# CHAPTER 3.0 ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

## 3.1 Effects Found Not Significant as Part of the DSEIR Process

### 3.1.1 Air Quality

The assessment of the Project's potential to have an adverse effect related to air quality is based on the technical study prepared for the Project. The results of the analysis presented below are included as an appendix to the DSEIR.

- Appendix K: *Air Quality Assessment for the Chinese Bible Church of San Diego* (Scientific Resources Associated, 2016a) and *Chinese Bible Church Revision to Project Description* (Scientific Resources Associates, 2016b)

The air quality assessment for the Project assumed that a preschool/kindergarten would be developed as part of the Project; however the design has since been changed to remove the preschool/kindergarten component. This change results in a reduction of trips and associated vehicular emissions. The report memorandum addresses this change and notes that the findings of the originally prepared air report are a conservative evaluation of potential impacts to air quality (Scientific Resources Associates, 2016b)

The Santa Fe Valley Specific Plan (SFVSP) EIR (SP95-001) was also reviewed to identify previously identified impacts and associated mitigation requirements. The SFVSP EIR identified potentially significant impacts related to air quality, specifically relating to construction emissions and vehicular emissions. Please see Section 3.1.1.1, below, for more information on the SFVSP EIR air quality analysis.

Comments received in response to the Notice of Preparation included:

- Air quality impacts related to vehicles finding parking
- Odors from church kitchen
- Construction impacts

These concerns are addressed in the attached report and summarized in this section. A copy of the NOP and comment letters received in response to the NOP are included in Appendix A.

#### 3.1.1.1 *Background*

Previous EIR Analysis

Air quality impacts were addressed in the SFVSP EIR. The EIR provided information related to air quality monitoring based on data from the Escondido station and analyzed construction and operational emissions as well as consistency with applicable regional air quality plans. Estimated emissions from construction activities exceeded thresholds for particulate matter with an aerodynamic diameter less than 10 microns ($PM_{10}$) and oxides of nitrogen (NOx) and impacts were determined to be significant. Operationally, the EIR also noted that due to emissions associated with an increase in area traffic

resulting from the buildout of cumulative projects in the Project area, it was likely that carbon monoxide (CO) standards would be exceeded. All other air quality impact were determined to be less than significant.

Mitigation measures aimed at reducing significant $PM_{10}$ and NOx emissions from fugitive dust and exhaust emissions resulting from construction activities (6A) and operational vehicular emissions of CO (6B) were identified in the Candidate CEQA Findings contained within the previous Final EIR and would be applicable to the Project:

- Mitigation Measure 6A required that prior to issuance of a grading permit and approval of improvement plans pursuant to all Tentative Maps in the SFVSP, the subdivider shall submit and have approved by the Director of Public Works, a construction dust abatement and management plan. This plan shall include all required measures contained in San Diego County Air Pollution Control District (SDAPCD) Nuisance/Dust Control Rule #51, and other applicable measures deemed necessary to meet these requirements. In addition, said plan shall include the following standards which exceed standard dust control requirements of the SDAPCD:
    - Sufficient water shall be applied to all graded areas to maintain minimum soil moisture content of four percent in the upper six inch soil stratum. Other equally effective dust palliatives may be substituted if drought conditions limit water availability.
    - Permanent landscaping shall be established within 90 days of the completion of grading, or the graded area shall be hydroseeded with an Interim groundcover plant mix immediately after grading, to minimize wind erosion, and irrigate as necessary to sustain groundcover vegetation.
    - All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods as appropriate.
    - All site grading, excavation, and travel on unpaved surfaces shall be terminated when hourly average wind speed exceeds 25 miles per hour.
    - Low pollutant emitting grading equipment shall be used.
    - Electrical grading equipment shall be used if feasible.
    - Caterpillar prechamber diesel engines or equivalent shall be used, together with proper maintenance and operation of vehicles to reduce emissions.
    - The Department of Public Works shall periodically monitor construction activities to ensure compliance with the dust control measures identified in the approved construction dust abatement and management plan.
- Mitigation Measure 6B required provision of a shuttle service between the resort, golf course, and regional transit services to reduce vehicle emissions by promoting the use of alternative transportation methods.

The mitigation measures identified above are applicable to the Project and implementation of these measures will be required as a condition of Project approval.

Changes Requiring New Analysis

Since certification of the SFVSP EIR, health impacts of particulate matter less than 2.5 microns in diameter [$PM_{2.5}$] have become better understood and this pollutant has been added to the list of criteria air pollutants. Even more recently, the issue of climate change/greenhouse gases has been incorporated into impact analysis requirements (refer to DSEIR Section 3.1.2, Greenhouse Gases). Therefore, a new air quality analysis has been prepared based on the March 19, 2007 *County of San Diego Guidelines for Determining Significance* and *Report Format and Content Requirements, Air Quality*. An air quality report was prepared for the Project by Valorie Thompson, on behalf of Eilar Associates. The complete report is included as Appendix J to this DSEIR.

### 3.1.1.2 *Existing Conditions*

Regional Meteorology/Climatology

The Project site is located in the San Diego Air Basin (SDAB). The Project area has a Mediterranean climate characterized by warm, dry summers and mild, wet winters. The average annual temperature in the Escondido area (the nearest climatic monitoring station where temperature data are measured) is 61.6 ºF, with an average maximum temperature of 75.9 ºF and an average minimum temperature of 47.4 ºF. The highest temperatures occur in July and August, when the average maximum temperatures are 88.2 ºF. The lowest temperatures occur in January, when the average minimum temperature is 37.1 ºF. The average annual precipitation is 17.46 inches. Most precipitation occurs from November through April. The climate of the SDAB is dominated by a semi-permanent high pressure cell located over the Pacific Ocean. This cell influences the direction of prevailing winds and maintains clear skies for much of the year.

The high pressure cell also creates two types of temperature inversions that may act to degrade local air quality. Subsidence inversions occur during the warmer months as descending air associated with the Pacific high pressure cell comes into contact with cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. The other type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses also can trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce ozone, commonly known as smog.

Regulatory Setting

Federal Regulations and Standards

*Federal Clean Air Act*

Air quality is defined by ambient air concentrations of specific pollutants identified by the United States Environmental Protection Agency (USEPA) to be of concern with respect

to health and welfare of the general public. The USEPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several pollutants (called "criteria" pollutants). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere.

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. The California Air Resources Board (CARB) has established the generally more stringent California Ambient Air Quality Standards (CAAQS) for the six criteria pollutants identified in the CAA through the California Clean Air Act (CCAA) of 1988, and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. The NAAQS and CAAQS are presented in Table 3.1-1, Ambient Air Quality Standards. Areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be "nonattainment areas" for that pollutant. On April 15, 2004, the SDAB was designated a basic nonattainment area for the 8-hour NAAQS for ozone ($O_3$). The SDAB was subsequently designated as a moderate nonattainment area for the 2008 8-hour $O_3$ NAAQS. In December 2016 an update to the regional air quality strategy (RAQS) and Eight-Hour Ozone Attainment Plan and Reasonably Available Control Technology Demonstration to attain the state $O_3$ standards in San Diego County was approved by Air Pollution Control Board.

State Regulations and Standards

*California Air Resources Board*

The CARB, a branch of the California EPA, is the state regulatory agency responsible for coordination of State and local air pollution control programs with authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The CARB is responsible for the development, adoption, and enforcement of the state's motor vehicle emissions program, as well as the adoption of the CAAQS. The CARB also reviews operations and programs of the local air districts, and requires each air district with jurisdiction over a nonattainment area to develop its own strategy for achieving the NAAQS and CAAQS. CARB produces a major portion of the SIP for pollution sources that are state-wide in scope (e.g., motor vehicles), consisting of the emissions standards for vehicular sources set by the CARB, and the attainment plans including the rules adopted by the local air districts and approved by the CARB.

CARB also monitors air quality. The CARB has establishes and maintains, in conjunction with local air pollution control agencies, a network of sampling stations known as the State and Local Air Monitoring Station network. These stations monitor the pollutant levels in the ambient air around the monitoring station. CARB is also responsible for setting emission standards for motor vehicles, consumer products, small utility engines, and off-road vehicles. The CARB is additionally responsible, in conjunction with the local air districts, for developing and maintaining the Assembly Bill

2588 Air Toxic "Hot Spots" program and for regulating toxic air contaminants (TAC) in general.

Local Regulations and Standards

*San Diego Air Pollution Control District*

An Air Pollution Control District (APCD) is a local or regional agency with authority to regulate stationary, indirect, and area sources of air pollution (e.g., power plants, highway construction, and housing developments) within a given area, and governed by a district air pollution control board composed of elected County supervisors of the counties that the individual APCD covers. In the County of San Diego, protection and regulation of air quality is the responsibility of the SDAPCD. The federal and state standards have been adopted by the SDAPCD for assessing local air quality conditions. Air districts, such as the SDAPCD, have the primary responsibility for control of air pollution from all sources other than emissions from motor vehicles, which are the responsibility of the CARB and USEPA as identified above. Under federal and state law, air districts are required to adopt and enforce rules and regulations to achieve the NAAQS and CAAQS, and enforce applicable federal and state laws. Since the passage of the CCAA and the CAA and Amendments, this role has been expanded to include the implementation of transportation control measures, and indirect source control programs to reduce mobile source emissions.

*Regional Air Quality Plans*

As previously stated, a nonattainment designation means that a primary NAAQS or CAAQS has been exceeded in a given area. For each nonattainment area within the state, the CCAA has specified air quality management strategies that must be adopted by the agency responsible for the nonattainment area. Each area must prepare and adopt an air quality management plan or RAQS, which identifies programs for attaining the CAAQS and NAAQS for all criteria pollutants. At present, no attainment plan for $PM_{2.5}$ or $PM_{10}$ is required by the state regulations.

The attainment plan for $O_3$ must demonstrate a five-percent-per-year reduction of $O_3$ precursors, including NOx and volatile organic compounds (VOCs). In cases where this reduction rate is not feasible, alternative strategies must be identified, and every feasible control measure implemented. The San Diego County RAQS for the SDAB was initially adopted in 1991 and subsequently revised, most recently in 2016. The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for $O_3$. In addition, the SDAPCD relies on the State Implementation Plan (SIP), which includes the SDAPCD's plans and control measures for attaining the $O_3$ NAAQS. The SIP is required under the CAA for areas that are out of attainment of air quality standards. The latest SIP update was submitted by the CARB to the USEPA in 2007 and was approved in 2012. The latest revisions were submitted by the CARB to the USEPA in 2011. The RAQS and SIP accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on sources to attain the standards. The County of San Diego RAQS relies on information from the San Diego Association of Governments (SANDAG) including the SANDAG Transportation Control Measures (TCM) Plan, as well as information regarding projected growth in the County,

to identify strategies for the reduction of stationary source emissions through regulatory controls. As such, projects that propose development that is consistent with the growth anticipated by the general plans would be consistent with the RAQS. In the event that a project would propose development that is less dense than anticipated within the general plan, the project would likewise be consistent with the RAQS. If a project proposes development that is greater than that anticipated in the general plan and SANDAG's growth projections, the project may be in conflict with the RAQS and SIP, and may have a potentially significant impact on air quality.

*SDAPCD Rules and Regulations*

As discussed above, state law provides that local air districts such as the SDAPCD have primary responsibility for controlling emissions from non-mobile (stationary) sources. The stationary source control measures identified in the RAQS and SIP have been developed by the SDAPCD into regulations through a formal rulemaking process. Rules are developed to set limits on the amount of emissions from various types of sources and/or by requiring specific emission control technologies (ECTs). Following rule adoption, a permit system is used to impose controls on new and modified stationary sources and to ensure compliance with regulations by prescribing specific operating conditions or equipment on a source. Of particular difficulty in San Diego County is ensuring that new or modified sources do not interfere with attainment or maintenance of the established air quality standards for $O_3$. Since $O_3$ is a secondary pollutant (i.e., $O_3$ is not directly emitted, but results from complex chemical reactions in the atmosphere from precursor pollutants), control of its precursors is required. Therefore, control of emissions of VOCs and NOx, the $O_3$ precursors, is essential.

*Rule 51 – Public Nuisance*[3]

SDAPCD Rule 51 and California Health & Safety Code, Division 26, Part 4, Chapter 3, Section 41700 prohibit the emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health or safety of the public. Projects required to obtain permits from the SDAPCD, typically industrial and some commercial projects, are evaluated by SDAPCD staff for potential odor nuisance and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance.

*Rule 54 – Dust and Fumes*[4]

SDAPCD Rule 54 prohibits discharge of dust or fumes, including lead and lead compounds, in any one hour in excess of maximum weights stated in the text of the rule.

[3] http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Prohibitions/APCD_R50-1-51.pdf
[4] http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Prohibitions/APCD_R54.pdf

*Rule 55 – Fugitive Dust Control*[5]

Applicable to any commercial construction or demolition activity capable of generating fugitive dust emissions, SDAPCD Rule 55 prohibits the discharge of visible dust emissions during construction and demolition beyond the property line for a combined three minutes in any 60-minute period. Rule 55 also requires minimization of visible roadway dust through track-out/carry-out and erosion control measures and the removal of such dust at the end of each work day or every 24 hours, whichever is more frequent.

*Rule 67.0.1 – Architectural Coatings*[6]

This rule sets limits of the VOC content of architectural coatings. Per Rule 67.0.1, VOCs are limited to 150 grams per liter (g/l) for exterior paints and 100 g/l for interior paints.

*Rule 1200 – Toxic Air Contaminants, New Source Review*[7]

Rule 1200 establishes acceptable risk levels and emission control requirements for new and modified facilities that may emit additional toxic air contaminants (TACs). Under Rule 1200, permits to operate may not be issued when emissions of TACs result in an incremental cancer risk greater than 1 in 1 million without application of Toxics-Best Available Control Technology (T-BACT), or an incremental cancer risk greater than 10 in 1 million with application of T-BACT, or a health hazard index (chronic and acute) greater than one. The human health risk analysis is based on the time, duration and exposures expected. T-BACT is determined on a case-by-case basis; however, examples of T-BACT include diesel particulate filters, catalytic converters and selective catalytic reduction technology.

*San Diego County Grading, Clearing and Watercourses Ordinance*

Section 87.428, Dust Control Measures, requires all clearing and grading to be carried out with dust control measures adequate to prevent creation of a nuisance to persons or public or private property. Clearing, grading or improvement plans shall require that measures such as the following be undertaken to achieve this result: watering, application of surfactants, shrouding, control of vehicle speeds, paving of access areas, or other operational or technological measures to reduce dispersion of dust. These project design measures are to be incorporated into all earth disturbing activities to minimize the amount of particulate matter emissions from construction.

*San Diego County Zoning Ordinance*

Section 6218 requires all commercial and industrial uses “be operated as not to emit matter causing unpleasant odors which is perceptible by the average person at or beyond any lot line of the lot containing said uses.” Section 6318 goes on to further provide specific dilution standards that must be met “at or beyond any lot line of the lot containing the uses.”

[5] http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Prohibitions/APCD_R55.pdf
[6] http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Prohibitions/APCD_R67-0-1.pdf
[7] http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Toxic_Air_Cotaminants/APCD_R1200.pdf

Background Air Quality

The SDAPCD operates a network of ambient air monitoring stations throughout San Diego County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the NAAQS and CAAQS. The nearest ambient monitoring station to the Project site is the Escondido monitoring station, which measures $O_3$, $PM_{10}$, $PM_{2.5}$, CO, and nitrogen dioxide ($NO_2$). Because the Escondido monitoring station is located in an area where there is some traffic congestion, it is likely that pollutant concentrations measured at this monitoring station are higher than concentrations that would be observed or measured in the Project area, and would thus provide a conservative estimate of background ambient air quality.

Ambient concentrations of pollutants between 2012 and 2014 are presented in Table 3.1-2, Ambient Background Concentrations. As shown, the 8-hour federal ozone standard was exceeded at the Escondido monitoring station five times in 2014. The standard was not exceeded in 2012 or 2013. The Escondido monitoring station has also measured exceedances of the 24-hour NAAQS for $PM_{2.5}$. The Escondido monitoring station has measured exceedances of the CAAQS for ozone and $PM_{10}$ during the period from 2012 to 2014. The data from the monitoring station indicates that air quality is in attainment of all other standards.

Criteria Air Pollutants

The following specific descriptions of health effects for each of the criteria air pollutants associated with Project construction and operations are based on information from USEPA (2007) and CARB (2001).

Ozone: $O_3$ is considered a photochemical oxidant, which is a chemical that is formed when VOCs and NOx, both by-products of combustion, react in the presence of ultraviolet light. $O_3$ is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at greatest risk from exposure to $O_3$.

Carbon Monoxide: CO is a product of combustion, and the main source of CO in the SDAB is from motor vehicle exhaust. CO is an odorless, colorless gas. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues. CO can cause health effects to those with cardiovascular disease, and can also affect mental alertness and vision.

Nitrogen Dioxide: $NO_2$ is also a by-product of fuel combustion, and is formed both directly as a product of combustion and in the atmosphere through the reaction of nitric oxide (NO) with oxygen. $NO_2$ is a respiratory irritant and may affect those with existing respiratory illness, including asthma. $NO_2$ can also increase the risk of respiratory illness.

Respirable Particulate Matter and Fine Particulate Matter: Respirable particulate matter, or $PM_{10}$, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or $PM_{2.5}$, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in this size range has been

determined to have the potential to lodge in the lungs and contribute to respiratory problems. $PM_{10}$ and $PM_{2.5}$ arise from a variety of sources, including road dust, diesel exhaust, combustion, tire and brake wear, construction operations and windblown dust. $PM_{10}$ and $PM_{2.5}$ can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis. $PM_{2.5}$ has the potential to lodge deeper in the lungs than $PM_{10}$.

Sulfur dioxide: Sulfur dioxide ($SO_2$) is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil, and by other industrial processes. Generally, the highest concentrations of $SO_2$ are found near large industrial sources. $SO_2$ is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to $SO_2$ can cause respiratory illness and aggravate existing cardiovascular disease.

Lead: Lead (Pb) in the atmosphere occurs as particulate matter. Pb has historically been emitted from vehicles combusting leaded gasoline, as well as from industrial sources. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the largest amounts of Pb emissions. Pb has the potential to cause gastrointestinal, central nervous system, kidney and blood diseases upon prolonged exposure. Pb is also classified as a probable human carcinogen.

Sulfates: Sulfates are the fully oxidized ionic form of sulfur. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to $SO_2$ during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of $SO_2$ to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. The CARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure to humans at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and due to the fact that they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide: Hydrogen sulfide ($H_2S$) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation. Breathing $H_2S$ at levels above the CAAQS would result in exposure to a very disagreeable odor. In 1984, a CARB committee concluded that the ambient standard for $H_2S$ is adequate to protect public health and to significantly reduce odor annoyance.

Vinyl Chloride: Vinyl chloride, a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants and hazardous waste sites, due to microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness and headaches. Long-term exposure to vinyl

chloride through inhalation and oral exposure causes liver damage. Cancer is a major concern from exposure to vinyl chloride via inhalation. Vinyl chloride exposure has been shown to increase the risk of angiosarcoma, a rare form of cancer in humans.

Toxic Air Contaminants: A toxic air contaminant is an air pollutant that may increase a person's risk of developing cancer and/or other serious health effects. Toxic air contaminants include more than 700 chemical compounds that have been determined to have potential adverse health impacts. The emission of a toxic chemical does not automatically create a health hazard. Other factors, such as the amount of the chemical, its toxicity, how it's released into the air, the weather, and the terrain, all influence whether the emission could be hazardous to human health.

#### 3.1.1.3 *Analysis of Project Effects and Determination as to Significance*

Conformance to the RAQS

Guidelines for the Determination of Significance

The Project would have a potentially significant environmental impact if it would:

- Conflict with or obstruct the implementation of the San Diego RAQS and/or applicable portion of the SIP.

*Guideline Source*

This guideline is taken from the *County of San Diego Guidelines for Determining Significance – Air Quality* (March 19, 2007).

Methodology

The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for $O_3$. In addition, the SDAPCD relies on the SIP, which includes the SDAPCD's plans and control measures for attaining the $O_3$ NAAQS. These plans accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain the standards. Mobile sources are regulated by the USEPA and the CARB, and the emissions and reduction strategies related to mobile sources are considered in the RAQS and SIP.

The RAQS relies on information from CARB and SANDAG, including projected growth in the County, mobile, area and all other source emissions in order to project future emissions and determine from that the strategies necessary for the reduction of stationary source emissions through regulatory controls. The CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County. As such, and as identified above, projects that propose development that is consistent with the growth anticipated by the general plans would be consistent with the RAQS. In the event that a project would propose development that is less dense than anticipated within the general plan, the project would likewise be consistent with the RAQS. If a project proposes development that is not consistent with the County of San Diego General Plan and SANDAG's growth projections, the project would be in conflict with the RAQS and SIP, and may have a potentially significant impact on air quality. This

situation would warrant further analysis to determine if the Project and the surrounding projects exceed the growth projections used in the RAQS for the specific sub-regional area.

