**Table 24**
**Intersection Delay and LOS, 2016 No Project Conditions**

| Intersection | Jurisdiction | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Average Delay (sec/veh) | LOS | Average Delay (sec/veh) | LOS |
| 1. I-15 Southbound Ramps at Clinton Keith Road | Caltrans | 15.2 | B | 17.5 | B |
| 2. I-15 Northbound Ramps at Clinton Keith Road | Caltrans | 14.5 | B | 14.3 | B |
| 3. Palomar Street at Clinton Keith Road | Wildomar | 41.4 | D | 35.3 | D |
| 4. Washington Street at Nutmeg Street/Calle Del Oso Oro | Murrieta | 38.6 | D | 44.2 | D |

*Source: PlaceWorks 2014b, pp. 5–9*
*Notes: Intersections 1–4 are signalized.*

All study area intersections would operate at acceptable levels of service during the peak hours for 2016 No Project traffic conditions.

2016 With Project Traffic Conditions

To assess future traffic conditions with the project at the time of project opening year, project traffic is added to the background 2016 conditions discussed previously. The intersection operations for the 2016 With Project traffic conditions have been calculated and are listed in **Table 25**.

**Table 25**
**Intersection Delay and LOS, 2016 With Project Conditions**

| Intersection | Jurisdiction | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|
| | | Average Delay (sec/veh) | LOS | Average Delay (sec/veh) | LOS |
| 1. I-15 Southbound Ramps at Clinton Keith Road | Caltrans | 15.2 | B | 17.5 | B |
| 2. I-15 Northbound Ramps at Clinton Keith Road | Caltrans | 14.5 | B | 14.3 | B |
| 3. Palomar Street at Clinton Keith Road | Wildomar | 41.4 | D | 35.3 | D |
| 4. Washington Street at Nutmeg Street/Calle Del Oso Oro | Murrieta | 38.6 | D | 44.2 | D |
| 5. Project Access at Palomar Street | Wildomar | 20.5 | C | 19.7 | C |

*Source: PlaceWorks 2014b, pp. 5–9*
*Notes: Intersections 1–4 are signalized; project access would be unsignalized.*

Conclusion

Significant impacts are determined by comparing with- and without-project scenarios for each traffic condition. Potential traffic impacts would occur if, during the weekday peak hours:

- At intersections currently operating at acceptable level of service (A to D), the addition of project trips would change the LOS to an unacceptable LOS E or F.

- At intersections currently operating at unacceptable LOS E or F, the project would increase the delay by more than 5 seconds.

The maximum increase in delay related to the project would occur at the intersection of Palomar Street at Clinton Keith Road—an increase of 4.1 seconds in the AM peak hour. All study area intersections would continue to operate at acceptable levels of service during the peak hours for 2016 With Project traffic conditions. Therefore, the project would not cause a significant impact at any study area intersection.

b) **Less Than Significant Impact**. Every county in California is required to develop a Congestion Management Program (CMP) that looks at the links between land use, transportation, and air quality. The CMP in effect in Riverside County was approved by the Riverside County Transportation Commission (RCTC) in 2011. All freeways and selected arterial roadways in the county are designated elements of the CMP system of highways and roadways. The nearest CMP roadway from the study area is Interstate 15.

The project would generate 267 AM peak-hour trips and is not considered a project of regional significance. The proposed project traffic would add 51 peak-hour trips to each direction of travel on Interstate 15 during the AM peak hour, which is negligible compared to approximately 6,000 trips in each direction currently experienced during the peak hour. As noted above, the traffic analysis did not subtract the existing traffic from Sycamore Academy so the peak-hour estimate should be considered a conservative projection of traffic impact. As traffic from the existing school will be redirected to the new school but will use the same route, including I-15, the actual peak-hour impacts are expected to be less than projected in the traffic analysis. Therefore, the project would not conflict with the RCTC CMP and this impact would be less than significant.

c) **No Impact.** The proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. The maximum building height of the project (20 feet) is significantly less than the height of the terrain in the vicinity of the project. Since the location and height of the project would not affect air traffic patterns or aircraft operations from any private or public airport, no impact would occur.

d, e) **Less Than Significant Impact**

Proposed Site Access Driveways and Student Pick-Up/Drop-Off

Site access would be provided via a driveway on Palomar Street that would allow full access (right turn in, right turn out, left turn in, and left turn out movements) (intersection 5). Left turns in would be provided via a left turn pocket on Palomar Street just south of the project driveway.

The access driveway would be in the southeastern corner of the site, approximately 280 feet south of the driveway of the adjacent church, as shown in **Figure 7**.

A student drop-off and pick-up area is proposed on-site in the south portion of the site at the overflow parking area. A driveway of approximately 350 feet would run along the southeastern boundary of the site. That driveway would reach an overflow parking area with a driveway approximately 200 feet long at the eastern portion of the parking lot. The drop-off and pick-up route would run counterclockwise along the overflow parking lot just south of the school buildings. Assuming an average length of 25 feet per vehicle, the internal driveways could accommodate up to 22 vehicles before the student drop-off point (see **Figure 7**).

Queues

This analysis estimates whether the lengths of the northbound left turn approach and storage lane on Palomar Street would adequately accommodate the anticipated traffic volumes accessing the school during the AM drop-off and PM pick-up periods. Vehicular queuing was analyzed to assess the potential for vehicles arriving from the south that would wait on the median at Palomar Street to make a left turn into the school access driveway and into the school drop-off zone. The auxiliary lane should be sufficiently long to store the number of vehicles likely to accumulate during the critical drop-off and pick-up periods to avoid the possibility of left-turning vehicles stopping in the through lanes to wait for a gap in the opposing traffic flow. An analysis consistent with the HCM methodology was performed for the 95th percentile queue for the school opening year condition using the Synchro traffic analysis software. The 95th percentile queue is the queue length that has only a 5 percent probability of being exceeded during the analysis period.

As discussed previously, the highest turn movement volumes at the access driveway would occur during the AM peak hour with student drop-off. This analysis focuses on the worst-case scenario that occurs in the AM peak hour, when the traffic volumes related to the school are highest and coincide with the AM traffic peak hour on streets. Since the volumes for other periods are similar but less than in the AM peak, the afternoon pick-up and PM peak-hour times have not been evaluated in detail. During the AM peak hour, the project would generate 147 vehicular inbound trips; these would be spread over the hour, with a higher concentration approximately 30 minutes prior to the start of class times. During the AM peak hour, 35 vehicles would access the site from the south making a left turn into the site driveway. In this case, the number of southbound vehicles on Palomar Street opposing the north left turn would be 369 and the number of vehicles making a left-turn out would be 91. The southbound volumes on Palomar Street in the AM peak hour would be 385, and there would be sufficient gaps to prevent a substantial buildup in the queue. Based on a detailed review of the HCM calculation worksheets, the northbound left approach is expected to operate at LOS A. The 95th percentile queue for the northbound left turn lane would be one vehicle because, on average, one car would make a northbound left turn every 2 minutes during the AM peak hour. However, it should be noted that at times the queues may be greater because arrivals at the school may be concentrated in a shorter period, especially in the AM peak hour. The Geometric Design of Highways and Streets published by the American Association of State Highway and Transportation Officials (AASHTO) recommends, as a rule of thumb, that unsignalized intersections provide sufficient storage for the number of vehicles likely to arrive in an average 2-minute interval. The worst-case scenario would occur during the AM drop-off time, when 35

vehicles make a northbound left turn into the school's driveway. Assuming a worst-case scenario where 75 percent of those cars arrive in a 15-minute period, a 2-minute interval would have an average of four arrivals at the northbound left-turn lane. Therefore, according to AASHTO's 2-minute arrival rule of thumb, a storage length would need to allow for four vehicles. The section of Palomar Street in front of the school and extending approximately 300 feet to the south of the site will be widened as part of the proposed project, and a striped pocket on the northbound left turn lane on Palomar Street would be provided to allow storage along the section of the road that would be widened. A striped pocket that would extend a minimum of 100 feet south of the driveway access to allow for storage of up to four vehicles should be sufficient to accommodate the longest queue expected most of the time. The striped pocket should be tapered or extended to allow proper vehicle deceleration into the left turn lane.

Finally, on-site queuing along the student drop-off/pick-up route would minimize vehicular queuing extending into the adjoining street and creating delays for through traffic. On-site queuing is generally not expected to extend onto the southbound lanes of Palomar Street, except during the drop-off and pick-up periods when queues may extend out of the school's access driveways. The typical morning peak drop-off and afternoon pick-up activity lasts about 20 minutes, and any possible queue would dissipate immediately after the drop-off and pick-up periods. To facilitate circulation and to accommodate the potential for queues to spill into the southbound lanes at Palomar Street, curbside parking will be prohibited along Palomar Street in front of the school.