Analysis

The site is currently zoned as S88, planned in the SFVSP as a Low Medium residential area with 1 dwelling unit to 1 to 1.9 acres. The site was rezoned in 1998 to half-acre lots with unlimited floor area ratios and lot coverage. The Project would require a major use permit to allow for the construction and operation of the proposed church facility.

The Project is not proposing housing on site that would be more dense than anticipated in the General Plan. The Project is also not creating new jobs that would increase vehicle miles traveled; rather, the Project's employment is moving from the church's existing location. The Project does not extend infrastructure to previously undeveloped areas, nor is the Project of such magnitude (either in terms of employment or services provided) that it would result in substantial numbers of people relocating to the area to access the Project. The Project does not induce growth within the SFVSP Area. Therefore, the Project would not exceed SANDAG's population, housing, or employment projections for the Specific Plan Area.

Adjacent to the SFVSP, six churches were planned in the 4S Ranch Village. To date, none have been built to provide local access to places of worship. The Project would be consistent with the 4S Ranch Specific Plan by providing this use adjacent to the 4S Ranch Village. The County's General Plan includes general civic uses, and promotes the siting of civic uses near Villages. The Project meets the needs of the community, and will provide a civic use for the local residents. Because it provides a civic use that meets the needs of the community adjacent to the Village, vehicle miles traveled would be reduced by the Project because church members would not be required to drive out of the area to attend church. Because the Project would help reduce vehicle miles traveled by providing a civic use within the Village, the Project is consistent with the General Plan.

In addition, because the Project involves moving existing church uses spread across three locations to the Project site, a portion of the emissions associated with vehicles traveling to the church already exist within the SDAB and are not new emissions. Based on the analysis presented in the Greenhouse Gas Analysis (RECON 2017), the annual vehicle miles traveled from the point of origin to the Project location would decrease slightly from the vehicle miles traveled from the point of origin to the existing church locations. Based on this calculation, the reduction in annual vehicle miles traveled would result in a slight reduction in the emissions of ozone precursors within the SDAB.

The Project is consistent with current land uses and provides a civic use adjacent to the Village. Therefore, the Project is consistent with the RAQS and SIP.

As part of its attainment planning process, the SDAPCD proposes and adopts rules and regulations to control air pollutants to demonstrate further progress toward attainment as part of the RAQS and SIP. The Project also will comply with any applicable rules and regulations that have been adopted as part of the RAQS and SIP by the SDAPCD.

In addition, as discussed in greater detail below in Section 3.1.2.2, Project-generated construction and operational emissions would not exceed applicable San Diego County screening level thresholds for criteria air pollutants and therefore would not result in adverse air quality impacts. For these reasons, impacts are **less than significant**.

Conformance to Federal and State Ambient Air Quality Standards

Guidelines for the Determination of Significance

The Project would have a potentially significant environmental impact if it would:

- Result in emissions that would violate any air quality standards or contribute substantially to an existing or projected air quality violation, as follows:
    - Ozone Precursors: result in emissions that exceed 250 pounds per day (lbs/day) of NOx or 75 lbs/day of VOCs
    - Carbon Monoxide: result in emissions of CO of 550 lbs/day and, when totaled with the ambient concentrations, would exceed a 1-hour concentration of 20 parts per million (ppm) or an 8-hour average of 9 ppm
    - Fine Particulate Matter: result in emissions of $PM_{2.5}$ that exceed 55 lbs/day
    - Particulate Matter: result in emissions of $PM_{10}$ that exceed 100 lbs/day and increase the ambient $PM_{10}$ concentration by five micrograms per cubic meter or greater at the maximum exposed individual.

*Guideline Source*

This guideline is taken from the *County of San Diego Guidelines for Determining Significance – Air Quality* (2007).

Methodology

To determine whether the Project would result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation, Project emissions are evaluated based on the quantitative emission thresholds established by the SDAPCD. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIA). The County of San Diego has also adopted the South Coast Air Quality Management District's (SCAQMD) screening threshold of 55 lbs/day or 10 tons/year as a significance threshold for $PM_{2.5}$. The screening thresholds are presented in Table 3.1-3, Screening Level Thresholds for Air Quality Impact Analysis. Emissions from the construction phase of the Project were estimated using the CalEEMod Model, Version 2013.2.2 (ENVIRON 2013).

CalEEMod relies on the total area of the site and estimates site disturbance based on the maximum acres that can be graded given the construction equipment input in an 8-hour day. To account for standard dust control measures within the CalEEMod Model, it was assumed that watering active grading areas three times a day would reduce particulate matter emissions by 61 percent. This watering requirement is identified as a design feature for the Project. Architectural coatings would also be required to meet the requirements of SDAPCD Rule 67.0, which limits VOC content to 150 g/l for exterior

paints and 100 g/l for interior paints. This rule was taken into account in the CalEEMod Model as well.

In addition to the two design features listed above, the following best management practices were assumed to be implemented during Project construction:

- Dust control during equipment loading and unloading
- Application of water three times daily to unpaved roads
- Reduction of speeds to 15 MPH on unpaved roads
- Use of a construction fleet that uses CARB certified Tier III or IV equipment. It should be noted that even with the assumption that the construction fleet is represented by the average fleet for the years 2016 to 2018, the impact would not exceed the County's threshold of 10 in a million, when more stringent standards will apply. The average fleet does include equipment that is rated to Tier II and Tier III. Actual construction is projected after 2018, and as time progresses, more of the construction equipment in the fleet will meet more stringent standards.

Operationally, Project-generated traffic was analyzed in the Project's traffic impact study (KOA Corporation 2017). According to the traffic study, under buildout conditions the weekday trip generation would be 914 average daily traffic (ADT). The Sunday trip generation would be 2,775 ADT. Based on these trip generation figures, operational emissions were also estimated using CalEEMod Model, Version 2013.2.2 (ENVIRON 2013), assuming an operational year of 2016 for Phase 1 and 2018 for Phase 2. These assumptions are conservative because emissions from vehicles decrease with time due to increasingly stringent emission standards.

For analysis of the formation of CO hotspots, the Caltrans Intelligent Transportation Systems (ITS) Transportation Project-Level Carbon Monoxide Protocol (Caltrans 1998) was followed to determine whether a CO hotspot was likely to form due to Project-generated traffic. In accordance with the Protocol, CO hotspots are typically evaluated when (a) the level of service (LOS) of an intersection or roadway decreases to LOS E or worse; (b) signalization and/or channelization is added to an intersection; and (c) sensitive receptors such as residences, commercial developments, schools, hospitals, etc. are located in the vicinity of the affected intersection or roadway segment.

Analysis

*Construction Impacts*

The Project would be constructed in two phases. The first phase includes a 1,000 seat main sanctuary and ancillary facilities. The second phase would expand the main sanctuary to 1,500 seats, with construction of additional classrooms, offices, recreation facilities, café, bookstore, and kitchen. For the purpose of estimating emissions from construction, it was assumed that the main grading activities would occur during Phase 1 of construction, and that Phase 2 would involve only fine grading activities.

Emissions of pollutants such as fugitive dust and heavy-duty equipment exhaust that are generated during construction are generally highest near the construction site.

Construction emission calculations were based on the construction phases as well as equipment and crew requirements identified for the Project by the Project developer and construction contractors. Table 3.1-4, Construction Phases and Equipment/Crew Requirements, summarizes the equipment assumed for each construction phase.

Construction impacts would be potentially significant if they exceed the quantitative screening-level thresholds for attainment pollutants ($NO_2$, $SO_2$, and CO), and would result in a significant impact if they exceed the screening-level thresholds for nonattainment pollutants ($O_3$ precursors and $PM_{10}$ and $PM_{2.5}$). Tables 3.1-5a, Maximum Daily Estimated Construction Emissions, Phase I, and 3.1-5b, Maximum Daily Estimated Construction Emissions, Phase 2, provide a summary of the construction emission estimates. As shown, maximum simultaneous emissions are projected to be below the screening level thresholds for all criteria pollutants.

- Phase 1 and Phase 2 NOx emissions would be 96.27 lbs/day and 48.60 lbs/day, respectively. This is below the screening threshold of 250 lbs/day.
- Phase 1 and Phase 2 VOC emissions would be 20.81 lbs/day and 4.60 lbs/day, respectively. This is below the screening threshold of 75 lbs/day.
- Phase 1 and Phase 2 CO emissions would be 63.84 lbs/day and 31.10 lbs/day, respectively. This is below the screening threshold of 550 lbs/day.
- Phase 1 and Phase 2 $PM_{10}$ emissions would be 10.22 lbs/day and 4.47 lbs/day, respectively. This is below the screening threshold of 100 lbs/day.
- Phase 1 and Phase 2 $PM_{2.5}$ emissions would be 7.28 lbs/day and 3.24 lbs/day, respectively. This is below the screening threshold of 55 lbs/day.
- Phase 1 and Phase 2 sulfur oxides (SOx) emissions would be 0.08 lbs/day and 0.04 lbs/day, respectively. This is below the screening threshold of 250 lbs/day.

In summary, construction emissions would not exceed any screening level thresholds and impacts would be **less than significant**.

*Operational Impacts*

The primary operational impacts associated with the Project would be mobile-source emissions associated with Project-generated traffic. Additional emissions would be associated with area sources such as consumer products and landscaping equipment and energy use.

The results of the emissions calculations, in lbs/day and tons/year, are summarized in Table 3.1-6, Total Operational Emissions, for buildout conditions, along with emissions associated with area sources and energy use, and a comparison with the County of San Diego significance criteria. These calculations assume excessive idling would not occur while finding parking, as a total of 417 off-street parking spaces would be provided, 42 more than required by the County of San Diego Zoning Ordinance, and an adjacent DG lot would be available to accommodate overflow parking.

Operational impacts would be potentially significant if they exceed the quantitative screening-level thresholds for attainment pollutants ($NO_2$, $SO_2$, and CO), and would result in a significant impact if they exceed the screening-level thresholds for nonattainment pollutants ($O_3$ precursors and PM). As shown in Table 3.1-6, maximum emissions associated with the Project are below the County's screening level thresholds for all pollutants.

- Operational NOx emissions would be 15.81 lbs/day. This is below the screening threshold of 250 lbs/day. VOC emissions would be 10.75 lbs/day. This is below the screening threshold of 75 lbs/day.
- Operational CO emissions are estimated to be 77.17 lbs/day. This is below the screening threshold of 550 lbs/day**.**
- Operational $PM_{10}$ emissions would be 11.20 lb/day. This is below the screening threshold of 100 lbs/day.
- Operational $PM_{2.5}$ emissions would be 3.14 lbs/day. This is below the screening threshold of 55 lbs/day.
- Operational SOx emissions would be 0.17 lbs/day. This is below the screening threshold of 250 lbs/day.

In summary, operational air quality emissions would not exceed any screening thresholds and therefore impacts would be **less than significant**.

*CO Hotspot Analysis*

Projects that generate traffic may result in the formation of locally high concentrations of CO, known as CO hotspots at intersections affected by the Project. Intersections with high levels of peak-hour traffic and long idling times have the potential to result in CO hotspots. A CO hotspot analysis was conducted based on approved methodologies and Project-specific traffic data.

The Traffic Impact Study (KOA Corporation, 2017) evaluated ten intersections in the Project vicinity to evaluate the level of service for existing, existing plus Project, near-term, and buildout conditions. It determined that project-level impacts were not significant. The Project would contribute to the Transportation Impact Fee (TIF) program as required by County ordinance. The lack of impacts to LOS and/or delay indicates CO hotspots would not be anticipated.

The SFVSP EIR included a mitigation measure to reduce vehicular emissions. Specifically, the Project would promote the use of alternative transportation methods, including the provision of two vans that would pick up patrons. Additionally, the air quality analysis identified that the SCAQMD in their attainment demonstration for the CO standard modeled the three most congested intersections in the City of Los Angeles, plus an additional intersection within the South Coast Air Basin (SCAB) that was subject to high background concentrations of CO, and demonstrated that these intersections would not experience a CO hotspot.

These intersections studied by SCAQMD experience more than 100,000 ADT. In contrast, the intersection at Camino Del Norte and Four Gee Road would experience far less traffic than the intersections studied for the SCAB attainment demonstration. Intersections within the study area for the Project would therefore experience less congestion than the attainment demonstration study intersections, and would also experience lower levels of gasoline-powered vehicles than the study intersections. Therefore, the air quality analysis concluded that even if mitigation measures were not required for traffic, because the ADT at all intersections studied for the Project is well below the levels studied by the SCAQMD in their CO attainment demonstration, no CO hotspots would result from Project traffic. Therefore, no mitigation measures would be required to reduce air quality impacts from Project traffic. Impacts would be **less than significant**.

Impacts to Sensitive Receptors

Guidelines for the Determination of Significance

The project will result in a significant impact to air quality if:

- The project will expose sensitive receptors to substantial pollutant concentrations by placing sensitive receptors near CO hotspots or creating CO hotspots near sensitive receptors or project implementation will result in exposure to TACs resulting in a maximum incremental cancer risk greater than 1 in 1 million without application of T-BACT or a health hazard index greater than one.

*Guideline Source*

This guideline is taken from the *County of San Diego Guidelines for Determining Significance – Air Quality* (2007).

Methodology

To evaluate whether Project construction could pose a significant impact to nearby sensitive receptors, an evaluation of diesel exhaust particulate matter was conducted. Diesel exhaust particulate matter is known to the state of California as a carcinogenic compound, which can cause adverse health impacts with long-term exposure. The risks associated with exposure to substances with carcinogenic effects are typically evaluated based on a lifetime of chronic exposure, which is defined in the California Office of Environmental Health Hazard Assessment (OEHHA) guidelines, *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 2015), as 24 hours per day, 7 days per week, 350 days per year, for 30 years. Diesel exhaust particulate matter would be emitted during Project construction from the operation of heavy-duty equipment at the site.

To assess whether there is a potential for a significant impact associated with exposure to diesel exhaust particulate matter, a health risk evaluation was conducted. The analysis considered the proposed construction equipment list and estimates of the duration and location of use for each piece of equipment. Any project which has the potential to directly impact a sensitive receptor located within one mile and results in a health risk greater than the risk significance thresholds listed above would be deemed to have a potentially significant impact. For the purpose of this analysis, a one-mile

distance from the site provides a conservative means of evaluating significance. Sensitive receptors in the vicinity of the site include residences to the south on Wild Horse Glen, residences to the north of Campania Avenue, and residences to the east on Silver Crest Lane.

The USEPA's approved air dispersion model, AERMOD (USEPA 2009), was used to estimate the downwind impacts at the closest receptors to the construction site. The model was run using preprocessed meteorological data from the Escondido surface meteorological monitoring station provided by the SDAPCD. Risks were estimated using the OEHHA's 2015 Air Toxic Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. The risk predicted using the equation presented in the guidance manual is then compared to the County's significance threshold for health risk (10 in 1 million, assuming implementation of T-BACT pursuant to SDAPCD Rule 1200).

Analysis

Air quality regulators typically define "sensitive receptors" as schools (preschool through 12$^{th}$ grade), hospitals, resident care facilities, day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. For the purpose of CEQA analysis, the County of San Diego definition of sensitive receptors also includes residences (County of San Diego 2007). The two primary emissions of concern for impacts to sensitive receptors are CO and diesel particulate matter. As discussed in Section 3.1.1.2, above, operational impacts would not result from CO hotspots. This analysis therefore focuses on diesel particulate matter.

The Project would result in emissions of diesel exhaust particulate matter during construction activities and from truck traffic associated with project operations. Based upon the health risk assessment presented in the air quality report (DSEIR APPENDIX I), which utilized the equipment list and associated diesel particulate emissions for each piece of equipment to calculate equipment usage in each construction zone, the maximum concentration at an off-site receptor is 1.31454 micrograms per cubic meter ($\mu g/m^3$). The maximum excess cancer risk predicted at the nearest residential receptor, calculated from the maximum off-site receptor concentration, would be 7.59 in one million. This value is below the County of San Diego's significance threshold of 10 in 1 million with implementation of T-BACT. In addition, the chronic hazard was calculated based on the potential for adverse non-cancer health effects associated with exposure to diesel particulate matter. The chronic hazard quotient, which is generally driven by the calculated cancer risk, for construction of the Project was calculated to be 0.263, which is below the County's significance hazard threshold of 1.0 as presented in Table 3.1-3.

As identified above, the Project would require as a design feature that the construction contractor provide a construction fleet that uses CARB certified Tier III or IV equipment. If construction fleets cannot meet this requirement, the applicant will use the best available fleet. It should be noted that with the assumption that the construction fleet is represented by the average fleet for 2016, the impact would not exceed the County's

threshold of 10 in one million. The average fleet does include equipment that is rated to Tier II and Tier III, and because construction would take place after 2018, as time progresses more of the construction equipment in the fleet will meet more stringent standards. The analysis is therefore conservative.

The excess cancer risk and non-cancer hazard associated with exposure to diesel particulate from construction of the Project would not exceed the applicable threshold of significance for health risk and impacts are therefore **less than significant**.

Operational vehicular traffic may result in emissions of TACs. Minor amounts of TACs are found in light-duty vehicle exhaust; however, the main source of on-road TACs is from diesel-powered heavy-duty trucks. Because the Project is a multiple use religious assembly, the amount of truck traffic is expected to be minimal during Project operation, and no risks to surrounding sensitive receptors would be anticipated from Project operations.

In summary, impacts to sensitive receptors from diesel particulate emissions and TACs would be **less than significant**.

Odor Impacts

Guidelines for the Determination of Significance

The project will result in a significant impact to air quality if:

- The project which is not an agricultural, commercial or an industrial activity subject to SDAPCD standards, as a result of implementation, will either generate objectionable odors or place sensitive receptors next to existing objectionable odors, which will affect a considerable number of persons or the public.

*Guideline Source*

This guideline is taken from the *County of San Diego Guidelines for Determining Significance – Air Quality* (2007).

Methodology

A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of offsite receptors.

Analysis

*Construction-Related Odors*

Project construction could result in minor amounts of odor compounds associated with diesel heavy-duty equipment exhaust. Due to the distance of sensitive receptors to the Project site, and because any construction activity that would occur in the vicinity of existing receptors would be temporary, any odors would dissipate over distance to these sensitive receptors and impacts associated with odors during construction are therefore not considered substantial.

*Operation-Related Odors*

For operations, according to the *SCAQMD CEQA Air Quality Handbook* (SCAQMD 1993), land uses associated with odor complaints are agricultural operations, wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding plants. The Project is not in any of these categories, and is not proposing any of these uses.

The Project includes a small café with a commercial kitchen. Prior to construction of the café and kitchen, the Project Applicant will be required to submit plans to the Plan Check and Construction Unit of the County of San Diego Department of Environmental Health (DEH) Food and Housing Division (FHD) for review and approval. Plans must be submitted and approved by DEH prior to the start of construction and prior to the issuance of building permits. DEH will also conduct construction inspections while the proposed facility is being built and grant the final approval for the facility to open for operation once the work is complete.

DEH inspects and enforces the California Retail Food Code, the California Plumbing Code, and the California Mechanical Code. As provided in the County of San Diego Food Facility Plan Review Guide, a hood-exhaust system is required for the food facility to remove the by-products (e.g., smoke, steam, grease, vapors, and heat of cooking). All hoods, ducts, and exhaust outlets are required to be installed in accordance with the current edition of the Uniform Mechanical Code Chapter on Commercial Kitchen Ventilation Systems as adopted by the local building inspection departments.

Since the proposed kitchen would be required to undergo DEH plan review prior to obtaining a building permit, and would be constructed per and inspected for compliance with State and local building codes related to kitchen ventilation systems, the Project would not result in significant odors emanating from the kitchen facility.

Furthermore, all sources within the SDAB are subject to Rule 51, Nuisance, which requires that a facility “shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.” Rule 51 prohibits emissions of odors that would cause a nuisance. Multiple use religious assemblies must operate without violating applicable odor regulations. Therefore, the Project is not considered a source of objectionable odors from operations.

Because the Project would not generate objectionable odors or place sensitive receptors near existing odor sources that would affect a considerable number of persons or the public during Project construction or operation, odor impacts are **less than significant**.

#### 3.1.1.4 *Cumulative Impact Analysis*

Guidelines for the Determination of Significance

The project will result in a significant impact to air quality if:

- The project will result in a cumulatively considerable net increase of any criteria pollutant for which the SDAB is nonattainment under an applicable NAAQS or CAAQS.
- A project that has a significant direct impact on air quality with regard to emissions of $PM_{10}$, $PM_{2.5}$, NOx, and/or VOCs would also have a significant cumulatively considerable net increase.
- In the event direct impacts from a proposed project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions of concern from the proposed project, in combination with the emissions of concern from other proposed projects or reasonably foreseeable future project within a proximity relevant to the pollutants of concern, are in excess of the thresholds identified in Table 3.1-3.

Guideline Source

This guideline is taken from the *County of San Diego Guidelines for Determining Significance – Air Quality* (2007).