Sight Distance

Access to the school would be provided by a driveway on Palomar Street; no additional driveways are proposed in conjunction with the project. At intersections and project driveways, a substantially clear line of sight will be maintained between the driver of a vehicle waiting at the crossroad and the driver of an approaching vehicle. Sight distance is the continuous length of roadway visible to the user. A preliminary sight distance evaluation prepared for the proposed driveway was based on criteria and procedures from Caltrans in the State's Highway Design Manual (HDM). Table 201.1, Sight Distance Standards, of the HDM relates minimum sight distance values to a range of design speeds. For this analysis, a design speed of an arterial roadway of 45 mph has been utilized. Based on the design speed of 45 mph, the minimum sight distance from the access driveway on Palomar Street would be 360 feet. A preliminary sight distance diagram, shown on **Figure 12**, has been prepared for the project access to Palomar Street and shows that sufficient sight distance would be provided, since the road is relatively straight and maintains a constant grade for at least 800 feet in each direction. Observations at the project site also indicate that the sight distance exceeds these standards at the existing driveway locations. Since the site would be easily accessible from arterials and the minimum peripheral visibility would be maintained per the Caltrans HDM, this impact would be less than significant.

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# Sycamore Academy


Note: Required stopping sight distance = 360'

Stop Sign

Source: PlaceWorks 2014 B

0 150 300

FEET

N

**Figure 12**

**Sight Distance Evaluation**

f) **Less Than Significant Impact.** The Riverside Transit Agency (RTA) provides transit service in the study area. Currently there are no bus stops within a mile of the project site. There is no scheduled public transit service in the area of the project site, nor is any public service planned in the future. Therefore, project implementation would not conflict with any adopted policies, plans, or programs regarding public transit. A paved sidewalk has been constructed on the north side of Palomar Street that provides access from Clinton Keith Road to the project site. A segment of sidewalk has also been constructed on the south side of Palomar Street along the adjacent church property. The proposed project would include frontage improvements along Palomar Street that, in accordance with City standards, would include a sidewalk to further improve pedestrian access in the area. Therefore, this impact would be less than significant.

**STANDARD CONDITIONS AND REQUIREMENTS**

1. Prior to issuance of any building permit on the project site, the project applicant shall pay all existing roadway network fees (e.g., development impact fees and the Transportation Uniform Mitigation Fee).

**MITIGATION MEASURES**

None required.

**17. Utilities and Service Systems**

| Issues, would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | ✓ | |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | ✓ | |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | ✓ | |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed? | | | ✓ | |
| e) 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? | | | ✓ | |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | ✓ | |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | | | ✓ | |

**DISCUSSION**

a) **Less Than Significant Impact.** The San Diego Regional Water Quality Control Board regulates wastewater discharges in the portion of Wildomar encompassing the project site.[5] Development on the project site would receive wastewater services from the Elsinore Valley Municipal Water District (EVMWD). Sewer service would be provided through connection to existing sewer lines in Palomar Street. Wastewater would be conveyed to the Lake Elsinore Wastewater Treatment

[5] The city lies within two different watersheds and therefore is subject to the jurisdiction of two different regional boards: Santa Ana (Lake Elsinore) and San Diego (Santa Margarita River). This would require the City to administer two separate MS4 permits, which would add considerably to the cost and burden of development. The City requested to be governed by one MS4 permit to reduce costs. The City and the Regional Boards agreed that the City would be governed by the MS4 permit issued by the San Diego Regional Water Quality Control Board for the Santa Margarita River watershed. So, no matter where a project is located within the city, it must comply with the MS4 permit issued by the San Diego Regional Board for the Santa Margarita River watershed. Other regulatory responsibilities such as compliance with the Clean Water Act Section 401 Water Quality Certification, fall within the jurisdictions as mapped by the State of California (http://www.waterboards.ca.gov/waterboards_map.shtml).

Facility located at 14980 Strickland Avenue in the City of Lake Elsinore. Per California Regional Water Quality Control Board Order No. R8-2005-0003, the treatment plant has a capacity of 8 million gallons per day (mgd) with an average flow of approximately 4.66 mgd, resulting in a remaining treatment capacity of approximately 3.34 mgd (EVMWD 2008). The proposed project demand of 0.02 mgd would not result in a flow of wastewater that exceeds the permitted flow of this facility. Therefore, this impact would be less than significant.

b) **Less Than Significant Impact**. The EVMWD would provide water and wastewater services for the proposed project. The EVMWD has an adopted Urban Water Management Plan (UWMP), 2011, and a Wastewater Master Plan (WWMP), 2008, that are designed to meet the service needs of future growth. Based on water demand estimates for a similar school project (WCCUSD 2008, p. 4.11-34) of 30 gallons per day per student, the proposed project would have a total water demand of approximately 20 acre-feet per year (594 students x 30 gallons/student/day = 17,820 gallons/day x 365 days/year = 6,504,300 gallons/year = 19.96 acre-feet/year). The UWMP states that the current average daily production of potable water is 43,800 acre-feet per year and that the EVMWD has the capacity to produce 66,500 acre-feet per year of potable water. Considering the incremental increase in potable water production required by the proposed project and the remaining production capacity of the EVMWD, the proposed project would have a less than significant impact on water treatment and conveyance facilities.

For this study, assumptions on wastewater production from the proposed project are based on the estimated water demand of 17,820 gpd (0.02 mgd). Per California Regional Water Quality Control Board Order No. R8-2005-0003, the Lake Elsinore Wastewater Treatment Facility has a capacity of 8 mgd with an average flow of approximately 4.66 mgd, resulting in a remaining treatment capacity of approximately 3.34 mgd. Estimated wastewater flows from the proposed project would result in an incremental increase to treatment demands at the treatment plant. Therefore, this impact would be less than significant.

c) **Less Than Significant Impact**. The reader is referred to Impacts d) and e) in subsection 9, Hydrology and Water Quality, for further discussion of the project site's existing and proposed drainage. The project proposes to construct an on-site drainage system that would collect drainage at various points throughout the site and route it through a series of bioswales prior to reaching the existing detention basin and the ultimate discharge point, Murietta Creek. All proposed drainage improvements would be constructed on the project site. As such, impacts related to their construction are considered throughout this document as part of the proposed project and mitigated when applicable. Therefore, this impact would be less than significant.

d) **Less Than Significant Impact**. The project site is within the service boundary of the EVMWD, and the proposed development would connect to existing EVMWD water service infrastructure in Palomar Street. The EVMWD utilizes both groundwater and imported water supplies to ensure adequate water is available for consumers. Imported water is utilized to ensure that significant overdraft of local groundwater supplies does not occur. Imported water is obtained from the Metropolitan Water District, local surface water from Canyon Lake, and local groundwater from the Elsinore Basin. The EVMWD has access to groundwater from the Elsinore Basin, Coldwater Basin, San Bernardino Bunker Hill Basin, Rialto-Colton Basin, and Riverside-North Basin. Almost all of the groundwater production for potable use occurs in the Elsinore Basin. Imported water supply is purchased from the Metropolitan Water District via the Eastern Municipal Water District and Western Municipal Water District. The EVMWD plans to expand its recycled water

system to provide recycled water for irrigation users and to maintain water levels in Lake Elsinore during normal and dry years (EVMWD 2011). Per the Metropolitan Water District's (2010) Regional Urban Water Management Plan (RUWMP), the district indicates that its existing supplies are adequate to meet the projected demands in all hydrologic conditions through 2035. Based on the district's 2010 RUWMP, it is assumed that imported water is fully reliable during average, dry, and wet years. The EVMWD's (2011) Urban Water Management Plan projects a 2035 water demand of 65,258 acre-feet per year, with a projected supply of 70,581 acre-feet per year. As described in Impact b) above, the proposed project's projected water demand would be approximately 20 acre-feet per year. Because the project is consistent with the General Plan land use designation and the zoning for the site, the water demand is included in the 2011 Urban Water Management Plan. Development of the project was considered in the EVMWD Urban Water Management Plan as part of the City of Wildomar General Plan. Therefore, this impact would be less than significant.

e) **Less Than Significant Impact**. As described above, development on the project site would connect to existing water and sewer service infrastructure. Furthermore, the proposed project has received a service commitment letter (#2601-1) from the EVMWD indicating that it has sufficient capacity to serve the proposed project in addition to the district's existing customers. This impact would be less than significant.