Methodology

As discussed above, the SDAB is considered a nonattainment area for the NAAQS for $O_3$ and the CAAQS for $O_3$, $PM_{10}$, and $PM_{2.5}$. To determine whether the Project would result in a cumulatively considerable net increase of $PM_{10}$ and $PM_{2.5}$ or exceed quantitative thresholds for $O_3$ precursors, $NO_X$ and VOCs, Project emissions are evaluated based on the quantitative emission thresholds established by the SDAPCD as presented above in Table 3.1-3.

Analysis

Cumulative Construction Emissions

Cumulatively considerable net increases of criteria pollutants during the construction phase would typically happen if two or more projects near each other are under construction simultaneously.

The emissions budget for 2015 in the SIP, as reported on the CARB's website, includes the following emissions for construction for the SDAB:

- Off-Road Equipment: 10.05 tons/day VOC, 11.79 tons/day NOx
- Construction Fugitive Dust: 28.67 tons/day $PM_{10}$, 2.87 tons/day $PM_{2.5}$

Project-related emissions of nonattainment pollutants would be below the construction emissions evaluated in the RAQS and SIP for construction projects, and are also below the significance thresholds set forth by the County of San Diego.

The following cumulative projects were identified in the vicinity of the Project:

- Lot 11 – 290,000 square feet of office uses (under construction)
- Lots A & B – 390,000 square feet of office uses (planned)
- 4S Ranch Village Phase 2 – two additional buildings (completed)

- The Vista – 270,000 square feet of office uses (unoccupied)
- BMR North Village – multiple uses (nearly completed)

It is likely that Lot 11 would be complete by the time the Project is under construction. Lots A & B could be under construction simultaneously with the Project. In general, impacts associated with fugitive dust from construction are localized and would affect the area within approximately one-quarter mile of the Project site.

Based upon modeling conducted as part of the Project's air quality study, fugitive $PM_{10}$ concentrations would decrease with distance from the fence line. At approximately 330 feet from the Project boundary, the concentration of $PM_{10}$ would decrease by 99 percent. None of the cumulative projects are located within 330 feet of the Project site. Because impacts would be limited to localized areas and emissions are below the significance thresholds, impacts would be less than cumulatively considerable. Thus cumulative air quality impacts related to construction emissions would be **less than significant.**

Cumulative Operational Emissions

A project would result in a cumulatively significant impact related to operational emissions if the project results in a significant contribution to the cumulative increase in NOx, VOCs, $PM_{10}$, and $PM_{2.5}$. A project that does not conform to the RAQS and/or has a significant direct impact on air quality with regard to operational emissions of nonattainment pollutants would also have a cumulatively considerable net increase.

As presented in Table 3.1-6, operational emissions of nonattainment pollutants ($PM_{10}$, $PM_{2.5}$, NOx, and VOCs) would be below the screening level thresholds for Project operations. The Project would therefore not result in a cumulatively considerable net increase in nonattainment pollutants.

The evaluation of CO hotspots took into account cumulative traffic at the intersections, and no exceedance of the CO standard would result from cumulative traffic.

The Project is consistent with the RAQS and SIP because it provides a civic use adjacent to the Village, is consistent with SANDAG projections, and would not increase vehicle miles traveled. Thus cumulative impacts would be **less than significant**.

#### 3.1.1.5 *Significance of Impacts*

Based on the analysis in this section, all Project-level and cumulative air quality impacts would be less than significant. The Project incorporates design features to minimize fugitive dust during construction, reduce construction equipment emissions, and require low-VOC paints for finishing.

#### 3.1.1.6 *Conclusion*

The Project incorporates design features that will minimize fugitive dust during construction, require the use of low-VOC architectural coating and require emission-reducing equipment on the construction fleet pursuant to SDAPCD Rule 1200. The

Project was found to be consistent with the RAQS and SIP. Project- and cumulative-level construction and operational emissions were determined to be below screening level thresholds for all criteria pollutants and impacts were determined to be less than significant. Impacts to sensitive receptors were determined to be less than significant due to the distance of the sensitive receptors from the Project site. Finally, odor emissions were determined to be less than significant. In summary, all air quality emissions for the Project will be **less than significant** and no mitigation is required.

### 3.1.2 Greenhouse Gases

The assessment of the Project's potential to have an adverse effect related to greenhouse gas (GHG) emissions is based on the technical study prepared for the Project. The results of the analysis presented below are included as an appendix to the DSEIR.

- Appendix L: Chinese Bible Church Global Climate Change Analysis (RECON Environmental, August 2017)

Comments received in response to the Notice of Preparation (NOP) related to GHGs and global climate change (GCC) included:

- Project Compliance with the California Air Pollution Control Officer's Association (CAPCOA) GHG guidance, and

Quantifying GHG reductions for the Project

#### 3.1.2.1 *Background*

Although air quality was addressed in the Santa Fe Valley Specific Plan EIR, GHGs and their contribution to global climate change was not. Since the previous EIR was adopted in 1995, the California Environmental Quality Act (CEQA) Guidelines were amended (March 2010) to require that the potential environmental effects of GHGs be addressed in CEQA documents. Therefore, a Global Climate Change Analysis (January 2017) has been prepared based on current CAPCOA guidance to evaluate potential environmental impacts associated with the Project's emissions of GHGs, and the effects of global climate change (GCC) on the Project.

#### 3.1.2.2 *Existing Conditions*

Global climate change is a change in the average weather of the earth, which can be measured by wind patterns, storms, precipitation, and temperature. The earth's climate is in a state of constant flux, with periodic warming and cooling cycles. Extreme periods of cooling are termed "ice ages," which may then be followed by extended periods of warmth. For most of the earth's geologic history, these periods of warming and cooling have been the result of many complicated, interacting natural factors that include volcanic eruptions which spew gases and particles (dust) into the atmosphere, amount of water, vegetation, and ice covering the earth's surface, subtle changes in the earth's orbit, and amount of energy released by the sun (sun cycles). However, since the beginning of the Industrial Revolution around 1750, the average temperature of the

earth has been increasing at a rate that is faster than can be explained by natural climate cycles alone.

GHGs influence the amount of heat that is trapped in the earth's atmosphere and thus play a critical role in determining the earth's surface temperature. Outgoing infrared radiation is absorbed by GHGs, resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on earth. With the Industrial Revolution came an increase in the combustion of carbon-based fuels such as wood, coal, oil, and biofuels, as well as the creation of GHG-emitting substances not found in nature. Such human activities have increased atmospheric GHG levels in excess of natural ambient concentrations. This has led to a trend of unnatural warming of the earth's atmosphere and oceans, with corresponding effects on global circulation patterns and climate.Greenhouse Gases of Primary Concern

There are numerous GHGs, both naturally occurring (i.e., biogenic) and artificial (i.e., anthropogenic). Table 3.1-7, Global Warming Potentials and Atmospheric Lifetimes, summarizes some of the most common. Each GHG has a variable atmospheric lifetime and global warming potential (GWP).

Although there are dozens of GHGs, state law defines GHGs as the following seven compounds: carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride ($SF_6$), and nitrogen trifluoride ($NF_3$). Of these gases, $CO_2$, $CH_4$, and $N_2O$ are produced by both biogenic and anthropogenic sources, and are the GHGs of primary concern in this analysis. The remaining gases occur as the result of industrial processes, such as refrigeration, aluminum production, semiconductor manufacture, and insulation in electric power transmission and distribution equipment, and are not of primary concern to this analysis.

Sources of GHG Emissions

The main sources of GHG emissions and the major sectors identified for emissions reductions strategies by the California Air Resources Board (CARB) include transportation, electric power, residential, commercial, industrial land uses, recycling and waste, high global warming potential sources, agriculture, and forestry. Two of these GHG emission sectors account for the majority of GHG emissions generated within California: transportation and electric power.

The transportation sector includes the GHG emissions associated with on-road vehicles, off-road vehicles, aviation, ships, and rail. GHG emissions from on-road and off-road vehicles are generated from the engines' combustion of fossil fuels and thus are typically estimated based on fuel type, fuel quantity consumed, and vehicle miles traveled (VMT). $CO_2$ emissions account for the majority of GHG emissions from mobile sources and are directly related to the quantity of fuel combusted, while $CH_4$ and $N_2O$ emissions depend more on the emissions-control technologies employed in the vehicle and distance traveled.

Emissions from the electric power sector, as measured statewide, represent the GHG emissions associated with use and production of electrical energy, including electricity generated out of state. Electricity use is associated with fulfilling commercial, residential and industrial energy needs, as well as with collecting, treating, storing, and distributing water, wastewater, and solid waste.

Direct GHG emissions from the commercial and residential sector include area sources such as landscape maintenance equipment, fireplaces, and natural gas consumption for space and water heating. Indirect GHG emissions are also generated off-site at electricity-generating plants to meet commercial and residential electricity demand for heating, cooling, ventilating, lighting, and appliance needs. At the state level, these indirect electricity emissions are counted in the electric power sector. At the project-level, both the electricity and natural gas needs of a project are counted in the operational emissions estimates.

GHG emissions associated with industrial land uses, such as manufacturing plants and refineries, are predominantly comprised of stationary sources (e.g., boilers and engines) associated with industrial processes.

The recycling and waste sector represents the GHG emissions associated with operations at waste management facilities and landfills. GHG emissions are generated from solid waste disposal (including emissions associated with anaerobic and aerobic decomposition that primarily produce $CH_4$ and $CO_2$ emissions, respectively) and alternative daily cover (i.e., organic material used to cover waste piles, which also decompose and generate GHG emissions).

Examples of high global warming potential GHG sources include refrigerants (e.g., HFCs), industrial gases (e.g., PFCs and $NF_3$), and electrical insulation (e.g., $SF_6$). Although these GHGs are typically generated in much smaller quantities than $CO_2$, their high GWP results in considerable carbon dioxide equivalent ($CO_2e$) statewide.

The agriculture sector represents the GHG emissions associated with agricultural processes as generated through the use of off-road farm equipment, irrigation pumps, residue burning, livestock, and fertilizer volatilization.

GHG emissions associated with the forestry sector include emissions from forest and rangeland fires and other disturbances such as pest damage, timber harvesting, wood waste decomposition, and other sources. CARB also tracks sinks or sequestration (i.e., the removal of $CO_2$) associated with forestry.

Potential Climate Change Impacts

The increase in the earth's temperature is expected to have wide-ranging effects on the environment. Although global climate change is anticipated to affect all areas of the globe, there are numerous implications of direct importance to California. Statewide average temperatures are anticipated to increase by between 3 and 10.5 degrees Fahrenheit (°F) by 2100 (California Climate Change Center 2006). Some climate models indicate that this warming may be greater in the summer than in the winter. This could result in widespread adverse impacts to ecosystem health, agricultural production, water use and supply, and energy demand. Increased temperatures could reduce the Sierra Nevada snowpack and put additional strain on the region's water supply. In

addition, increased temperatures would be conducive to the formation of air pollutants resulting in poor air quality.

The anticipated consequences of global climate change have the potential to result in adverse impacts to the Project. Future patrons of the Project could be exposed to increased risk of dehydration, heat stroke, heat exhaustion, heart attack, stroke, and respiratory disease. However, these risks would be no different from those experienced by the San Diego region as a whole. Increased temperatures would result in more frequent use of air conditioning that would increase energy costs and that could put a strain on the area's energy supplies. Because the Project is located inland well above sea level, no impacts related to sea level rise are anticipated.

It is also important to note that even if GHG emissions were to be eliminated or dramatically reduced, due to the lifespan of GHGs in the atmosphere it is projected that the effect of those emissions would continue to affect global climate for centuries.

Regulatory Setting

Federal Greenhouse Gas Legislation

*GHG Emissions Intensity Reduction Programs*

Towards the effort to reduce GHG emissions, in February 2002, the U.S. set a goal to reduce its GHG emissions intensity, which is the ratio of GHG emissions to economic output. In 2002, the U.S. GHG Emissions Intensity was 183 metric tons per million dollars of gross domestic product (GDP; U.S. EPA 2007). The goal established in February 2002 was to reduce this GHG emissions intensity by 18 percent by 2012 through various GHG reduction programs. One of these programs includes the Energy Star program that was first established in 1992 by the United States Environmental Protection Agency (U.S. EPA) and became a joint program with the U.S. Department of Energy in 1996. Energy Star is a program that labels energy efficient products with the Energy Star label. Energy Star enables consumers to choose energy-efficient and cost-saving products, with up to 30 percent energy savings over conventional appliances such as refrigerators, dishwashers, clothes washers, and fans. Another key federal GHG reduction program is the Green Power Partnership program that establishes partnerships between the U.S. EPA, and companies and organizations that have bought or are considering buying green power (i.e., power generated from renewable energy sources). The U.S. EPA offers recognition and promotion to organizations that replace electricity consumption with green power.

*U.S. EPA Authority to Regulate GHGs*

On April 2, 2007, the U.S Supreme Court, in Massachusetts v. EPA; Case *549 U.S. 497* (2007), ruled that $CO_2$ is an air pollutant as defined under the Clean Air Act, and that the U.S. EPA has the authority to regulate GHG emissions.

*Corporate Average Fuel Economy*

The federal Corporate Average Fuel Economy (CAFE) standards determine the fuel efficiency of certain vehicle classes in the U.S. While the standards had not changed since 1990, as a part of the Energy and Security Act of 2007, the CAFE standards were

increased for new light-duty vehicles to achieve the equivalent of 35 miles per gallon (mpg) by 2020. In October 2012, the U.S. EPA and National Highway Traffic Safety Administration issued a final rule for new light-duty vehicles for model years 2017 to 2025 to achieve an equivalent of 54.5 mpg. With improved gas mileage, fewer gallons of transportation fuel would be combusted to travel the same distance, thereby reducing nationwide GHG emissions associated with vehicle travel.

*State of California Greenhouse Gas Regulations*

The State of California has passed a number of policies and regulations that are either directly or indirectly related to GHG emissions. Only those most relevant to land use development projects are included in this discussion.

*Executive Order S-3-05*

Executive Order (EO) S-3-05 proclaims that California is vulnerable to the impacts of climate change, including increased temperatures that could reduce the Sierra Nevada's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, it established the following GHG emission reduction targets for the state of California:

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

This EO also directed the secretary of the California EPA (CalEPA) to oversee the efforts made to reach these targets, and to prepare biannual reports on the progress made toward meeting the targets and on the impacts to California related to global warming. The first such Climate Action Team Assessment Report was produced in March 2006 and has been updated every two years thereafter.

Of note, in adopting Assembly Bill (AB 32), discussed below, the Legislature did not adopt the 2050 horizon-year goal from the EO; and, in the last legislative session, the Legislature rejected legislation to enact the EO's 2050 goal (see Cleveland National Forest Foundation v. San Diego Association of Governments (2017) Case No. S223606; Professional Engineers in California Government v. Schwarzenegger (2010) 50 Cal.4th 989, 1015; and State of California 2004).

*Assembly Bill 32—California Global Warming Solutions Act*

In response to EO S-3-05, the California Legislature passed AB 32, the California Global Warming Solutions Act of 2006, and thereby enacted Sections 38500-38599 of the California Health and Safety Code. It required the CARB to establish an emissions cap and adopt rules and regulations that would reduce statewide GHG emissions to 1990 levels by 2020. AB 32 also required CARB to adopt a plan by January 1, 2009 indicating how emission reductions would be achieved from significant GHG sources via regulations, market mechanisms, and other actions.

*Executive Order B-30-15*

This EO, issued on April 29, 2015, established an interim GHG emission reduction goal for the state of California to reduce GHG emissions 40 percent below 1990 levels by 2030. This EO also directed all state agencies with jurisdiction over GHG-emitting

sources to implement measures designed to achieve the new interim 2030 goal, as well as the pre-existing long-term 2050 goal established by EO S-3-05. Additionally, this EO directed CARB to update its Climate Change Scoping Plan to address the 2030 goal. CARB has released a draft of the statewide inventory and projection data for 2030 and identified reduction strategies capable of securing emission reductions that allow for achievement of the EO's new interim goal.

*Senate Bill 32—California Global Warming Solutions Act: Emissions Limit*

In August 2016, the California Legislature approved SB 32, the California Global Warming Solutions Act: Emissions Limit, and in September 2016, it was signed by Governor Brown. Under SB 32, the state would reduce its GHG emissions to 40 percent below 1990 levels by 2030. SB 32 is tied to AB 197, which would establish a legislative oversight committee to which the Chair of CARB would report once a year, and would add two members of the legislature to the CARB board. Additionally, in implementing the 40 percent reduction target, AB 197 would require CARB to prioritize emissions reductions to consider the social costs of the emissions of GHGs. AB 197 defines "social costs" to mean "an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate adaptation impacts, such as property damages from increased flood risk; and changes in energy system costs, per metric ton of greenhouse gas emission per year."

*Senate Bill 375—Sustainable Communities and Climate Protection Act of 2008*

SB 375, the Sustainable Communities and Climate Protection Act of 2008, was signed into law in September 2008 and requires CARB to set regional targets for reducing passenger vehicle GHG emissions. The purpose of SB 375 is to align regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations under state housing law. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy to address GHG reduction targets from cars and light-duty trucks in the context of that MPO's Regional Transportation Plan (RTP).

*Senate Bill 97—California Environmental Quality Act Greenhouse Gas Amendments*

SB 97 (Chapter 185, Statutes of 2007; Public Resources Code, Sections 21083.05 and 21097) acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. The California Natural Resources Agency adopted amendments to the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Sections 15000-15387) to address GHG emissions, consistent with Legislature's directive in Public Resources Code Section 21083.05 (enacted as part of SB 97 [Chapter 185, Statutes 2007]). These changes took effect in March 2010.

*Title 24—California Building Code*

The CCR, Title 24, is referred to as the California Building Code, or CBC. It consists of a compilation of several distinct standards and codes related to building construction, including plumbing, electrical, interior acoustics, energy efficiency, handicap accessibility, and so on. Of particular relevance to GHG reductions are the CBC's energy efficiency and green building standards as outlined below.

*Title 24, Part 6—Energy Efficiency Standards*

The CCR, Title 24, Part 6 is the California Energy Efficiency Standards for Residential and Nonresidential Buildings (also known as the California Energy Code). This Code, originally enacted in 1978, establishes energy efficiency standards for residential and non-residential buildings in order to reduce California's energy consumption. The Energy Code is updated periodically to incorporate and consider new energy-efficient technologies and methodologies as they become available, and incentives in the form of rebates and tax breaks are provided on a sliding scale for buildings achieving energy efficiency above the minimum standards.

The current version of the Energy Code, known as 2016 Title 24, or the 2016 Energy Code, became effective January 1, 2017. The 2016 Energy Code provides mandatory energy-efficiency measures as well as voluntary tiers for increased energy efficiency. The California Energy Commission (CEC) has not yet released impact analysis for the 2016 Energy Code; however, preliminary CEC estimates indicate that residences built consistent with 2016 Title 24 requirements will be 28 percent more energy efficient than residences built consistent with 2013 Title 24 requirements and non-residential buildings built consistent with 2016 Title 24 requirements will be 5 percent more energy efficient than non-residential buildings built consistent with 2013 Title 24 requirements (CEC 2015). Based on an impact analysis prepared by the CEC, for single-family residences the 2013 Energy Code has been estimated to achieve a 36.4 percent increase in electricity efficiencies and a 6.5 percent increase in natural gas efficiencies over the 2008 Title 24 standards (CEC 2013). Non-residential structures are estimated to achieve a 21.8 and 16.8 percent increase in electricity and natural gas efficiencies, respectively. The 2008 Title 24 required energy savings of 15–35 percent above the former 2005 Title 24 Energy Code. The reference to 2005 Title 24 Energy Code is relevant in that many of the state's long-term energy and GHG reduction goals identify energy-saving targets relative to 2005 Title 24. The CEC, in conjunction with the California Public Utilities Commission (CPUC), has adopted a goal that all new residential and commercial construction achieve zero net energy by 2020 and 2030, respectively (CPUC 2013). It is expected that achievement of the zero net energy goal will occur via revisions to the Title 24 standards.

New construction and major renovations must demonstrate their compliance with the current Energy Code through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC. The compliance reports must demonstrate a building's energy performance through use of CEC-approved energy performance software that shows iterative increases in energy efficiency given the selection of various heating, ventilation and air conditioning (HVAC); sealing; glazing; insulation; and other components related to the building envelope.

*Title 24, Part 11—California Green Building Standards*

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11 first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 CBC). The 2016 CALGreen institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. Local jurisdictions must

enforce the minimum mandatory Green Building Standards and may adopt additional amendments for stricter requirements.

The mandatory standards require:

- Outdoor water use requirements as outlined in Model Water Efficient Landscape Ordinance emergency standards
- 20 percent mandatory reduction in indoor water use relative to specified baseline levels;
- 65 percent construction/demolition waste diverted from landfills;
- Infrastructure requirements for electric vehicle charging stations;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and
- Requirements for low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring and particleboards.