f) **Less Than Significant Impact.** The main disposal site in the vicinity of the project site is the El Sobrante Landfill in Corona. The El Sobrante Landfill (CalRecycle Solid Waste Information System Number 33-AA-0217) is projected to reach full capacity of 184,930,000 tons in 2045 (CalRecycle 2014). The landfill covers approximately 1,322 acres and receives approximately 16,054 tons of solid waste per day. Based on an estimated solid waste generation rate of 0.5 lbs per student per day provided on CalRecycle's website, the proposed project would generate approximately 54 tons of solid waste per year (594 students x 0.5 lbs/student/day = 297 lbs/day x 365 days/year = 108,405 lbs/year/2,000 lbs/ton = 54.2 tons/year). This incremental generation is within the capacity of the El Sobrante Landfill. Therefore, this impact would be less than significant.

g) **Less Than Significant Impact**. Development on the project site would be subject to the Solid Waste Reuse and Recycling Access Act of 1991. The act requires that adequate areas be provided for collecting and loading recyclable materials such as paper products, glass, and other recyclables. City of Wildomar Municipal Code Section 8.104 regulates solid waste handling and mandates that sufficient receptacles be in place on-site to accommodate refuse and recycling. Compliance with state law and the City's Municipal Code will ensure that the project results in a less than significant impact.

**STANDARD CONDITIONS AND REQUIREMENTS**

1. As required by California Public Resources Code Section 42911, prior to the issuance of a building permit, the project applicant shall submit a recycling collection and loading area plan to the Riverside County Waste Management Division and the City of Wildomar Public Works Department.

**MITIGATION MEASURES**

None required.

## VI. MANDATORY FINDINGS OF SIGNIFICANCE

| Issues, does the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have the potential to 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, 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? | | ✓ | | |
| 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.) | | ✓ | | |
| c) Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly? | | ✓ | | |

**DISCUSSION**

The following are Mandatory Findings of Significance in accordance with CEQA Guidelines Section 15065.

a) **Less Than Significant Impact with Mitigation Incorporated.** Based on evaluations and discussion contained in this IS/MND, the proposed project has a very limited potential to incrementally degrade the quality of the environment because the site was previously disturbed. As discussed in subsection 4, Biological Resources, with implementation of mitigation measures **BIO-1** through **BIO-3,** the proposed project would have a less than significant impact on biological resources and would have no conflict with the MSHCP. Furthermore, as discussed in subsection 5, Cultural Resources, with implementation of mitigation measures **CUL-1** through **CUL-8** the proposed project would have a less than significant impact on archeological and paleontological resources. Therefore, the proposed project would not significantly affect the environment with implementation of the mitigation measures contained in this IS/MND.

b) **Less Than Significant Impact with Mitigation Incorporated**

**Aesthetics**

Implementation of the proposed project would not contribute to cumulative visual resource or aesthetic impacts. The project proposes several design measures to minimize light pollution. This project and other projects in the city are required to comply with the City's light pollution ordinance. Furthermore, the City's public use permit application process would ensure the proposed development is in compliance with the City's zoning and design standards and

guidelines, which regulate building design, mass, bulk, height, color, and compatibility with surrounding uses. Thus, the proposed project would have a less than cumulatively considerable impact to aesthetics.

**Agricultural Resources**

Implementation of the proposed project would not result in any impacts to agricultural or forestry resources and would therefore not contribute to cumulative impacts to these resources.

**Air Quality**

As previously stated, the SCAQMD's approach for assessing cumulative impacts is based on the Air Quality Management Plan forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. In other words, the SCAQMD considers projects that are consistent with the AQMP, which is intended to bring the basin into attainment for all criteria pollutants, to also have less than significant cumulative impacts. The discussion under Impact a) in subsection 3, Air Quality, describes the SCAQMD criteria for determining consistency with the AQMP and further demonstrates that the proposed project would be consistent with the plan. As such, the project would have a less than cumulatively considerable impact on air quality.

**Biological Resources**

Cumulative biological impacts are defined as those impacts resulting from development in the MSHCP Plan Area as a result of buildout of the cities in western Riverside County consistent with SCAG's regional growth projections. Regional growth projections are based on current land use designations that determine what the planned land use is for cities within the region. Since the proposed project would not include a change of the existing land use designation, cumulative impacts for the proposed project have been accounted for by SCAG and by the Riverside Conservation Authority (RCA), the agency that administers the MSHCP.

The potential for the proposed project to result in direct biological impacts is addressed through mitigation measures **BIO-1** through **BIO-3**. Therefore, the proposed project would have a less than cumulatively considerable impact on biological resources.

**Cultural Resources**

Development of the project site would contribute to a cumulative increase in potential impacts to cultural and paleontological resources. However, mitigation measures **CUL-1** though **CUL-8** would reduce the potential impacts associated with development on the project site. Thus, the project would have a less than cumulatively considerable impact.