Similar to the reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water reduction requirements must be demonstrated through completion of water use reporting forms for new low-rise residential and non-residential buildings. The water use compliance form must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

State of California Greenhouse Gas Reduction Plan and Programs

*Climate Change Scoping Plan*

As directed by the California Global Warming Solutions Act of 2006, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (Original Scoping Plan). CARB has periodically revised GHG emissions forecasts and prepared supplemental revisions to the Original Scoping Plan. In 2014, CARB adopted the comprehensive First Update to the Climate Change Scoping Plan: Building on the Framework (First Update to the Scoping Plan) (CARB 2014). The First Update to the Scoping Plan ". . . highlights California's success to date in reducing its GHG emissions and lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050" (CARB 2014). The First Update to the Scoping Plan found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and notes that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050, if the state realizes the expected benefits of existing policy goals (CARB 2014).

In conjunction with the First Update to the Scoping Plan, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050" (CARB 2014). Those six areas are: (1) energy;

(2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure); (3) agriculture; (4) water; (5) waste management; and (6) natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of the 2050 reduction goal.

Based on CARB's research efforts, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050" (CARB 2014). Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies.

In January 2017, CARB released the *2017 Climate Change Scoping Plan Update, The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target* (Draft Scoping Plan; CARB 2017). The comment period for the Draft Scoping Plan will last until March 2017. The Draft Scoping Plan identifies state strategy for achieving the state's 2030 interim GHG emissions reduction target codified by SB 32. The Draft Scoping Plan assessed three scenarios: (1) a Reference Scenario that represents current policies prior to the passage of SB 350 (i.e., October 2015); (2) a Proposed Scoping Plan Scenario (referred to as the "Draft Scoping Plan Scenario") that represents current policies, known commitments, as well as additional measures to reduce emissions from the refinery sector, and (3) an Alternative 1 Scenario that represents all policies and programs included in the Draft Scoping Plan Scenario, as well as additional prescriptive measures to meet the 2030 statewide reduction target without reliance on the Cap-and-Trade Program or a carbon tax

*Original Scoping Plan GHG Reduction Strategies*

The majority of the Scoping Plan's GHG reduction strategies are directed at the two sectors with the largest GHG emissions contributions: transportation and electricity generation. The GHG reduction strategies for these sectors involve statutory mandates affecting vehicle or fuel manufacture, public transit, and public utilities. The reduction strategies employed by CARB are designed to reduce emissions from existing sources as well as future sources. The most relevant are outlined in the following sections.

*AB 1493—Light-Duty Vehicle GHG Emissions Standards*

AB 1493, enacted in July 2002, directed CARB to adopt vehicle standards that lowered GHG emissions from passenger vehicles and light-duty trucks to the maximum extent technologically feasible, beginning with the 2009 model year.

CARB adopted these regulations (termed "Pavley I") as a discrete early action measure pursuant to AB 32, and estimates that full implementation of Pavley I will reduce GHG emissions from California passenger vehicles by about 26 million MT $CO_2e$ (CARB 2011a and 2011b). CARB has also adopted a second phase of the Pavley regulations that covers model years 2017 to 2025. These regulations were originally termed "Pavley II" but are now referred to as either the Low Emission Vehicle III" (LEV III) standards or the Advanced Clean Cars Program. In this report, they are referred to as the LEV III standards. CARB estimates that LEV III will reduce vehicle GHGs by an additional 4.0 million MT $CO_2e$ for a 2.4 percent reduction over Pavley I (CARB 2011a). These

reductions come from improved vehicle technologies such as smaller engines with superchargers, continuously variable transmissions, and hybrid electric drives. On August 7, 2012 the final regulation for the adoption of LEV III became effective. It is expected that Pavley I and LEV III regulations will reduce GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, while improving fuel efficiency and reducing motorists' costs (CARB 2013).

CARB has adopted a new approach to passenger vehicles – cars and light trucks – by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards, which includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California (CARB 2013).

*Low Carbon Fuel Standard*

An executive order (EO S-1-07) signed in 2007 directed that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 through a Low Carbon Fuel Standard (LCFS).

CARB adopted the LCFS as a discrete early action measure pursuant to AB 32 in April 2009. The LCFS is a performance standard with flexible compliance mechanisms intended to incentivize the development of a diverse set of clean low-carbon transportation fuel options. Its aim is to accelerate the availability and diversity of low-carbon fuels such as biofuels, electricity, and hydrogen by taking into consideration the full life cycle of GHG emissions.

*Renewable Portfolio Standard (RPS)*

The RPS promotes diversification of the state's electricity supply and decrease reliance on fossil fuel energy sources. Originally adopted in 2002 with a mandate to achieve a 20 percent renewable energy mix by 2020 (referred to as the "Initial RPS"), the mandate was accelerated and increased to 33 percent by 2020. Recently, SB 350 was passed and signed into law, which increased the RPS to 50 percent by 2030. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.

*Tire Pressure Program*

CARB's Tire Pressure Regulation took effect in September 2010. The purpose of this regulation is to reduce GHG emissions from vehicles operating with under-inflated tires by inflating them to the recommended tire pressure rating. Automotive service providers must meet the regulation's following requirements:

Check and inflate each vehicle's tires to the recommended tire pressure rating, with air or nitrogen, as appropriate, at the time of performing any automotive maintenance or repair service.

Indicate on the vehicle service invoice that a tire inflation service was completed and the tire pressure measurements after the service were performed.

Perform the tire pressure service using a tire pressure gauge with a total permissible error no greater than +2 pounds per square inch.

Have access to a tire inflation reference that is current within three years of publication.

Keep a copy of the service invoice for a minimum of three years, and make the vehicle service invoice available to CARB or its authorized representative upon request.

*Million Solar Roofs Program*

The Million Solar Roofs Program is one of CARB's GHG-reduction measures identified in the Scoping Plan to reduce energy sector emissions. The Million Solar Roofs Program was created by SB 1 in 2006 and includes the CPUC's California Solar Initiative and CEC's New Solar Homes Partnership. It requires publicly owned utilities to adopt, implement, and finance solar-incentive programs to lower the cost of solar systems and help achieve the goal of installing 3,000 megawatts (MW) of new solar capacity by 2020. Achievement of the program's goal is expected to equate to a reduction of 1.1 million MT $CO_2e$ (CARB 2011a).

*Solid Waste Sources*

The California Integrated Waste Management Act of 1989, as modified by AB 341, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities; (2) diversion of 50 percent of all solid waste on and after January 1, 2000; and (3) diversion of 75 percent of all solid waste by 2020, and annually thereafter. The California Department of Resources Recycling and Recovery (CalRecycle) is required to develop strategies, including source reduction, recycling, and composting activities, to achieve the 2020 goal.

CalRecycle published a discussion document, entitled California's New Goal: 75 Percent Recycling, which identified concepts that would assist the state in reaching the 75 percent goal by 2020. Subsequently, in October 2013, CalRecycle released a revised concept list, entitled *Update on AB 341 Legislative Report: Statewide Strategies to Achieve the 75 Percent Goal by 2020*.

Cap-and-Trade Program

The California Cap-and-Trade Program began in January 2013 and was originally authorized to continue until the end of 2020. The program is a market-based regulation that is designed to reduce GHG emissions associated with major sources by setting a firm cap on overall GHG emissions from covered entities and gradually reducing that cap over time. The program defines major sources as facilities that generate more than 25,000 MT $CO_2e$ per year, which includes many electricity generators, refineries, cement production facilities, oil and gas production facilities, glass manufacturing facilities, and food processing plants. Each entity covered by the program is allocated specific GHG emission allowances and is able to buy or sell additional offset credits to other major sources-covered entities. Thus, the program employs market mechanisms to cost effectively reduce overall GHG emissions. Throughout the program's duration, CARB continues to adjust the overall GHG emissions cap to achieve emission levels consistent with 2020 statewide GHG emission reduction targets established by AB 32.

The California Cap-and-Trade Program was extended through passage of AB 398 on July 17, 2017. Pursuant to AB 398 the program will be continued through 2030; AB 398

directs CARB to ensure that statewide GHG emissions are reduced to at least 40 percent below the 1990 level by 2030.

Draft Scoping Plan GHG Reduction Strategies

Measures under the Draft Scoping Plan Scenario build on existing programs such as the LCFS, Advanced Clean Cars Program, RPS, SCS, the Short-Lived Climate Pollutant Reduction Strategy, and the Cap-and-Trade Program. Additionally, the Draft Scoping Plan proposes further strategies to reduce waste emissions through cogeneration, reduction of GHG emissions from the refinery sector by 20 percent, and new policies to address GHG emissions from natural and working lands. As discussed in Section 3.4.2.7 of the Chinese Bible Church Global Climate Change Analysis in Appendix L, CARB continues to adjust the cap of the Cap-and-Trade Program to achieve emission levels consistent with 2020 statewide GHG emissions reduction targets established by AB 32. Modeling for the Draft Scoping Plan Scenario does not reflect reductions achieved by the Cap-and-Trade Program.

As identified in the Alternative 1 Scenario, prescriptive measures necessary to achieve the State's 2030 interim GHG reduction target without reliance on the Cap-and-Trade Program include a 5 percent renewable pipeline gas standard, a 25 percent reduction in GHG emissions from the oil and gas extraction sector, a 25 percent reduction in the GHG emissions from the industrial sector, 20 percent flexible demand response from residential and commercial electric appliances, an additional 7 percent increase in the Low Carbon Fuel Standard (from 18 to 25 percent), an additional 10 percent reduction from the refining sector (from 20 to 30 percent), an additional 10 percent increase to California RPS (from 50 to 60 percent), increased building energy efficiency standards, and additional transportation demand measures.

San Diego Association of Governments Plans

*Regional Transportation Plan—San Diego Forward*

The San Diego Association of Governments (SANDAG) is the San Diego region's MPO. SANDAG completed and adopted the San Diego Forward in October 2015. CARB's targets for SANDAG call for a 7 percent reduction in GHG emissions per capita from automobiles and light duty trucks compared to 2005 levels by 2020, and a 13 percent reduction by 2035 (SANDAG 2015). The reduction targets are to be updated every eight years, but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. As stated by SANDAG, the strategy set forth in San Diego Forward is to "focus housing and job growth in the urbanized areas where there is existing and planned infrastructure, protect sensitive habitat and open space, invest in a network that gives residents and workers transportation options that reduce GHG emissions, promote equity for all, and implement the plan through incentives and collaboration" (SANDAG 2015).

Pursuant to Government Code Section 65080(b)(2)(K), an SCS does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local

planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process (CARB 2014, see also Gov. Code § 65080(b)).

County of San Diego Policies and Plans

*County of San Diego General Plan*

The County's General Plan incorporates smart growth and land planning principles intended to reduce VMT, and thus a reduction of GHGs. The General Plan aims to accomplish this by locating future development within and near existing infrastructure. The General Plan also directs preparation of a County CAP with reduction targets; development of regulations to encourage energy-efficient building design and construction; and development of regulations that encourage energy recovery and renewable energy facilities, among other actions. These planning and regulatory efforts are intended to ensure that actions of the County of San Diego do not impede AB 32 and SB 375 mandates.

*County of San Diego Green Building Incentive Program*

The County's Green Building Incentive Program is designed to promote the use of resource-efficient construction materials, water conservation, and energy efficiency in new and remodeled residential and commercial buildings. The program offers incentives of reduced plan check turnaround time and a 7.5 percent reduction in plan check and building permit fees for projects meeting minimum program requirements. Minimum program requirements include compliance with resource conservation measures related to natural resource conservation, water conservation, and energy conservation.

*County of San Diego Construction and Demolition Debris Deposit Ordinance*

The County's Construction and Demolition Recycling Ordinance is designed to promote the diversion of debris from construction and demolition projects away from landfills. The ordinance requires that construction, demolition, or renovation projects with 40,000 square feet or greater prepare a Debris Management Plan. The plan must demonstrate how the project will achieve diversion of 90 percent diversion of inerts and 70 percent of all other construction materials from a project.

*County of San Diego Climate Action Plan (CAP)*

The County of San Diego adopted a Climate Action Plan (CAP) on February 14, 2018 which outlines actions that the County will undertake to meet its greenhouse gas (GHG) emissions reductions targets. Implementation of the CAP requires that new development projects incorporate more sustainable design standards and implement applicable reduction measures consistent with the CAP. In March 2018, several petitioners filed a lawsuit against the County, alleging that the CAP and, in particular, M-GHG-1 were inconsistent with General Plan Goal COS-20 and Policy COS-20.1.

In December 2018, the San Diego Superior Court ruled against the County. The Court issued a writ ordering the approval of the CAP and its EIR to be set aside, and enjoining reliance on the County CAP's mitigation measure M-GHG-1. In January 2019, the County appealed the San Diego Superior Court ruling which stayed the above described writ. Essentially, the CAP and its EIR are still in place during the

appeal. Given the current legal instability concerning the County's CAP, the analysis prepared for the proposed project did not solely rely on the CAP to streamline the Project's environmental analysis under CEQA Guidelines Section 15183.5. The proposed project's significance determination used the criteria detailed below (Section 3.1.2.3), (informed by CEQA Guidelines Section 15064.4) and mitigation strategies (informed by CEQA Guidelines Section 15126.4(c)) that are independent of the CAP. However, as described below, the project would not interfere with the implementation of the CAP and would also incorporate applicable measures from the CAP checklist. In the event that the CAP does not withstand judicial scrutiny, the project has undergone a separate, stand-alone analysis for determining whether the project's GHG emissions would significantly impact the environment.

### 3.1.2.3 *Analysis of Project Effects and Determination as to Significance*

Guideline for Determination of Significance

According to CEQA Guidelines Appendix G Environmental Checklist, implementation of the Project would have significant environmental impacts on global climate change if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs.

~~Individual projects do not generate sufficient GHG emissions to have a substantial direct effect on global climate change (South Coast Air Quality Management District [SCAQMD] 2008; San Joaquin Valley Air Pollution Control District 2009). However, continued development may contribute to the cumulative global accumulation of GHG emissions that could result in adverse impacts to the environment. Therefore, assessment of climate change impacts is by its nature a cumulative impact~~. For purposes of this analysis, the two Appendix G checklist questions set forth above are utilized as the thresholds of significance when evaluating the environmental effects of the project's GHG emissions. In applying these thresholds, reference is made to CEQA Guidelines Section 15064.4(b)(1)-(3), which states that, "a lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment: (1) the extent to which a project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting; (2) whether project emissions exceed a threshold of significance that the lead agency determines applies to the project; and, (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions."

Recognizing that GHG emissions contribute to the cumulative impact condition of global climate change, Section 15064(h)(1) of the CEQA Guidelines is also applicable. Section 15064(h)(1) states that "the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable." A cumulative impact may be significant when the project's

incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of other past, current, and reasonably foreseeable probable future projects.

Guideline Source

The two thresholds identified above are from the Appendix G of the State CEQA Guidelines.

Further guidance from the CAPCOA report CEQA & Climate Change, dated January 2008, identifies several potential approaches for assessing a project's GHG emissions (CAPCOA 2008). Among these approaches, the guidance introduces the concept of establishing thresholds based on GHG emission market capture rates. Following this approach, a lead agency defines an acceptable market capture rate and identifies the corresponding emissions level.

The CAPCOA Guidance identifies a recommended project-level threshold that would correspond to a 90 GHG emissions percent market capture rate, annual emission of 900 MT $CO_2e$. Following rationale presented in the CAPCOA Guidance, projects with annual emissions that do not exceed a screening level of 900 MT $CO_2e$, would not impede achievement of state reduction targets and would therefore be less than cumulatively considerable.

Analysis

Sustainable Project Design Features

The proposed project has been designed with a goal to comply with criteria established in the Leadership in Energy & Environmental Design (LEED) rating system. LEED is an internationally recognized green building certification system, providing third-party verification that a building was designed and built using strategies aimed at improving building siting and orientation, energy savings, water efficiency, waste reduction, use of recycled and sustainable building materials, non-toxic building and surfacing materials, and incorporation of other innovative features such as green roofs and on-site energy generation. These strategies also serve to reduce GHG emissions.

LEED was developed by the U.S. Green Building Council and provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operation, and maintenance. Projects applying for LEED certification are awarded points that are distributed across major categories such as sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. Depending on the number of points earned, projects can be classified as Certified, Silver, Gold, or Platinum.

The proposed project would be designed and constructed with the goal of obtaining LEED certification. To achieve this, the proposed project is implementing the following project design features:

PDF-1. The proposed project would incorporate rooftop solar photovoltaic panels to offset a portion of its energy demand. Solar photovoltaic panels would be

designed to achieve a 10 percent offset of project energy demand. This equates to 84,027 kilowatt-hours (kWh) per year.

PDF-2. The proposed project would use lighter colored pavers in large areas of the parking lot to reduce heat absorption and radiating heat compared to normal asphalt paving.

PDF-3. The proposed project would use lighter decomposed granite in large areas of the parking lot to reduce heat absorption and radiating heat compared to normal asphalt paving.

PDF-4. The proposed project would plant large canopy trees in the parking lot, the entry street, open space, and around buildings to reduce heat absorption, radiant heat, consume $CO_2$, and produce oxygen to minimize heat island effect.

PDF-5. The proposed project would include several outdoor water reduction measures including xeriscape planting and installing weather- or soil moisture-based automatic irrigation system controllers and provision of outdoor water from an existing on-site well. These features are estimated to achieve at least a ~~25~~ 40 percent reduction in outdoor water use.

PDF-6. The proposed project would incorporate cool roof technologies on all buildings which utilize light-colored, reflective roofing materials to significantly reduce heat absorption.

PDF-7. The proposed project would install U.S. Environmental Protection Agency's (U.S. EPA's) Energy Star-rated appliances in all kitchens.

PDF-8. The proposed project would install high energy efficient Heating, Ventilating, and Air Conditioning (HVAC) rooftop units.

PDF-9. The proposed project would minimize site lighting to only that necessary for security, safety, and identification. The proposed project would increase the use of low-voltage lighting and equipment.

PDF-10. The proposed project has been located more centrally for existing and future congregation members to reduce commute times compared to current congregation experiences. This would reduce the amount of ongoing transportation fuel consumption and GHG production by allowing for shorter trips to the church location during operation.

PDF-11. The proposed project would implement a voluntary commute trip reduction (CTR) program with parishioners to discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking.

PDF-12. The proposed project would provide online access to worship services for teleworshipping.

PDF-13. The proposed project would use a landscape service that provides certification that only electric equipment would be used for landscaping.

GHG Emissions

GHG emissions were estimated using California Emission Estimator Model (CalEEMod) Version 2013.2.2 (CAPCOA 2013). CalEEMod was developed with the participation of several state air districts including the San Diego Air Pollution Control District. Emissions scenarios included both the condition of completion of Phase 1 and the full buildout of the Project (condition at completion of Phase 2). GHG emissions estimates include construction emission sources as well as operational emissions sources (e.g., vehicles, energy use, area sources, water/wastewater, and solid waste). Table 3.1-8, GHG Emissions Calculations Methodology Summary, summarizes the methodology used to calculate each of the GHG emissions sources.

Construction Emissions

The Project will be constructed in two phases. The first phase includes a 1,000-seat main sanctuary and ancillary facilities. The second phase would expand the main sanctuary to 1,500 seats, with construction of additional classrooms, offices, recreational facilities, café, bookstore, and kitchen. Based on the time frame and the type and size of the proposed land use, the Project would generate approximately 626 MT $CO_2e$. As construction emissions are finite in time, i.e., when construction ends, so do construction-related GHG emissions, no additional construction emissions would be associated with future conditions. Based on guidance from the SCAQMD, total construction GHG emissions resulting from the proposed project are amortized over 30 years and added to operational GHG emissions to account for their contribution to GHG emissions over the lifetime of the proposed project (SCAQMD 2009). Total annual and amortized construction emissions are presented in Table 3.1-9, Summary of Construction Emissions.

Carbon Sequestration Loss

The project site is 9.03 acres. Apart from the area occupied by two existing houses and associated landscaping, the project site includes low-lying vegetation and limited trees. This vegetation may be characterized as grassland (CalEEMod 2016). Loss of sequestration was calculated using emission factors from CalEEMod (CAPCOA 2013). Temporary GHG emissions associated with loss of carbon sequestration are amortized over the average growth period of vegetation communities, 20 years, and are added to annual operational emissions.

Operational Emissions

The project is anticipated to be completed and in operation by ~~2020~~2022. Project operational emission sources including vehicle use, energy use, and area sources (landscaping equipment) were modeled for the year 2020. The 2020 assumptions represent a conservative analysis. Operational emissions will remain generally the

same whether modeled for the year 2020 or 2022; therefore the 2020 analysis does not require updating.

Table 3.1.2.2 summarizes the assumptions and data used to estimate emissions. The primary sources of direct and indirect GHG emissions have been calculated. Table 3.1-10, Operational GHG Emissions in 2020, summarizes the operational emissions associated with the Project and also includes a summation of operational emissions and amortized GHG emissions associated with construction.

The first criterion identified in Appendix G of the State CEQA Guidelines indicates that implementation of the Project would have significant environmental impacts on global climate change if it would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

~~The County of San Diego has not adopted a threshold of significance for general use as part of its environmental review process.~~ This analysis uses a screening level of 900 MT $CO_2e$ that was adapted from the CAPCOA report CEQA & Climate Change. This screening level threshold is based upon a 90 percent emissions market capture rate.