**Geology and Soils**

Project-related impacts on geology and soils associated with development on the project site are site-specific, and development on the site would not contribute to seismic hazards or soil erosion. Implementation of mitigation measure **GEO-1** would result in decreased exposure to the risks associated with seismic activity. Therefore, the proposed project is anticipated to have no impact on cumulative geophysical conditions in the region.

**Greenhouse Gas Emissions**

The greenhouse gas analysis provided in subsection 7, Greenhouse Gas Emissions, analyzed the proposed project's cumulative contribution to global climate change and determined that the project would not create a cumulatively considerable environmental impact resulting from greenhouse gas emissions.

**Hazards and Hazardous Materials**

The proposed project is not expected to utilize or contribute to hazards associated with the accidental release of hazardous materials. Furthermore, compliance with federal, state, and city regulations would ensure that cumulative hazard conditions are less than cumulatively considerable.

**Hydrology and Water Quality**

Water quality measures included in the proposed project and the SWPPP prepared for the project would protect the quality of water discharged from the site during both construction and operation activities. Therefore, the project would have a less than cumulatively considerable impact on water quality. The site is not located within a flood hazard zone. Therefore, the proposed project would have a less than cumulatively considerable impact related to hydrology.

**Land Use and Planning**

The proposed project is consistent with the existing land use designation of the General Plan and the existing zoning for the site and, with implementation of mitigation measures **BIO-1** through **BIO-3**, would be consistent with the MSHCP. Therefore, the project would have a less than cumulatively considerable impact related to land use and planning.

**Mineral Resources**

The proposed project would have no impact related to mineral resources and would therefore not contribute to any cumulative impacts to such resources.

**Noise**

As discussed in subsection 12, Noise, operation of the proposed project would comply with all applicable noise standards and would have less than significant direct impacts related to noise. Project construction could result in some noise disturbance; however, these impacts would be temporary and would be restricted to daytime hours. Cumulative operational noise impacts associated with increases in vehicle traffic on roadways was also evaluated, and as shown in Table 11, the project's contribution to cumulative noise is between 0.0 and 1.2 dBA. As this is below the 3 dBA considered as the threshold of human hearing, the proposed project will not result in a cumulatively significant increase in ambient noise.

**Population and Housing**

The project proposes construction of a permanent campus for an existing school. Although enrollment is projected to increase with the addition of the new grade levels, the school would serve existing households within the area and would not result in substantial population growth in the city. The project would not displace any houses or people requiring the construction of new housing elsewhere. Therefore, the project would have a less than cumulatively considerable related to population and housing.

**Public Services and Recreation**

Implementation of the proposed project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the immediate area, may increase the demand for public services such as fire and police protection. However, as a standard condition of approval, the project applicant would be required to pay developer impact fees to fund the expansion of such services. Development of any future public facilities would be subject to CEQA review prior to approval that would identify and address any resulting impacts. Furthermore, the proposed project would provide new school and recreational facilities to serve city residents. Therefore, the proposed project would have a less than cumulatively considerable impact on public services.

**Transportation/Traffic**

Cumulative impacts to traffic in the region are anticipated by considering current approved land use designations. Specific ranges of the daily trips are assigned to particular land use types. Since the proposed project does not include a change in the land use designation of the project site, the proposed project's contribution to cumulative traffic impacts would be less than significant. In addition, as a standard condition, the project applicant would be responsible to implement and pay its fair-share contribution toward necessary improvements through payment of the Transportation Uniform Mitigation Fee. The project's impacts to cumulative traffic conditions would be less than cumulatively considerable.

**Utilities and Service Systems**

Implementation of the proposed project would increase demand for public utilities. However, because the proposed project is consistent with the existing land use designation for the site, its development was accounted for in long-range plans for the provision of such services. Therefore, the proposed project would have less than cumulatively considerable impacts on utilities and service systems.

c) **Less Than Significant Impact With Mitigation Incorporated**. The proposed project does not have the potential to significantly adversely affect humans, either directly or indirectly. While a number of the impacts were identified as having a potential to significantly impact humans, with implementation of the identified mitigation measures and standard requirements, these impacts are expected to be less than significant. With implementation of the identified measures, the proposed project is not expected to cause significant adverse impacts to humans. All significant impacts are avoidable, and the City of Wildomar will ensure that measures imposed to protect human beings are implemented.

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