As shown in Table 3.1-10, Phase 1 of the Project would result in the equivalent annual emission of 632 MT $CO_2e$ and full buildout of the Project would result in the equivalent annual emission of 885 MT $CO_2e$. As annual emissions do not exceed 900 MT $CO_2e$, the Project would not conflict with the state reduction targets and emissions would therefore be less than cumulatively considerable. Impacts would be **less than significant**.

Plan, Policy, and Regulatory Conflicts

The second criterion identified in Appendix G of the State CEQA Guidelines indicates that implementation of the Project would have significant environmental impacts on global climate change if it would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs.

Numerous local, state, and federal plans, policies, and regulations have been adopted for the purpose of reducing the GHG emissions. As the Project includes land use development that is anticipated to be complete and in operation by 2020, conformity with state reduction targets codified by AB 32, conformity with the County of San Diego General Plan policies are assessed.

State Scoping Plan and Reduction Targets—EO S-3-05, AB 32, EO B-30-15, and SB 32

EO S-3-05 established the following GHG emission reduction targets for the state of California:

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

AB 32 codified the 2020 goal of EO S-3-05 and launched the Climate Change Scoping Plan that outlined the reduction measures needed to reach this target. EO B-30-15

established an additional interim GHG emission reduction goal for the state of California by 2030 of 40 percent below 1990 levels.

SB 32 codified the 2030 goal of EO B-30-15 and called for revision of the Climate Change Scoping Plan to outline the reduction measures needed to reach this target.

The 900 MT $CO_2e$ screening level identified by CAPCOA identifies small projects with emissions that would result in less than cumulatively significant impacts to achievement of state reduction targets. CAPCOA guidance indicates that projects that meet the 900 MT $CO_2e$ would be consistent with state reduction targets identified by AB 32.

While the Project is anticipated to be constructed and operational by 2020, Project emissions would decline beyond 2020 as a result of continued implementation of federal, state, and local reduction measures such as increased federal and state vehicle efficiency standards, and SDG&E's increased renewable sources of energy in accordance with RPS goals. Based on currently available models and regulatory forecasting, Project emissions would continue to decline from 2020 through at least 2050. Given the reasonably anticipated decline in Project emissions once fully constructed and operational, the Project is in line with the GHG reductions needed to achieve the 2030 GHG emission reduction targets identified by EO B-30-15 and SB 32.

The project is anticipated to be complete and in operation by 2020. The annual emission of the project do not exceed 900 MT $CO_2e$, the Project would not conflict with the state Scoping Plan or the achievement of state reduction targets established and/or codified by AB 32 and the annual emissions of the project would continue to decline after 2020 and thus would not conflict with the achievement of state reduction goals identified and codified by B-30-15 and SB 32. Impacts would be **less than significant**.

SB 375 and the San Diego Forward

Pursuant to SB 375, CARB directed SANDAG to prepare a regional transportation plan that would achieve a 7 percent reduction in GHG emissions per capita from automobiles and light duty trucks compared to 2005 levels by 2020, and a 13 percent reduction by 2035. SANDAG's regional transportation plan – the San Diego Forward - proposes policy and public infrastructure changes to meet and exceed these goals.

The San Diego Forward was developed based on local land use plans. As such, projects that propose development that is consistent with the growth anticipated by the local land use plan would be consistent with the VMT budgets used in the San Diego Forward. In the event that a project would propose development that would result in less VMT than is assumed by the San Diego Forward, then the project would likewise be consistent with the San Diego Forward.

The project site is located within the Santa Fe Valley Specific Plan area in the San Dieguito Community Plan area. The project would remove two existing residences and would construct a church. As discussed in Section 5.1.3.1, surveys of congregation families indicate that the overall attendance of mass at the current locations results in approximately 13,199 VMT per week and that attendance of mass at the proposed project would result in approximately 10,854 VMT per week. The relocation would result in a 17.8 percent reduction in VMT associated with the congregation. This reduction is due to the proposed project being more centrally located than existing facilities. The

17.8 percent reduction achieved by the project would exceed the regional VMT reduction target of 13 percent by 2035, thus the project would not conflict with the San Diego Forward. Impacts would be **less than significant**.

County of San Diego General Plan

The Conservation and Open Space Element of the County's General Plan General Plan includes policies intended to reduce GHG emissions through sustainable land development, architecture and buildings, mobility, solid waste management, energy, water supply. Project consistency with these policies is assessed in Table 3.1-11, Project Consistency with County General Plan Policies. It should be noted that several of the policies identified in the table are beyond the scope of individual land use projects. All policies related to sustainability are included for disclosure, regardless of whether or not the Project could reasonably conflict with the policy.

As shown in Table 3.1-11, the Project would not conflict with policies outlined in the Conservation and Open Space Element.

The County of San Diego Climate Action Plan (CAP) adopted in February of 2018, outlines actions the County will undertake to meet its GHG emissions reductions targets. The *Final Climate Action Plan Consistency Review Checklist* (Checklist) is a means to review new development projects to ensure they incorporate new sustainable design standards and implement applicable reduction measures consistent with the CAP. The Checklist has been completed for the project and is attached to the greenhouse gas analysis (Appendix L) of the FSEIR.

The Checklist for the project includes measures that will be implemented as conditions of approval. As such, the project is consistent with the Climate Action Plan, and achieves a 15% reduction in emissions from vehicle miles traveled through the use of telecommuting, carpools, and vanpools. Bicycle facilities, shared parking, and parking spaces dedicated to carpools and electric vehicles would be provided, and the project is conditioned with a Landscape Plan that must demonstrates a 40% reduction in current Maximum Applied Water Allowance for outdoor use.

In summary, the Project would not conflict with the achievement of state reduction targets established and/or codified by EO S-3-05, AB 32, EO B-30-15, or SB 32, nor would it conflict with policies outlined in the County's Conservation and Open Space Element. Impacts would be less than significant.

#### 3.1.2.4 *Cumulative Impact Analysis*

As described in Section 3.1.1.1 of this discussion, the entire issue of global climate change requires cumulative review. As a result, additional discussion is not required.

#### 3.1.2.5 *Significance of Impacts*

Impacts related to GHG emissions and GHG policy compliance were determined to be less than significant. Therefore, no mitigation is required.

#### 3.1.2.6 *Conclusion*

A climate change report was prepared for the Project (RECON 2017). The report concluded that the Project would not generate GHG emissions exceeding the 900 MT CO2e screening level. Further, the Project would comply with federal, State, and local orders, ordinances, and regulations related to reductions in GHG and minimization of contribution to climate change. GHG impacts would be less than significant.

### 3.1.3 Hydrology/Water Quality

The assessment of the Project's potential to have an adverse effect on hydrology and water quality is based on the drainage study and Storm Water Quality Management Plan (SWQMP) prepared for the Project. The results of the analysis are presented below and are included in the appendices to this DSEIR.

- Appendix M: *CEQA Drainage Study* (MLB Engineering, 2013) and *MUP 10-037 Changes to Project Description* (MLB Engineering, 2016)
- Appendix N: *County of San Diego Preliminary Priority Development Project (PDP) SWQMP: Chinese Bible Church* (MLB Engineering 2016) and *MUP 10-037 Changes to Project Description* (MLB Engineering, 2016)

The Santa Fe Valley Specific Plan (SFVSP) EIR (SP95-001) was also reviewed. The SFVSP EIR identified significant and mitigated impacts to hydrology and water quality.

Comments received in response to the Notice of Preparation (NOP) related to hydrology and water quality include:

- Alteration of flow in open space area and associated biological impacts
- On- and off-site drainage modifications and compliance with water quality regulations
- Location and design of retaining wall and associated on- and off-site flooding
- Consistency of retaining wall with Specific Plan
- Retaining wall and downstream flow, water quality
- Incorporation of flows from development south of Camino Del Sur
- Vacation of flowage easement
- Soil erosion and sedimentation

Hydrologic modifications, including to the open space area and on- and off-site, due to implementation of the Project and its retaining wall are discussed in Section 3.1.3.3, below. Water quality, flooding, and erosion/sedimentation implications of the Project are also discussed in Section 3.1.3.3. Biological impacts are discussed in Section 2.2, Biological Resources. The Project's consistency with the Specific Plan is discussed in Section 3.1.4, Land Use and Planning.

A copy of the NOP and comment letters received in response to the NOP are included in Appendix A.

### 3.1.3.1 *Background*

The previously certified EIR found significant and mitigable impacts related to hydrology and water quality. Mitigation measures were identified to reduce impacts related to flooding, increased runoff, sedimentation (temporary and permanent), and water quality, as follows:

- Portions of the paved trail within the floodway of the San Dieguito River shall be relocated outside the floodway to the flood fringe portion of the 100-year floodplain.
- Drainage systems for each proposed development shall be designed in accordance with the recommendations of site-specific drainage studies by a qualified geotechnical or hydrologic consultant. Proposed drainage system plays shall be submitted for review to the County of San Diego Department of Public Works (DPW), Flood Control Section. Final design shall include all requirements and recommendations provided by these agencies.
- All project-related drainage facilities shall be designed to accommodate surface runoff associated with a 100-year storm event pursuant to requirements of the San Diego County DPW, Flood Control Section.
- Drainage channels shall be unlined wherever feasible to allow infiltration of site-related runoff. In addition, energy dissipaters shall be constructed wherever necessary to maintain non-erosive flow velocities. Energy dissipating structures such as rip rap strips and detention ponds shall be constructed to prevent erosion where runoff enters unpaved areas.
- Access roads, trails, and parking/storage areas shall be surfaced with permeable materials wherever practical to increase infiltration and minimize surface runoff.
- Removal and disposal of groundwater encountered during construction activities (i.e., dewatering) shall be coordinated with the local Regional Water Quality Control Board (RWQCB) to ensure proper disposal methods and locations.
- Irrigation requirements on graded slopes and golf course areas shall be reduced through the use of native and drought-tolerant plant species as ground cover wherever feasible.
- Irrigation requirements on graded slopes and golf course areas shall be reduced through means such as the use of low-pressure sprinkling systems wherever feasible and conducting irrigation operations to minimize runoff and evaporation losses.
- Final design specifications shall include a schedule for regular maintenance of all drainage facilities to insure proper working conditions.
- Soil stockpiles and exposed (graded) slopes shall be covered with plastic sheeting where feasible during inclement weather conditions.

- Drainage control devices shall be constructed to direct surface water runoff away from slopes and other graded areas. Temporary berms, hay bale barriers, or sandbags shall be placed along the toes of graded slopes or along the edges of floodplains to help control and reduce sedimentation during grading operations.
- Disturbed slopes shall be immediately seeded with groundcover vegetation.
- Disturbance to existing vegetation and slopes shall be minimized; the angle of constructed slopes shall also be minimized where feasible.
- Silt curtains shall be placed around construction areas to protect natural drainage channels from sedimentation.
- Construction and grading shall be avoided during periods of inclement weather.
- Graded areas and temporary (haul) roads shall be sprayed with water during construction to control fugitive dust.
- Temporary sedimentation/desilting basins shall be constructed where needed during grading activities to minimize the amount of sediment entering existing drainages onsite and offsite.
- Prior to approval of final grading and project plans, a drainage control plan shall be prepared by a qualified geotechnical or hydrological consultant. Recommendation on the type, design, and location of temporary and permanent drainage facilities shall be incorporated into the final project design.
- Energy dissipating structures such as rip rap strips and detention ponds shall be constructed downstream of all culverts, storm drain outlets, and subdrain outlets, where surface water runoff from drainage facilities enters natural drainages.
- Inlet pipes and brow ditches shall be constructed where appropriate to minimize runoff flow down graded slopes.
- Source control practices shall be implemented that would reduce the amount and likelihood of contaminants coming into contact with surface runoff. Examples of source control practices include covering outdoor facilities that contain potential contaminants; encouraging proper use and disposal of pesticides, herbicides, and fertilizers; controlled methods, application rates, and application frequency of these chemicals; encouraging alternative methods for controlling insects and weeds using physical, biological, and lower-toxicity methods; and handing, recycling, and disposing of chemicals in a safe, proper manner.
- Prior to approval of the final project plans, a spill prevention and control plan shall be developed for activities that require the use of hazardous materials such as fuels, fertilizers, pesticides, herbicides, cleaners, etc.
- The following ongoing measure would be required to reduce potential total dissolved solids (TDS) impacts related to the use of reclaimed water for irrigation if the reclaimed water exceeds TDS objectives or does not employ nutrient removal: Monitoring for TDS and nutrient levels shall be performed on a regular basis and the results submitted to the San Diego County RWQCB. If the levels

exceed wastewater discharge requirements for the use of reclaimed water, the discharge must cease until proper treatment has been accomplished or reclaimed water has been diluted to lower TDS concentrations to meet the requirements.

- Mitigation measures employed during grading, and on a permanent basis, to minimize runoff and associated erosion and sedimentation shall be incorporated into the final grading plans, pending approval by the County.
- Impacts to surface water quality from contaminated runoff shall be mitigated through the use of BMPs. These measures provide for percolation of stormwater runoff through soil or vegetation prior to discharge into natural channels. Possible measures include the following: unlined drainage channels, grassed swales along streets and the sides of storm drain channels. Final stormwater design plans shall include the measures to prevent the first flush of rainfall from flowing directly into natural onsite or offsite drainages. Such measures include infiltration trenches or basins and riparian strips.

Changes Requiring New Analysis

Since the previous EIR was certified, the County has adopted the Watershed Protection, Stormwater Management and Discharge Control Ordinance (WPO) to protect water resources and improve water quality through the use of management practices, as described in greater detail below. Additionally, on November 18, 2015, the San Diego RWQCB issued an amendment to Order R9-2013-0001 Municipal Separate Storm Sewer Systems (MS4) Permit (Municipal Permit) under the National Pollutant Discharge Elimination System (NPDES) by Order R9-2015-0100. As required by the MS4 Permit, the copermittees prepared the Model Best Management Practices (BMP) Design Manual to replace the current Countywide Model Standard Urban Stormwater Mitigation Plan (SUSMP), dated March 25, 2011, which was based on the requirements of the 2007 MS4 Permit. This County of San Diego BMP Design Manual (Manual) supersedes the content of the Model SUSUMP to include County-specific guidelines and requirements.

This section describes existing hydrologic and water quality conditions within the Project site and vicinity, identifies regulatory requirements and industry standards associated with hydrologic and water quality issues, and evaluates potential impacts and mitigation measures related to implementation of the Project.

### 3.1.3.2 *Existing Conditions*

On-Site Drainage Characteristics

A natural drainage channel/wash runs northerly of the Project site within the open space easement. This wash also crosses onto the Project site near its northwest corner. The topography on the Project site includes a small ridge on which the existing residences are located (See Figure S-2, USGS Quadrangle Map). The ridge runs from approximately the center of the site to the southeast. The portion of the site northerly

and northeasterly of the ridge slopes generally northerly towards the open space lot and the natural drainage channel. The portion of the site westerly of the ridge slopes both to the northwest and southwest. Storm water runoff from the site is directed by surface flow to the wash, then to the San Dieguito River and on to the Pacific Ocean.

The Project site is located within the San Dieguito 905 Hydrologic Unit. The hydrologic sub-area is Rancho Santa Fe 905.11. The site is also located within the Solana Beach Hydrologic Area (HA) 905.11 hydrologic unit basin for groundwater. In the San Dieguito Watershed, the San Dieguito River connects Lake Sutherland and Lake Hodges, and discharges to the San Dieguito Lagoon near Del Mar.

Off-Site Drainage Characteristics

South of the Project site is a residential development (Map No. 14699). When these residences were developed, the drainage from a 2.7-acre portion of that site was directed by surface flow to the north to the San Diego County Water Authority (SDCWA) easement. The runoff from the SDCWA easement eventually flows across and under the existing driveway to the Project site and flows northerly into the open space area and to the creek.

There is an existing 18-inch PVC pipe culvert under the existing driveway to the Project site. The invert for the pipe, and the low spot for the SDCWA easement, is at an elevation of approximately 488 feet. The existing drainage channel leads from the culvert outlet to the rip rap for the culvert under Four Gee Road. Thus, any significant runoff ponding on the SDCWA easement would flow both through the pipe culvert and over the low spot in the driveway, through this channel, and to the existing creek north of the Project site. The existing runoff from the southwest portion of this site currently drains down along the Project driveway to the existing channel along Four Gee Road.

To the east of the Project site is Map No. 14747 and a sheriff's substation. The stormwater runoff from the substation is conveyed via a drain pipe to a location southeasterly of the substation. From this outlet, the runoff flows through a landscaped lot along the easterly line of the Project site in an earthen swale to a point northeasterly of the Project site. While this stormwater runoff does not enter the Project site, these flows were calculated for the project as the flows include the runoff from a small tributary area along the east edge of the Project site.

Flood Hazards

The Federal Insurance Rate Map (FIRM) is the official map created and distributed by the Federal Emergency Management Agency (FEMA) and the National Flood Insurance Program (NFIP) that delineates the Special Flood Hazard Areas, or those areas subject to inundation by the base flood, for every county and community that participates in the NFIP. FIRMs contain flood risk information based on historic, meteorologic, hydrologic, and hydraulic data, as well as open-space conditions, flood control works, and development.

There are no mapped FEMA floodplains located on the Project site. The area to the west and east of the intersection of Four Gee Road and Camino Del Sur is mapped Zone AE, which is an area of 100-year flood with base flood elevations determined.

Groundwater

There is an on-site well that historically has been used to water the Project site for landscaping and agricultural use. The well is controlled through a piped system and does not flow into or support the wetland in the open space. According to the biological letter report prepared for the Project (Appendix E of the DSEIR), this well had a tested capacity of 65 to 70 gallons per minute without drawing down the other offsite well in the area. Past use of the on-site well for landscaping and agricultural activities has been below capacity levels. Potential impacts to groundwater resulting from future use of this well are discussed below.

Water Quality

On-Site and Vicinity Water Quality

Surface water within the Project site consists of intermittent flows from storm events and runoff from landscape irrigation. No known surface water quality data are available for the Project site or off-site areas, with storm and irrigation flows typically subject to variations in water quality due to local conditions such as runoff rates/amounts and land use. A summary of typical pollutant sources anticipated or expected to occur during construction of the Project is provided in Table 3.1-12, Pollutants of Concern. These include sediment, nutrients, heavy metals, trash and debris, oxygen demanding substances, oil and grease, and pesticides.

The Project site contains soils with high clay content. The hydrologic soils classification for the on-site soils is type D (high run-off potential). Previous percolation tests performed on the site indicate very low permeability. The site shows little evidence of erosion, except in the vicinity of the natural drainage channel. The depth to groundwater is unknown. No infiltration BMPs would be possible due to the low permeability of the soil.

Off-Site Water Quality

Receiving waters associated with the Project site include the San Dieguito River and the Pacific Ocean. Both of these water bodies are included in the Clean Water Act (CWA) Section 303(d) Impaired Water Bodies List. The State Water Resources Control Board (SWRCB) and RWQCBs produce bi-annual qualitative assessments of statewide and regional water quality conditions. These assessments are focused on CWA Section 303(d) impaired water listings and scheduling for assignment of total maximum daily load (TMDL) requirements. States are required to identify and document any and all polluted surface water bodies, with the resulting documentation referred to as the *CWA Section 303(d) List of Water Quality Limited Segments*, or more commonly, the 303(d) list. This list of water bodies identifies the associated pollutants and TMDL, along with pollutant sources and projected TMDL implementation schedule/status. A TMDL establishes the maximum amount of impairing substance or stressor that a water body can assimilate and still meet water quality standards, and allocates that load among pollution contributors. TMDLs are quantitative tools for implementing state water quality standards, based on the relationship between pollution source sand water quality

conditions. The most current (2012) approved 303(d) list identifies the following impaired waters in watersheds downstream of the Project site (SWRCB 2015):

- San Dieguito River is listed as impaired for Indicator Bacteria, specifically Enterococcus and Fecal Coliform, as well as Nitrogen, Phosphorus, TDS, and Toxicity. Potential sources are nonpoint source[8], point source[9], and urban runoff/storm sewers. Estimated TMDL completion, or when the water quality standard will be met, is 2021.
- Pacific Ocean Shoreline, San Dieguito Hydrologic Unit is listed as impaired for Indicator Bacteria, specifically Total Coliform. The Total Coliform impairments are located at the San Dieguito Lagoon Mouth at San Diego River Beach. Potential sources are unknown nonpoint source, unknown point source and urban runoff/storm sewers. Estimated TMDL completion for Total Coliform is 2010.

The Project's potential contribution to these downstream impairments is discussed in greater detail below.

Regulatory Framework

The Project is subject to a number of regulatory requirements associated with federal, state, and local guidelines, as summarized below.

Federal Water Pollution Control Act (Clean Water Act)

The principal federal law pertaining to the regulation of water quality is the CWA. The CWA strives to restore and maintain the chemical, physical, and biological integrity of the nation's water. The Act sets up a system of water quality standards, discharge limitations, and permits. The fundamental purpose of this law is the protection of designated beneficial uses of water resources. Sections 106, 205(g), 205(j), 208, 303, and 305 of the CWA establish requirements for state water quality planning, management, and implementation with regard to surface waters. The CWA requires that states adopt water quality standards to protect public health and welfare and enhance the quality of water. The CWA was amended in 1987 to include urban and stormwater runoff, which required many cities to obtain an NPDES permit for stormwater conveyance system discharges. Section 402(p) of the Clean Water Act prohibits discharges of pollutants contained in stormwater runoff, except in compliance with an NPDES permit.

[8] Nonpoint source pollution refers to diffuse, widespread cumulative sources of pollution and is the primary source of surface water and groundwater contamination. In other words, nonpoint source pollution cannot be traced back to a single point or source. Rainwater and over-irrigation flowing over land that has been altered by human activity and washing pollutants that have accumulated on those land surfaces into storm drains, streams, rivers, and groundwater, and eventually into lakes, streams, or coastal embayments, cause nonpoint source pollution.

[9] Point source pollution refers to pollutants discharged to water through any discernable, confined, and discrete conveyance. In other words, the boundaries of the source of pollution can be easily defined and identified from a single point. Point sources generally discharge predictable concentrations and volumes of pollutants. Examples of point source pollution are sewage treatment plants, landfills, and industrial facilities, all of which may release effluent and sewage or other liquid waste into a body of water.

National Pollutant Discharge Elimination Systems Requirements

The Project is subject to applicable elements of the CWA, including the NPDES. Specific NPDES requirements associated with the Project include conformance with the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, NPDES No. CAS000002, SWRCB Order 2009-0009-DWQ, as amended by Order 2012-0006-DWQ), General Permit for Discharges from Groundwater Extraction and Similar Discharges to Surface Waters within the San Diego Region Except for the San Diego Bay (Groundwater Permit; RWQCB Order No. R9-2008-0002, NPDES No. CAG919002), NPDES Municipal Storm Water Permit (Municipal Permit, NPDES No. CAS010266, RWQCB Order No. R9-2013-0001, as amended by Order No. R9-2015-0001), and related County standards as outlined below.

Construction General Activity Storm Water Permit

Conformance with the Construction General Permit is required prior to development of applicable sites exceeding one acre, with this permit issued by the SWRCB under an agreement with the USEPA. Specific conformance requirements include implementing a Storm Water Pollution Prevention Plan (SWPPP), an associated Construction Site Monitoring Program (CSMP), employee training, and minimum BMPs.

Under the Construction General Permit, Project sites are designated as Risk Level 1 through 3 based on site-specific criteria (e.g., sediment and receiving water risk), with Risk Level 3 sites requiring the most stringent controls. Based on the site-specific risk level designation, the SWPPP and related plans/efforts identify detailed measures to prevent and control the off-site discharge of pollutants in stormwater runoff. Depending on the risk level, these may include mandatory technology-based action levels, effluent limitations, and advanced treatment systems (ATS). Specific pollution control measures require the use of best available technology economically achievable (BAT) and/or best conventional pollutant control technology (BCT) levels of treatment, with these requirements implemented through applicable BMPs. While site-specific measures vary with conditions such as risk level, proposed grading, and slope-soil characteristics, detailed guidance for construction-related BMPs is provided in the permit and related County standards (as outlined below), as well as additional sources including the EPA National Menu of Best Management Practices for Storm Water Phase II-0 Construction (USEPA 2014), and California Stormwater Quality Association Storm Water Best Management Practices Handbooks. Specific requirements for the Project under this permit would be determined during SWPPP development, after completion of Project plans and application submittal to the SWRCB.

Municipal Stormwater Permit

Per Federal regulations, States issue a Municipal Stormwater permit, or NPDES permit, to municipalities with renewals every five years. Under this permit each municipality must develop a stormwater management program designed to control the discharge of pollutants into and from the municipal separate storm sewer systems (MS4) or from being discharged directly into the MS4. The purpose of this permit is to protect local

water bodies since storm drains typically discharge their water into streams, bays, and/or the ocean without treatment.

The NPDES permit identifies waste discharge requirements for urban runoff related to applicable new development, redevelopment, and existing development sites under the jurisdiction of co-permittees (e.g., the County). The intent of these requirements is to protect environmentally sensitive areas and provide conformance with pertinent water quality standards, including the CWA and the RWQCB Basin Plan, summarized below. Identified requirements involve using a number of planning, design, operation, treatment, and enforcement measures to reduce pollutant discharges from individual development projects and the municipal storm drain system as a whole to the maximum extent practicable. Specifically, these measures include: (1) using jurisdictional planning efforts (such as discretionary general plan approvals) to provide water quality protection, (2) requiring coordination between individual jurisdictions to provide watershed-based water quality protection, (3) implementing applicable LID, site design, source control, priority project, and/or volume- or flow-based (as defined in the permit text) treatment control BMPs to avoid, reduce, and/or mitigate effects including increased erosion and sedimentation, hydromodification[10], and the discharge of pollutants in urban runoff, and (4) using appropriate monitoring, reporting, and effacement efforts to ensure proper implementation, documentation and, as appropriate, modification of permit requirements. The Municipal Permit also requires co-permittees to fund and implement runoff management plans (RMPs) to reduce runoff and pollutants discharges to the maximum extent practicable. The RMPs were conducted on a jurisdictional basis for the first two years, and were expanded to include a watershed-based approach for subsequent efforts.

- The RWQCB adopted Order No. R9-2013-0001, NPDES Permit and Waste Discharge Requirements for Discharges from the MS4s Draining The Watersheds Within The San Diego Region at its May 8, 2013 Board Meeting. Order No. 2015-0001, which was adopted on February 11, 2015, amends the previous order to extend coverage of the Regional MS4 Permit to Orange County co-permittees and address a variety of other issues. The Regional MS4 Permit regulates MS4 discharges to inland surface waters, bays, estuaries, and coastal waters throughout the three counties within the co-permittees' region.
- The Regional MS4 Permit jointly covers 39 municipal, county government, and special district entities (referred to jointly as co-permittees) located in southern Orange County, southwestern Riverside County, and San Diego County which own and operate large MS4s that discharge stormwater runoff and non-stormwater runoff to surface waters throughout the San Diego Region.

Basin Plan Requirements

[10] Hydromodification is defined in the Municipal Permit as the change in natural watershed hydrologic processes and runoff characteristics (infiltration and overland flow) caused by urbanization or other land use changes that result in increased stream flows, sediment transport, and morphological changes in the channels receiving the runoff.

The RWQCB Basin Plan establishes a number of beneficial uses and water quality objectives for surface and groundwater resources. Beneficial uses are generally defined in the Basin Plan as "the uses of water necessary for the survival or wellbeing of man, plus plants and wildlife."

The SWRCB has adopted a uniform list and description of beneficial uses to be applied throughout all basins of the State. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals identified in the Water Quality Control Plan for the San Diego Basin prepared by the RWQCB. Downstream areas of the Project site include the San Dieguito River and Pacific Ocean.

Identified existing and potential beneficial uses of ground waters for the downstream areas of Solana Beach Hydrologic Area within the San Dieguito Hydrologic Unit include municipal and domestic supply, agricultural supply, and industrial service supply.

Identified existing and potential beneficial uses for the Pacific Ocean Shoreline include industrial service supply, navigation, contact water recreation, non-contact water recreation, commercial and sport fishing, preservation of biological habitats of special significance, wildlife habitat, rare, threatened, or endangered species, marine habitat, aquaculture, migration of aquatic organisms, spawning, reproduction, and/or early development, and shellfish harvesting.

County of San Diego Requirements

Pursuant to the described NPDES Permit requirements, the County has adopted and/or updated the following related standards: (1) the WPO (Storm Water Ordinance, No. 10410), (2) the associated Stormwater Standards Manual, which is an appendix to the WPO and LID[11] Handbook (2007), (3) the County BMP Design Manual, discussed below, (4) the County Jurisdictional RMP, and (5) the County Grading Ordinance (No. 10224).

These sources provide direction for applicants to determine if and how they are subject to County and related Municipal Storm Water Permit standards, and identify requirements for the inclusion of permanent low impact development (LID) and site design, source control, and/or LID/treatment control BMPs to provide regulatory conformance for applicable projects. The County Watershed Protection, Stormwater Management, and Discharge Control Ordinance and Attachment A: Stormwater Standards Manual (WPO/SSM) also requires construction-related BMPs to address issues including erosion and sedimentation. The County may, at its discretion, require the submittal and approval of a SWPPP to address construction-related stormwater issues prior to site development (with such requirements in addition to the NPDES SWPPP criteria described above).

The County of San Diego Watershed Protection, Storm Water Management, and Discharge Control Ordinance, which includes a Stormwater Standards Manual (WPO and SSM) strives to protect the health, safety, and general welfare of County residents;

[11] The LID process is intended to mimic predevelopment hydrologic conditions by using design practices and techniques to effectively capture, filter, store, evaporate, detain, and infiltrate runoff close to its source.

to protect water resources and to improve water quality; to cause the use of management practices by the County and its citizens that will reduce the adverse effects of polluted runoff discharges on waters of the state; to secure benefits from the use of stormwater as a resource; and to ensure the County is compliant with applicable state and federal law. The WPO contains discharge prohibitions and requirements that vary depending on type of land use activity and location in the County. The SSM, provided in Appendix A of the WPO, sets out in more detail, by Project category, what dischargers must do to comply with the WPO and to receive permits for projects and activities that are subject to the WPO. The WPO and SSM are legally enforceable by the County in the unincorporated County.

The County has also adopted its BMP Design Manual (DM) for Land Development and Public Improvement Projects. The BMP DM is focused on project design requirements and related post-construction requirements for land development and capital improvement projects, and addresses WPO requirements for these project types.

The San Diego County Grading Ordinance serves to combine regulations affecting the grading and clearing of land and activities affecting watercourses within the unincorporated County of San Diego. Chapter 6 (Sections 87.601-87.608) of the ordinance covers watercourses and is intended to protect persons and property against flood hazards by identifying prohibited acts in watercourses and acts prohibited unless a permit is obtained.

In addition to the standards outlined above, the San Diego County Hydrology Manual provides uniform procedures for analyzing flood and stormwater conditions in the County. Specific elements of these procedures include methods to estimate storm flow peaks, volumes and time distributions. These data are used in the design of storm water management facilities to ensure appropriate dimensions and capacity (typically 100-year storm flow volumes), pursuant to applicable requirements in the San Diego County Drainage Design Manual.

Additionally, Order R9-2013-0001 as amended by Order R9-2015-0001 directs the County and other co-permittees to design and implement requirements of the County's BMP DM and LID BMPs to mitigate water quality and hydro-modification impacts from stormwater runoff from Project development sites by promoting infiltration and minimizing impervious areas. Pursuant to these requirements, the County prepared the BMP DM for Priority Development Projects (PDPs), which was adopted in February 2016. The stated purpose of the BMP DM is "…to help a project applicant, in coordination with the County, develop a Storm Water Quality Management Plan (SWQMP) for a development project (Public or Private) that complies with local MS4 Permit requirements…" Specifically, the BMP DM requires that all PDPs must comply with pollutant control and hydro-modification control requirements by implementing permanent post-construction BMPs and mitigation measures.

Finally, the County of San Diego Resource Protection Ordinance (RPO) prohibits development of permanent structures for human habitation or as a place of work in a floodway. Modifications to any floodway must meet specified design criteria.

### 3.1.3.3 *Analysis of Project Effects and Determination as to Significance*

Alteration of Drainage Patterns

Guideline for Determination of Significance

The Project would have a significant hydrology impact related to drainage alteration if it would:

- 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.

*Guideline Source*

This guideline is from Section 4.0 of the *County of San Diego Guidelines for Determining Significance, Hydrology* (County of San Diego, July 30, 2007).

Analysis

As described above, a natural drainage channel/wash runs northerly of and crosses onto the Project site. The Project site includes a small ridge that runs from the center of the site toward the southeast. The portion of the Project site northerly and northeasterly of the ridge drains generally northerly and the portion of the Project site west of the ridge drains both to the northwest and southwest. Project implementation would result in some modification of the described on-site drainage patterns and directions through proposed grading and construction activities. According to the SWQMP prepared for the Project, included as Appendix N, these modifications would not substantially alter the overall described on- and off-site drainage patterns because storm water runoff from the Project site would be directed by surface flow to the natural drainage channel/wash as it does in the existing conditions and then to the San Dieguito River and Pacific Ocean.

The Project would preserve natural drainage areas to the maximum extent practical while allowing for the development of the site. All impervious areas created on-site would drain into pervious areas prior to entering the wash northerly of the Project site. The stormwater discharge points would not divert runoff from existing conditions. The potential pollutants generated by the increased runoff from the additional impervious areas would be reduced by directing the flows through vegetated swale/buffer strips on each of the two lots prior to draining onto the existing natural drainage areas. Specifically, the Project design would encompass a number of appropriately designed and located drainage facilities to retain the overall existing drainage features, including the use of similar outlet points for flows discharged from the Project site. In addition, the Project would conform to design standards in the County's Drainage Design Manual and the SSM. Therefore, according to the project's CEQA Drainage Study, the development of the Project would not alter drainage patterns on the site or the surrounding area, nor would it result in substantial erosion or siltation on the properties

upstream and downstream of the development. A **less than significant** impact is identified.

Increase in Water Surface Elevation

Guideline for Determination of Significance

The Project would have a significant hydrology impact if it would:

- Increase water surface elevation in a watercourse within a watershed equal or greater than 1 square mile, by 1 foot or more in height and in the case of the San Luis Rey River, San Dieguito River, San Diego River, Sweetwater River and Otay River, 2/10 of a foot or more in height.

*Guideline Source*

This guideline is from Section 4.0 of the *County of San Diego Guidelines for Determining Significance, Hydrology* (2007).

Analysis

Implementation of the Project would result in the construction of impervious surfaces including pavement and structures, with such areas increasing both the rate and amount of runoff within the Project site by reducing infiltration capacity and concentrating flows. The CEQA Drainage Study (Appendix M) includes an assessment of pre- and post-development runoff rates and amounts within and from the Project site, including analyses of Project-related effects to existing/proposed storm drain systems, off-site flows, and related downstream flooding hazards. This analysis is summarized below.

*Storm Run-On*

The Project site is not subject to storm run-on. The existing drainage pattern keeps water from the south and east from entering the property. The runoff from the development to the south passes under the existing driveway to the site and through the open space lot adjoining Four Gee Road. The runoff from the east runs along the easterly property line of the Project site to a point north of the Project site where it enters the open space lot. These areas were included in the drainage study and are part of the "drainage basin" in which this Project is located.

*Storm Run-Off*

Much of the proposed parking lot would be constructed of porous pavement or decomposed granite to reduce the total amount of impervious area created. The on-site walkways and patios would also be constructed of interlocking pavers to further limit the amount of impervious area. There would still be an increase to the amount of impervious area predominantly due to the construction of the church buildings, impervious areas in the parking lot, and the construction of Grace Way. This increase in impervious area would cause an increase in the storm runoff from the Project drainage area.

According to the CEQA Drainage Study, prior to development the impervious area on the site is approximately 0.84 acres of the 9.1-acre site, or 9 percent of the site area. After the site is developed, the impervious area would increase to 3.7 acres, or 41 percent of the site area. A comparison of pre- and post-construction runoff volumes and velocity for the site drainage basin is included in Table 3.1-13, Comparison of Pre-Construction and Post-Construction Runoff and Velocity. Changes in runoff quantity and velocity will range from 0 to 12.8 percent, depending on the node under consideration.

The CEQA Drainage Study also calculates the total runoff flow contributed to the existing creek from the Project site in a 100 year storm event. This figure, after calculations for the confluence at the culvert under Four Gee Road, is 21.7 cubic feet per second (cfs) pre-construction. The post construction runoff would be 23.8 cfs, which is an increase in 2.1 cfs. The 2.1 cfs increase is a 9.7 percent increase over the existing 100 year storm runoff for the site. The anticipated 100 year flow at the culvert under Four Gee Road is 1,900 cfs as per the improvement plans for Tract No. 5070-2.

The 2.1 cfs increase in runoff from the site is one tenth of one percent (0.1%) of the expected culvert flow. The effect of this increase would have an immeasurable effect on the water surface elevation and velocity of the flows in the creek upstream and downstream of the culvert. Bio-filtration basins are also scattered throughout the Project site as indicated in the CEQA Drainage Study (Appendix M). Moreover, and as discussed above, implementation of the Project is not anticipated to alter on-site or surrounding drainage patterns. Therefore, development of the Project would not increase water surface elevation in a watercourse within a watershed equal or greater than 1 square mile, by 1 foot or more in height and impacts would be **less than significant**.

Runoff Rates/Amounts and Related Drainage Systems and/or Flood Hazards

Guideline for Determination of Significance

The Project would have a significant hydrology impact if it would:

- Result in increased velocities and peak flow rates exiting the Project site that would cause flooding downstream or exceed the stormwater drainage system capacity serving the site.

*Guideline Source*

This guideline is from Section 4.0 of the *County of San Diego Guidelines for Determining Significance, Hydrology* (2007).

Analysis

As discussed above, implementation of the Project would result in the construction of impervious surfaces including pavement and structures, with such areas increasing both the rate and amount of runoff within the Project site by reducing infiltration capacity and

concentrating flows. Prior to development the impervious area on the site is approximately 9 percent of the 9.1-acre site. After the site is developed, the impervious area would increase to 41 percent of the site. A comparison of pre- and post-construction runoff for the site drainage basin is included in Table 3.1-13, Comparison of Pre-Construction and Post-Construction Runoff and Velocity. Bio-filtration basins are scattered throughout the Project site as indicated in the CEQA Drainage Study (Appendix M).

Additionally, the total pre-construction runoff flow contributed to the existing creek from the Project site in a 100-year storm event is 21.7 cfs. The post-construction runoff would increase by 2.1 cfs to 23.8 cfs. As identified above, the anticipated 100-year flow at the culvert under Four Gee Road is 1,900 cfs. The 2.1 cfs increase resulting from the Project is 0.1% of the expected culvert flow, which would result in an immeasurable effect on the water surface elevation and velocity of the flows in the creek upstream and downstream of the culvert.

*Hydromodification*

In general terms, hydromodification consists of the erosive impacts caused by cumulative changes in the quantity and duration of stormwater flows resulting from the increase in impervious surfaces associated with development. Specifically, an increase in impervious areas typically generates related increases in both the rate and amount of stormwater runoff compared to pre-development conditions. Flow thresholds associated with hydromodification mitigation requirements are typically expressed in terms of less intense storms (e.g., 2- to 10-year storm events) which, due to the increase of impervious area in associated watersheds, can potentially result in more accelerated cumulative long-term erosion than one larger storm event (such as a 100-year storm). As a result, hydromodification management techniques are aimed at reducing the duration and quantity of storm flows from the smaller and more frequent storm events.

According to information contained in the SWQMP prepared for the Project, included as Appendix N, the Project's stormwater runoff will flow via surface flow to 18 bio-filtration planters throughout the Project site. The Project site will also include porous pavement and concrete pavers with gravel beds and perforated pipe under drains. See Figure 3.1-1, Hydromodification Management Exhibit Post-Development. The Project's drainage plan has been designed to address both water quality and flow control issues per the County HMP. The HMP requires the Project to implement hydromodification mitigation measures so that post-project runoff flow rates and durations do not exceed pre-project flow rates and durations. Based on the SWQMP prepared for the Project, the proposed BMP areas are adequately sized to provide both water treatment and flow controls for the Project.

Based on the above discussions, the Project Drainage Study concludes that the overall peak 100-year flow from the Project site would not adversely increase downstream flooding hazards or the capacity of downstream storm drain systems/facilities. As a result of these considerations and the fact that the on-site drainage system would be designed to accommodate peak 100-year storm flows, potential Project-related impacts associated with increased peak flow rates and amounts, associated downstream

flooding hazards, and the capacity of existing or planned storm drain systems would be **less than significant.**

Floodplains, Floodwater Surface Water Elevations, and Related Flood Hazards

Guidelines for Determination of Significance

The Project would have a significant hydrology impact related to floodplains, floodwater surface elevations, and related flood hazards if it would:

- Result in placing housing, habitable structures, or unanchored impediments to flow in a 100-year floodplain area or other special flood hazard area, as shown on a FIRM, a County Flood Plain Map or County Alluvial Fan Map, which would subsequently endanger health, safety and property due to flooding.
- Place structures within a 100-year flood hazard or alter the floodway in a manner that would redirect or impede flow resulting in any of the following: (a) alter the Lines of Inundation resulting in the placement of other housing in a 100 year flood hazard, or (b) increase water surface elevation in a watercourse with a watershed equal to or greater than 1 square mile by 1 foot or more in height and in the case of the San Luis Rey River, San Dieguito River, San Diego River, Sweetwater River and Otay River 2/10 of a foot or more in height.

*Guidelines Source*

These guidelines are from Section 4.0 of the *County of San Diego Guidelines for Determining Significance, Hydrology* (2007).

Analysis

As noted above under Existing Conditions, there are no mapped FEMA floodplains located on the Project site. Therefore, no structures are proposed to be constructed within a FEMA floodplain. The area to the west and east of the intersection of Four Gee Road and Camino Del Sur is mapped Zone AE, for areas of 100-year flood with base flood elevations determined.

According to the analysis presented in the CEQA Drainage Study prepared for the Project, the construction of Grace Way would not be within the area of inundation of a 100-year storm.

Based on the described conditions and conclusions, potential impacts to the Project and offsite areas from 100-year flood-related health, safety, and property inundation water surface elevation hazards would be **less than significant.**

Water Quality

Guidelines for Determination of Significance

The Project would have a significant impact related to water quality if it would:

- Not comply with the standards set forth in the County Stormwater Standards Manual, Regulatory Ordinances Section 67.813, as amended, or the Additional Requirements for Land Disturbance Activities set forth in Regulatory Ordinances, Section 67.
- Fail to conform to applicable Federal, State or local Clean Water statutes or regulations including but not limited to the Federal Water Pollution Control Act, California Porter-Cologne Water Quality Control Act, and the County of San Diego WPO.
- Drain to a tributary of an impaired water body listed on the Clean Water Act Section 303(d) list, and will contribute substantial additional pollutant(s) for which the receiving water body is already impaired.
- Drain to a tributary of a drinking water reservoir and will contribute substantially more pollutant(s) than would normally runoff from the Project site under natural conditions.
- Contribute pollution in excess of that allowed by applicable state or local water quality objectives or cause or contribute to the degradation of beneficial uses.

*Guidelines Source*

These guidelines are from Section 4.0 of the *County of San Diego Guidelines for Determining Significance, Surface Water Quality* (2007).

Analysis

*Conformance with Federal, State and Local Water Quality Statutes and Associated Regulations*

Potential Project-related water quality impacts are associated with both short-term construction activities and long-term operation and maintenance. Project-related activities that could potentially result in direct effects to groundwater quality are limited to the percolation of Project-related surface runoff and associated pollutants (e.g., in bio-filtration planters). The Project site contains soils with high clay content with high run-off potential. Previous percolation tests performed on the Project site indicate very low permeability. The site shows little evidence of erosion, except in the vicinity of the natural drainage channel. No infiltration BMPs could be incorporated due to the low permeability of the soil. The following assessment of potential water quality impacts is applicable to both surface and groundwater resources.

*Short-Term Construction Impacts.*

Potential water quality impacts related to on- and off-site Project construction include erosion/sedimentation, the use and storage of construction-related hazardous materials (e.g., fuels, etc.), and generation of debris from demolition activities.

*Erosion and Sedimentation.*

Proposed excavation, grading, and construction activities on the Project site and associated off-site areas (e.g., road improvements) could potentially result in related

erosion and off-site sedimentation. Project activities would involve the removal of surface stabilizing features such as vegetation, excavation of existing compacted materials from cut areas, and re-deposition of excavated and/or imported material as fill in proposed development sites. Project-related erosion could result in the influx of sediment into downstream receiving waters, with associated water quality effects such as turbidity and transport of other pollutants that tend to adhere to sediment particles.

While graded, excavated, and filled areas associated with construction activities would be stabilized through compaction and installation of hardscape and landscaping, erosion potential during construction activities would be higher than for existing conditions. Developed areas would be especially susceptible to erosion between the beginning of grading/construction and the installation of pavement or establishment of permanent cover in landscaped areas. Erosion and sedimentation are not considered to be significant long-term concerns for the Project because developed areas would be stabilized through installation of hardscape or landscaping. The Project would incorporate long-term water quality controls pursuant to County and NPDES guidelines, including, among other efforts, measures that would avoid or reduce off-site sediment transport as well as installing and maintaining bio-filtration planters.

The short-term water quality effects from Project-related erosion and sedimentation could potentially affect downstream waters and associated wildlife habitats. Short-term construction-related erosion and sedimentation impacts would be addressed through conformance with the NPDES Construction General Permit and associated County standards as described above under Regulatory Framework. This would include implementing an authorized NPDES/County SWPPP for proposed construction, including, but not limited to, erosion and sedimentation BMPs. The Project SWQMP identifies a number of preliminary construction BMPs, including measures related to erosion/sedimentation (Appendix N of this DSEIR). While specific BMPs would be determined during the SWPPP process based on Project site characteristics (soils, slopes, etc.), the BMPs may include standard industry measures and guidelines from the NPDES Construction General Permit and County WPO/SSM, as well as the SWQMP. An initial list of temporary construction BMPs that may be incorporated into final Project design and implemented during construction includes:

- Hydraulic stabilization hydroseeding (summer)
- Bonded or stabilized fiber matrix (winter)
- Energy dissipater outlet protection
- Silt fence
- Fiber rolls (straw wattles)
- Storm drain inlet protection
- Stabilized construction entrance
- Street sweeping and vacuuming
- Material delivery and storage management

- Spill prevention and control
- Concrete waste management
- Solid waste management
- Sanitary waste management

Implementation of these measures would help avoid or minimize impacts related to erosion and sedimentation during short-term construction such that the Project would comply with applicable Federal, State, and County statutes and regulations. Associated erosion/sedimentation impacts would be **less than significant.**

*Construction-Related Hazardous Materials.*

Project construction would involve the use and/or storage of hazardous materials such as fuels, lubricants, solvents, concrete, paint, and portable septic system wastes. The accidental discharge of such materials during Project construction could result in impacts if such materials reach downstream receiving waters, particularly materials such as petroleum compounds that are potentially toxic to aquatic species in low concentrations. Implementation of a SWPPP would be required under NPDES and County guidelines, and would include detailed measures to avoid or mitigate potential impacts related to the use and potential discharge of construction-related hazardous materials. The Project SWQMP identifies a number of preliminary construction BMPs, as identified above, including measures related to the proper use and storage of hazardous materials. While detailed BMPs would be determined as part of the NPDES/SWPPP process based on Project-specific parameters, the BMPs are likely to also include the standard industry measures and guidelines from the NPDEDS Construction General Permit and County WPO/SSM, as well as the SWQMP. These construction-related BMPs would avoid or minimize impacts related to the use and storage of construction-related hazardous materials. Based on the implementation of these and/or other appropriate hazardous material BMPs as part of (and in conformance with) the Project SWPPP and related Federal, State, and County requirements during Project construction, associated impacts resulting from construction-related hazardous materials would be **less than significant.**

*Demolition-Related Debris Generation.*

The Project would involve the demolition of existing on-site structures and pavement. This demolition would generate variable amounts of construction debris, potentially including concrete, asphalt, glass, metal, drywall, paint, insulation, fabric, and wood. Demolition activities could also potentially generate particulates, as well as pollutants related to hazardous materials including lead-based paint and asbestos insulation. The introduction of demolition-related particulates or hazardous material pollutants into the local storm drain system could potentially result in downstream water quality impacts.

Project construction would be subject to a number of regulatory controls related to demolition, including NPDES/SWPPP requirements and hazardous materials controls. The Project SWPPP would include measures to address potential effects associated with pollutant generation from demolition activities, with detailed requirements to be determined as part of the SWPPP process. A number of standard BMPs that may likely

be applicable to Project demolition efforts are listed above. Demolition-related activities involving hazardous materials would conform to associated regulatory requirements. Such conformance would include applicable measures to regulate sampling and monitoring procedures, contain/abate contaminated materials during construction, provide protective gear for workers handling contaminated materials, ensure acceptable exposure levels, and provide for safe and appropriate handling, transport and disposal of hazardous materials generated during Project construction. Based on the implementation of appropriate BMPs as part of (and in conformance with) the Project SWQMP and related Federal, State, and County hazardous material regulations, potential water quality impacts from Project-related generation of demolition debris would be **less than significant.**

*Long-Term Operation and Maintenance Impacts.*

The Project SWQMP (Appendix N of this DSEIR) identifies pollutants of concern and appropriate control measures related to development of the Project, based on procedures identified in the County WPO/SSM, BMP Design Manual, and LID Manual, as well as the related NPDES Municipal Permit. The Project is identified as a PDP due to the inclusion of proposed development categories such as commercial property, parking areas, and roadways. According to the SWQMP, additional potential pollutant source areas include on-site storm drain inlets, future indoor and structural pest control, landscaping and outside pesticide use, refuse areas, and fire sprinkler test water. As identified above, anticipated pollutants associated with the Project include sediment, nutrients, heavy metals, trash and debris, oxygen demanding substances, oil and grease, and pesticides (Table 3.1-12, Pollutants of Concern). Sediment, nutrients, and pesticides are identified as receiving water pollutants of concern for the San Dieguito River. Bacteria and viruses are also impairments for the downstream waters (Pacific Ocean Shoreline and San Dieguito River); however, the SWQMP indicates these pollutants are not anticipated from the Project site. Urban pollutants accumulate in areas such as streets, parking areas, and drainage facilities, and are picked up in runoff during storm events.

As identified above, runoff within the Project site would increase as a result of constructing impervious surfaces, with a corresponding increase in pollutant loading potential. Based on these conditions, long-term Project operation could result in the on- and off-site transport of urban pollutants and associated effects such as increased turbidity, oxygen depletion, and toxicity to plants and wildlife in downstream receiving waters.

The Project would conform to applicable County and NPDES stormwater standards, with such conformance to include the use of appropriate post-construction LID and site design, source control, and permanent post-construction pollutant and hydro-modification control BMPs. Specific proposed BMPs are identified in the Project SWQMP (Appendix N), which specifies how these BMPs would be implemented, and listed in Table 3.1-14, Site Design BMPs.

*Source Control BMPs.*

Source Control BMPs are intended to avoid or minimize the introduction of pollutants into storm drains and natural drainages to the maximum extent practicable by reducing on-site pollutant generation and off-site pollutant transport. Specific source control BMPs identified in the Project SWQMP are included in Table 3.1-15, Project Source Control BMPs. These are illustrated in Figure 3.1-2, Permanent Storm Water, Source Control, and Site Design BMPs.

*Permanent Post Construction Pollutant and Hydromodification Control BMPs.*

Treatment control BMPs are designed to remove pollutants from urban runoff for a design storm event, which is a mathematical representation of a rain event that reflects conditions in a given area for design of infrastructure, to the maximum extent practicable through means such as filtering, treatment, or infiltration. Treatment control and/or LID BMPs are required to address the identified priority pollutants of concern, and must provide medium to high levels of removal efficiency for these pollutants per applicable regulatory requirements. Specific LID and treatment control BMPs identified in the Project SWQMP are illustrated in Figure 3.1-2, and include bio-filtration planters. Bio-filtration facilities detain runoff in a surface reservoir, filter it through plant roots and a biologically active soil mix, and then allow infiltration into the ground. Where native soils are less permeable, an underdrain conveys treated runoff to a storm drain or surface drainage.

Bio-filtration facilities are highly effective at treating coarse sediment and trash and pollutants that tend to associate with fine particles during treatment. The design of the site includes bio-filtration areas for flow control and to treat runoff from buildings, walkways, and driveways prior to flow into natural drainage areas. The existing natural drainage area lies within an open space easement as well as a flowage easement that lies mostly northerly of the Project site. These easements cross into the Project site along the northerly property line and provide existing natural areas that cannot be developed. The Project site generally drains from the south to the north, directing flow toward these bio-filtration areas.

*Post-Construction BMP Monitoring/Maintenance Schedules and Responsibilities.*

Identified structural BMPs include bio-filtration facilities that require ongoing monitoring and maintenance. Bio-filtration facilities can be readily maintained by the property owner without the need for specialized equipment or training. Accordingly, monitoring and maintenance efforts for these BMPs would be implemented by the Project owner(s) and memorialized through entering into a written BMP Maintenance Agreement with the County. Specific elements of this agreement would include the requirement that the basin areas be limited to the proposed use, granting an access easement to the County, and ensuring adequate funding through means such as a cash deposit, letter of credit, or other means acceptable to the County. Additional structural BMP maintenance information can be found in Attachment 3 of the SWQMP (DSEIR Appendix N).

In summary, the Project would implement LID and site design, source control, and LID/treatment control BMPs in conformance with County stormwater standards and the related NPDES Municipal Storm Water Permit (along with related monitoring/maintenance efforts). Project design would not conflict with any applicable standards presented in the County SSM. Therefore, the Project would comply with

applicable Federal, State, and County statutes and regulations and long-term Project-related water quality impacts would be **less than significant.**

*Drainage to 303(d) List Impaired Waters or Tributaries*

As described in Section 3.1.3.2, the Project site is tributary to 303(d) listed waters including the San Dieguito River and the Pacific Ocean at the mouth of the San Dieguito Lagoon at San Diego River Beach. Based on the identified list of anticipated and potential pollutants from the Project (Table 3.1-10, Pollutants of Concern), associated potential impacts to 303(d) listed waters would be related to pollutants including sediments, nutrients, bacteria and viruses, and pesticides. The Project would incorporate treatment BMPs that provide medium to high avoidance/removal efficiencies for all applicable pollutants. Specifically, these additional measures would involve preventing illicit discharges into the MS4, protecting trash storage areas from rainfall, run-on, runoff, and wind dispersal, and providing on-site storm drain inlets. Additional source control BMPs identified in the Project SWQMP are included in Table 3.1-15, Project Source Control BMPs. Based on the use of these and other appropriate measures in conformance with applicable County and NPDES regulatory requirements, potential Project-related impacts associated with drainage to 303(d) listed waters or tributaries would be **less than significant.**

*Drainage to a Drinking Water Reservoir*

A drainage is tributary to a drinking water reservoir if it is upstream of the reservoir and urban runoff from that facility or activity enters the stormwater conveyance system at a place and in a manner that would carry pollutants to the reservoir, a flowing stream that would carry pollutants to the reservoir, or an ephemeral stream that reaches the reservoir during storm events and that would carry pollutants to the reservoir during such storm events. The Project site does not drain to a drinking water reservoir. Therefore, **no impact** to drinking water would occur with implementation of the Project.

*Protection of Water Quality Objectives and Beneficial Uses*

A summary of applicable San Diego Basin Plan water quality objectives and related beneficial uses is provided in Section 3.1.3.2, under the discussion of Regulatory Framework. Water quality objectives established for the protection of beneficial uses are derived from this Plan. Pursuant to the discussion of short- and long-term water quality issues provided above under the analysis of regulatory conformance, the Project would incorporate a number of BMPs and related efforts to ensure conformance with applicable Federal, State, and County statutes and regulations including the CWA, NPDES, California Porter-Cologne Water Quality Control Act, San Diego Basin Plan, and pertinent County water quality requirements, each of which was enacted to ensure the protection of water quality objectives. Based on this conformance, the Project would not generate pollutants that exceed surface water quality objectives or cause or contribute to the degradation of associated beneficial uses, and related potential impacts would be **less than significant.**

<u>Well Interference</u>

Guideline for Determination of Significance

- Offsite well interference will be considered a significant impact if after a five year projection of drawdown, the results indicate a decrease in water level of five feet or more in the offsite wells. If site-specific data indicates alluvium or sedimentary rocks exist which substantiate a saturated thickness greater than 100 feet in offsite wells, a decrease in saturated thickness of five percent or more in the offsite wells would be considered a significant impact.

*Guideline Source*

This guideline is from Section 4.0 of the *County of San Diego Guidelines for Determining Significance, Groundwater Resources* (March 19, 2007).

Analysis

Historical use of the on-site well has included watering the whole property including landscape and agriculture (>285,000 sf). This well had a tested capacity 65 to 70 gallons per minute without drawing down of the other offsite wells in the area although the regular use of the onsite well was far below capacity levels. The Project would irrigate only 72,000 SF of landscaping using the onsite well. Using current water conservation methods such as limited spay emitters and a timed watering system this will result in an approximate 75 percent reduction in well water use. Since the Project would use substantially less water than has been historically used without impact to the groundwater table, a **less than significant impact** would occur related to well interference.

### 3.1.3.4 *Cumulative Impact Analysis*

As described in the preceding analysis, implementation of the Project would require conformance to a number of regulatory requirements related to hydrology and water quality, including applicable elements of the CWA, NPDES, County stormwater standards, California Porter-Cologne Water Quality Control Act, and RWQCB Basin Plan. Based on such conformance and the aforementioned Project BMPs, all identified Project-level hydrology and water quality impacts from the Project would be avoided or would be below a level of significance.

The described regulatory requirements constitute a regional effort to implement hydrology and water quality protections through a watershed-based program designed to meet applicable criteria such as Basin Plan beneficial uses and water quality objectives. To this end, these standards require the implementation of efforts to reduce runoff and contaminant discharges to the maximum extent practicable, with the NPDES Municipal Permit identifying the goal of "promoting attainment of water quality objectives necessary to support designated beneficial uses." The County has implemented all of these requirements in the form of the BMP Design Manual, WPO/SSM, and URMPs, as well as applicable education, planning, and enforcement procedures. Based on the described regional/watershed based approach required for hydrology and water quality issues in existing regulatory standards, and the fact that conformance with these requirements would be required for all identified projects within the cumulative projects area, cumulative hydrology/water quality impacts related to Project implementation would be **less than significant.**

#### 3.1.3.5 *Significance of Impacts*

Identified potential hydrology/water quality impacts associated with the Project would be less than significant with the incorporation of identified proposed design measures as provided in Chapter 7 and conformance with applicable regulatory requirements. Therefore, no mitigation is required.

#### 3.1.3.6 *Conclusion*

Based on the discussion above, potential Project-specific and cumulative hydrology and water quality impacts associated with implementation of the Project would be avoided or below identified significance guidelines through implementation of proposed design measures, as well as conformance with established regulatory requirements. Accordingly, no additional mitigation measures are required or proposed and impacts for this issue area are **less than significant**.

### 3.1.4 Land Use and Planning

The assessment of the Project's potential to have impacts related to land use is based on the land use and planning study prepared for the Project. The results of the analysis are presented below and are included in the appendices to this DSEIR.

- Appendix O: *Land Use and Planning Analysis for the Chinese Bible Church, San Diego, California* (RECON, May 2016) and *Addendum to Land Use and Planning Analysis* (RECON Environmental, Inc., 2016)

The Santa Fe Valley Specific Plan (SFVSP) EIR (SP95-001) was also reviewed. The SFVSP EIR did not identify any significant impacts related to land use or community character.

Comments received in response to the Notice of Preparation (NOP) related to land use include:

- Compatibility of proposed use with adjacent single family residences
- Consistency with land use and community character in project vicinity
- Compatibility of "J" height designator and building heights
- Bulk, scale and coverage of the Project
- Consistency with Santa Fe Valley Specific Plan

Consistency of the proposed uses with respect to noise are addressed in Section 2.5 (Noise) of the DSEIR. Lighting issues are analyzed in Section 2.1 (Aesthetics) of the DSEIR.

A copy of the NOP and comment letters received in response to the NOP are included in Appendix A.

### 3.1.4.1 *Background*

The previously certified EIR analyzed land use and planning topics in Section 4.1. The analysis considered land use policies, environmental plans/goals, and physical land use compatibility, and impacts were determined to be less than significant. Community character was analyzed as component of physical land use compatibility.

Changes Requiring New Analysis

The Project is located in the southeast corner of subarea V.6 of the Santa Fe Valley Specific Plan in the San Dieguito Community Plan Area (SDPCA), which is designated as "low medium density residential". Refer to Figure 3.1-3, Santa Fe Village Specific Plan. This designation would permit up to four single-family homes on the site. The Project proposes to amend the Specific Plan to allow for civic uses within this subarea. Because of this proposed change, additional land use and planning analysis is provided below.

### 3.1.4.2 *Existing Conditions*

Existing Setting

The Project site is located within unincorporated San Diego County. As a whole, the unincorporated County consists of approximately 3,570 square miles. The General Plan identifies over 20 distinct communities within the County that vary in land use and density and range from semi-suburban areas to low-density village centers surrounded by agricultural lands and open space. These areas generally contain local-serving land uses and public facilities with residential uses.

The Project site is located within the San Dieguito community, which is a more developed community located near the westernmost boundary of the unincorporated area. According to the General Plan, this community, along with its neighbors, is served by water, sewer, school, and other public facilities that are attractive and encourage more rapid development. The Project site is currently undeveloped. Figure 3.1-4, Land Uses within One Mile of the Project Site, depicts land uses within one mile of the site and Figure 3.1-5, Zoning Within One Mile of the Project Site, shows the zoning within one mile of the Project site.

The following provides a detailed description of development adjacent to and in the vicinity of the Project site, going clockwise from the north.

North

The Project site and the land uses to the north (13-acre wetland preserve and 63 single-family large-lot residences) are all a part of the Golem TM 5123 approved in 1999. The residences located north of the site, beyond an open space preserve area, are separated by Campania Avenue. The zoning for the preserve area and the single-family residential (Salviati Homes) to the north (22.8 percent coverage and 27 feet in height) is S-88 (0.5-acre lot sizes).

East and Northeast

The area to the east and northeast of the Project site lies within the 4S Ranch community. The 4S Ranch land uses within the vicinity of the Project site primarily comprise single-family residential development, but at higher densities than the single-family estate residential development that lies to the north and northwest. For example, the single-family units to the northeast are on approximately 5,000, and 6,000 SF lots (SilverCrest: 43.7 percent coverage and 28.9 feet in height; Travata: 34.7 percent coverage and 27 feet in height). The area further to the northeast also contains an active park and a utility station. The zoning for the 4S Ranch single-family residential area (Rosemary Lane) immediately to the east is RS (4,000 SF lots with 41.2 percent coverage and 27 feet in height). The properties to the east are large multi-family residences: Garden Walk (ll.2-acre property, 39 percent coverage, and 30 feet in height), Bridgeport (9.5-acre property, 40.8 percent coverage, and 37 feet in height), and San Moritz (3.7-acre property, 44.8 percent coverage, and 28.6 feet in height).

Southeast

Immediately southeast of the Project site is a sheriff substation, which is zoned as Specific Plan (S88). The sheriff station is located on 1 acre with coverage of 19 percent, and a height of 30 feet. The area beyond the substation is within the 4S Ranch community. This portion of 4S Ranch is the Village which is primarily developed with multi-family residential uses but nearby uses include the 4S Commons town center containing mixed commercial land uses. The zoning for the commercial portion (4S Commons) is C34 (General Commercial/ Residential Use). The C34 Use Regulations are intended to create and enhance areas where a mixture of commercial uses and residential uses (typically multi-family dwellings) are desired. In 'special circumstances' C34 allows for Village Residential, Office Professional, Neighborhood Commercial, and Rural Commercial uses. Various applications of the C34 Use Regulations with appropriate development designators can create areas where a single structure may serve a principal commercial function and a secondary residential use, or where a separate residential or a commercial structure is appropriate. This mixed-use area is comprised of the 4S Commons Regional Shopping Center located on a 30.5-acre property with coverage of 23.7 percent at a height of 44 feet. Between the sheriff station and 4S Commons is the Reserve Apartments located on a 29.2-acre property, covering 23.5 percent at a height of 43 feet. In addition, south of the Reserve Apartments and Camino Del Sur are other residences called Summerwood (5.8 acres, 47.8 percent coverage, and 24-foot height), and Ryland Heritage (8.9 acres, 22 percent coverage, and 24 feet in height).

The high density land uses within 4S Ranch Village to the east of the property would be compatible with civic uses such as a church. According to the General Plan, "The County of San Diego will continue to provide a diversity of choices for the type and character of community in which we live. These choices will include villages that contain a mix of housing types that are located near retail businesses, employment, schools, parklands, churches, and public institutions." (General Plan; p. 1-2). The General Plan also states "ideally, a village would reflect a development pattern that is characterized as compact, higher density development that is located within walking distance of commercial services, employment centers, civic uses, and transit." (GP page 3-7).

Because this property is next to the 4S Ranch Village and the General Plan states that in Semi-Rural areas "Higher densities within the allowable range should be located near Village areas…" (GP page 3-8), this property is suitable for a civic use, such as a church.

South

Immediately adjacent to the south, within the triangle-shaped piece bounded by Wild Horse Glen, Rancho Bernardo Road, and Camino Del Sur, are four multi-family buildings and small-lot (approximately 4,000 SF) single-family residential units which are a part of the BMR development. As shown on Figure 3.1-5, this triangle-shaped piece is zoned for residential use (AR-1-1; BMR Plan "Core Residential" 10–25 DU/AC by the City of San Diego. These residences are a part of the 4.5-acre La Viña community and Rancho Del Norte Apartments. The La Viña community is comprised of 46 homes characterized by two-story (27 feet in height) detached Mediterranean style residential homes that have 35.9 percent coverage. The apartments are located on a 5.6-acre property of four, three-story (40 feet in height) buildings with 24.1 percent coverage.

South of Camino Del Sur is the Design 39, a (K-8) school which opened in fall of 2014 and is part of the North Village at BMR. The school is located on a 22.2-acre property with 14.1 percent coverage at a height of 52 feet. The North Village at BMR is currently undergoing development and is a major factor in the currently ongoing changes to the character of the area.

South of the K-8 school is Del Norte High School, which is a part of the 4S Ranch Community. The high school is intended to accommodate approximately 2,250 students. The high school is located on a 63.3-acre property with coverage of 3.5 percent and a maximum height of 57 feet. Residences located west of the schools are Fairbanks Commons (6.7 acres, 40 feet in height, and 27.9 percent coverage), Fairbanks Square (2.8 acres, 23 feet in height, and 40.9 percent coverage), and Northridge Road (2.8 acres, 24 feet in height, and 47.1 coverage).

Southwest

To the southwest, across Camino Del Sur, is the North Village at BMR. This portion of BMR was approved as the "urban core" of the North Village, and contains mixed-use development, multi-family residential, employment, the village green, a transit center, and a middle school. The BMR urban core ("North Village") is zoned for commercial and mixed uses (25–45 du/ac). A shopping center area (Target store) was constructed as part of the mixed-use development and is located on a 10.4-acre property with coverage of 30 percent and a height of 30 feet. South of the shopping area is Pasco Del Sur apartment residences located on a 2.2-acre property with coverage of 31.7 percent, and a height of 28 feet.

Camino Del Sur has been widened to four lanes consistent with its configuration west of Bernardo Lakes Drive and east of Lone Quail Road/Rancho Bernardo Road. The widening was the responsibility of the North Village developer and was completed in

2012. This widening project completed the last remaining segment (approximately 0.8 mile) of the Camino Del Sur widening effort.

West and Northeast

The area directly west of the site is part of a biological open space easement. The portion of the easement that will become part of the access road would need to be vacated. The access road will be directly across from the main driveway of the existing fire station, located on the west side of Four Gee Road. The existing fire station is located on a 2.9-acre property with coverage of 9 percent, and a maximum height of 44 ~~53~~ feet. Past Four Gee Road to the west and northwest is Planning Area IV of the SFVSP area. The large open space area along Four Gee Road to the north of the fire station is reserved for a park and an elementary school (Poway School District). North of the proposed school site is existing (approximately 12,000 SF) single-family estate residential development. Similarly, there is an existing (approximately 12,000 SF) single-family estate residential development along Camino Del Sur to the west of the Project site. The remaining portions of PA IV are undeveloped and designated as open space OS-I (sensitive resource preservation area) and OS-II (allows active and passive recreational uses).

The area in the immediate Project vicinity to the west and northwest is zoned as Specific Plan (S88). Past that to the northwest, the planned elementary school and park area is zoned as Residential. Even further to the west and northwest, the single-family developments (Bel Etage Homes (28 percent coverage along Camino Del Sur and Savenna Homes (23.9 percent coverage) to the northwest of the school site) are zoned for single-family development ("RS2" 2 lots/acre) at 0.5-acre per lot and 32 feet in height.

Table 3.1-16, Summary of Surrounding Land Uses, summarizes the surrounding land uses described above and Figure 3.1-6 depicts the proposed uses with accompanying photographs.

General Plan/Community Plan/Specific Plan and Zoning

The County of San Diego General Plan Regional Categories Map shows the church property as "Semi-Rural." The Project site is within the San Dieguito CPA, which is a low-density estate residential area surrounded by the rapidly urbanizing areas of North San Diego County. The CPA designates the Project site as Specific Plan Area (SPA).

The SFVSP was prepared (amended 2006) in order to accommodate development of the SPA. The Project site is within PA V–Subarea V.6 of the SFVSP and is subject to the policies and regulations of the SFVSP. This portion of the SPA is designated for low–medium density residential uses (1 unit per 1–1.9 acres). As detailed within the Project Description, the SPA is proposed to allow for a religious assembly use in Subarea V, with the approval of a MUP. The religious assembly use would be allowed within approximately 9 acres, located within the southeastern most portion of Area V.6, specifically: north of the City of San Diego, east of Four Gee Road, south of Campania Avenue, and west of 4S Ranch.

The goal of the Community Design Guidelines is to establish consistent design expression among site planning, engineering, architectural, and landscaping components. Thus, the Project is required to prepare site plans consistent with development standards developed for Santa Fe Valley, as described in the Conservation and Open Space Element and the Community Design element of the SFVSP. The site plan for the Project is part of the MUP. The property is zoned Specific Plan (S88) and as a residential area by the SFVSP.

Regulatory Framework

SANDAG: Designing for Smart Growth

*Designing for Smart Growth, Creating Great Places in the San Diego Region* was accepted by the SANDAG Board of Directors on June 26, 2009. Chapter 7 of the publication addresses civic uses. While this is not a County document and does not set County policy, it does provide guidance for all SANDAG member agencies in San Diego County and contains recommendations that are applicable to the Project.

Specifically, the following design polices relative to civic structures are advocated in the SANDAG report:

- Incorporate opportunities for community gathering into a variety of civic buildings, especially civic buildings that are located within neighborhoods
- Incorporate limited types of retail, such as cafes, into civic buildings that have numerous visitors
- Locate public open spaces adjacent to civic buildings to promote community gatherings and emphasize the importance of civic buildings.
- Civic buildings should incorporate principles of universal design so that all members of the community can access services.
- Use building articulation or other architectural design solutions to identify the primary entrance to a civic building.
- Provide a single point of entry that is accessible for everyone regardless of their level of mobility.
- Orient the primary entrance of a civic building towards a public street or plan.

County of San Diego General Plan

The County of San Diego General Plan seeks to protect the County's unique and diverse natural and open space resources and maintain the character of its rural and semi-rural communities. Recognizing the need for sustainable infrastructure, housing, and an economy to accommodate a growing population, the General Plan is the guiding document that balances development and preservation within the unincorporated areas of San Diego County as a whole to outline logical growth patterns. Specific Community Plans that are aligned with the vision outlined in the County's General Plan are in place for each of the County's communities and provide greater specificity. The Land Use Element of the County's General Plan identifies the location and intensity of future development and open space areas. In addition to the Land Use Element, the General

Plan also contains elements related to mobility, conservation and open space, housing, safety, and noise.

San Dieguito Community Plan

The San Dieguito Community is a low-density estate residential area surrounded by developing North San Diego County. San Dieguito is surrounded by the cities of Encinitas, Solana Beach, Carlsbad, San Marcos, Escondido, and San Diego. Originally adopted in 1974, the San Dieguito Community Plan (SDCP) has been amended and revised, most recently in 2011. The SDCP focuses on 16 inland, unincorporated communities, including the established residential community of Rancho Santa Fe, which is the focus of the SDCPA. According to the SDCP, much of the remaining vacant land is located adjacent to developing areas and is therefore appropriate for low-intensity residential use. The SDCP discusses the area's community character; land use; circulation; public safety, services and facilities; conservation; recreation; scenic highways; open space; noise; and energy. The land uses within the SDCP are primarily semi-rural, providing quiet, scenic, rural qualities with small village cores. Residents are generally more affluent. The SDCP seeks to limit the encroachment of high-density urbanization occurring in surrounding cities and communities into the San Dieguito community and preserve its existing rural character. Within the SDCP, the Project site is designated Specific Plan Area.

Santa Fe Valley Specific Plan

The Santa Fe Valley consists of approximately 3,160 acres within the SDCP area. This area is generally located west of I-15, south of Del Dios Highway, and north of Artesian Road. Situated among existing and planned estate residential development as well as nearby industrial, commercial, and medium- to high-density residential development, the SFVSP is primarily undeveloped. The SFVSP presents a comprehensive concept for the development of a maximum of 1,200 residential dwelling units plus public facility, service, and commercial sites and permanent open space. The focus of the SFVSP is the San Dieguito River Regional Park. The SFVSP includes detailed land use, circulation, conservation and open space, public facilities, and community design plans. Within the SFVSP, the Project site is designated for low medium density residential uses, within Planning Subarea V.6.

The remainder of Planning Subarea V.6 was developed with 63 residential lots in 1999 as part of the Salviati Homes subdivision. The Project site contains two residences.

County of San Diego Zoning Ordinance

The County's Zoning Ordinance was originally adopted in 1978. Its purpose is "to serve the public health, safety and general welfare and to provide the advantages resulting from the implementation of the San Diego County General Plan" (Section 1002). The Project site is zoned S88, Specific Plan Area. Part Two of the ordinance outlines use regulations. S88 Specific Planning Area Use Regulations are captured in Sections 2880 through 2889. Part Four of the ordinance describes development regulations. Section 4010 stipulates that for properties zoned S88, Specific Plan Area, the approved Specific

Plan shall prevail over the Zoning Ordinance. For the Project site, the approved Specific Plan is the SFVSP, described above.

In accordance with Section 7358 of the Zoning Ordinance, before any use permit may be granted or modified, the County must make favorable findings concerning the following factors:

1. Harmony in scale, bulk, coverage, and density.
2. Availability of public facilities, services, and utilities.
3. The harmful effect, if any, upon desirable neighborhood character.
4. The generation of traffic and the capacity and physical character of surrounding streets.
5. The suitability of the site for the type and intensity of use or development which is proposed.
6. Project findings 1 through 5 and the project location will be consistent with the San Diego County General Plan.
7. The requirements of CEQA have been complied with.

Section 3.1.4.3 below addresses the land use and planning aspects of the Project that are needed to make the MUP findings.

County of San Diego Resources Protection Ordinance

Title 8, Division 6, Chapter 6 of the San Diego County Code outlines the County's Resource Protection Ordinance. This ordinance seeks to protect and preserve the County's unique topographic, scenic, and biological resources. The ordinance establishes development regulations to prevent degradation of these resources. Section 86.603, Resource Protection Study and Findings, requires completion of a Resource Protection Study prior to approval of a variety of discretionary applications, including Tentative Maps and Tentative Parcel Maps, Rezones, and Major Use Permits. A Resource Protection Study was completed for the Project. The study found no environmentally sensitive lands.

Natural Community Conservation Planning Program

The California Department of Fish and Wildlife's Natural Community Conservation Planning (NCCP) Program is an effort by the State of California and numerous private and public partners that takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. An NCCP identifies and provides for the regional or area-wide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.

As stated in Section 2.2, Biological Resources, the Project is located within one NCCP area, a Take Authorized Area of the Lake Hodges Segment of the Multiple Species Conservation Program (MSCP). This segment is within the draft North County (NC) MSCP planning area. The draft NCMSCP is in the planning stages and has not been adopted. The NCMSCP area encompasses 294,849 acres in and around the unincorporated communities of Bonsall, De Luz, Fallbrook, Harmony Grove, Rancho

Santa Fe, Lilac, Pala, Pauma Valley, Rainbow, Ramona, Rincon Springs, Twin Oaks Valley, and Valley Center.

### 3.1.4.3 *Analysis of Project Effects and Determination as to Significance*

Details of the Project, including development intensities, building heights, setbacks and proposed phasing for development, are detailed in Chapter 1, Project Description. Discretionary actions for the Project include: approval of a Specific Plan Amendment, Major Use Permit, and Open Space Easement Vacation, as described below.

Goals, Policies and Objectives of Applicable Land Use Plans

Guideline for Determination of Significance

According to Appendix G of the CEQA Guidelines, the Project would have a significant impact related to land use if it would:

- Conflict with the land use goals, objectives, policies, and recommendations of the adopted County of San Diego General Plan, San Dieguito Community Plan, Santa Fe Valley Specific Plan, County of San Diego Zoning Ordinance, and any other applicable plans, policies, ordinances, guidelines or regulations.

Analysis

SANDAG: Designing for Smart Growth

The church design is consistent with the SANDAG recommendations for smart growth and creating great places, including providing a fully accessible facility and landmark towers and other unique design features which identify the primary entrance (and significant uses such as courtyard, fountains, secondary entries, etc.).

While the SANDAG report does not expressly include religious assembly within their definition of civic use, the County's definition is broader:

> Civic use types include the performance of utility, educational, recreational, cultural, medical, protective, government, and other uses which are strongly vested with public or social importance. They also include certain uses accessory to the above, as specified in Section 6150, Accessory Use Regulations.

Even though the County has a broader definition of civic uses than that provided in the SANDAG report, the County implicitly values civic buildings "that demonstrate significant levels of investment and care communicate that a community values civic life and encourages people to become an active part of the greater community "(SANDAG 2007).

The County desires religious assembly to also include the same values and ideals for civic buildings as described in Chapter 7 of the SANDAG report. For example, both the County and SANDAG recognize that as the hearts of neighborhoods, civic buildings reflect community character and values while creating gathering places that encourage civic participation and interaction among community members.

County of San Diego General Plan

The General Plan designation for the Project site is "Semi-Rural." The Project's use for religious assembly would be consistent with the County General Plan by placing civic uses near the neighboring 4S Ranch village, as discussed above. The General Plan recognizes the importance of such civic uses being placed near developed villages of compact, higher density development within walking distance of commercial services, employment centers, civic uses, and transit.

*Guiding Principles*

The San Diego General Plan has ten guiding principles. The Project's consistency with these principles was analyzed in Table 3.1-17, Project Consistency with the Guiding Principles of the General Plan. As detailed in Table 3.1-17, the Project is consistent with the ten guiding principles.

*Land Use Framework/Community Development Model*

The General Plan Community Development Model asserts that "*The Semi-Rural category may effectively serve as an edge to the Village, as well as a transition to the lowest-density category.*"

The Project is consistent with this concept in that it provides a lower intensity civic use adjacent to higher density residential and commercial village uses, thereby serving as an appropriate transitional land use. Table 3.1-18, Project Consistency with Applicable General Plan Land Use Policies, provides a consistency analysis for all applicable General Plan land use policies. As shown in Table 3.1-18 the Project is consistent with all the applicable policies.

San Dieguito Community Plan and Santa Fe Valley Specific Plan

Community Plans are policy plans specifically created to address the issues, characteristics, and visions of communities within the County. The San Dieguito Community Plan designates the Project site as a Specific Plan Area with an assigned residential density of 0.4 dwelling units per acre. The SFVSP establishes goals and policies that are consistent with the General Plan and Community Plan. The adopted SFVSP, which governs land use at the Project site, is discussed in detail below.

The Project would be consistent with the SFVSP as follows:

| **SFVSP Recommendation** | **Project Consistency** |
|---|---|
| **p 2-10**<br>The southeast portion of Area V consists of a gentle south-facing slope adjoining the proposed medium density residential development in the 45 Ranch SPA. Most of this area is currently used for agricultural activity. Constraint to development is biological sensitivity, particularly freshwater marsh. Most of this portion of Area V is highly suitable for | The Project site is located in a portion of Planning Area V, which was identified as "suitable for development". |

| | |
|---|---|
| development. | |
| **Project Objectives - p 2-15a**<br>Provide for land uses that establish a sense of community in Santa Fe Valley consistent with the character of adjoining existing and planned communities. | Churches provide a gathering point for members and guests for spiritual, educational, and social interactions. Church communities identify and serve the needs of the larger communities in which they are located. The proposed church would help to meet an unmet demand for a religious gathering point for both church members and non-members alike. The Project would help form a more complete community in the Project area by reducing the need for community members to look outside their community for church needs. |
| **Project Objectives - p 2-15b**<br>Provide recreational and educational opportunities in close proximity to residential uses, accessible by public roads and trails. | In addition to the church, the Project would provide on-site recreational facilities. The Project would be located in close proximity to residential development within 4S Ranch and the facilities would be accessible by public roads. |
| **Objectives LU-3**<br>Provide complementary and ancillary uses to support the permitted residential land use in the SPA. | As is noted above, the proposed Project would help meet a need for spiritual, educational, and social needs in the surrounding community through the construction of a campus for worship, and fellowship. These uses would be complementary and ancillary to the permitted residential land use in the SPA as there is no land specifically designated for church use in the SPA and much residential land use has been developed or is proposed for development. |

The Community Design Element of the SFVSP contains policies to protect existing scenic resources, ensure continued visual compatibility, and promote a cohesive community design theme. The SFVSP promotes the creation of a visually unified and attractive community that preserves and enhances the natural sources, and maintains the unique visual features of the area.

*Grading*

The Project site would be graded to a level development area, similar to surrounding development. Due to the lower elevation of the Project site than the surrounding area and the use of landscaping, fencing, and walls, the graded area and subject development would be less visible than many of the surrounding development areas. Therefore, the Project would also be consistent with the SFVSP.

*Entry Treatments*

The Project entrance would be by way of a driveway from an intersection with Four Gee Road, across from an existing fire station. An attractive entrance is proposed that would pass through a biological open space easement. The 44-foot-wide Project driveway would lead to decorative pavers and landscaping within the proposed parking lot. There would be attractive entry treatments to the Project site and the Project would provide an attractive entry to the SFVSP area. Therefore, the Project would also be consistent with the SFVSP.

*Pedestrian Circulation*

A sidewalk is proposed on the north side of the Project driveway from Four Gee Road to connect the Project site to the surrounding community and to encourage pedestrians to enter the Project site. Once on the Project site, perimeter sidewalks lead to central courtyards, lawns, and plazas, all of which promote pedestrian and bicycle circulation while relegating the parking of motor vehicles to the Project periphery. Common open space areas link the sidewalks to the building areas. Therefore, the Project would also be consistent with the SFVSP.

*Parking Lots*

The proposed parking areas, which are located on the Project periphery, would be screened by walls and landscaping. This includes planting with shade and ornamental trees. In addition, a landscaped buffer would be used to provide shade for the parking lots and to delineate vehicular and pedestrian circulation patterns. Therefore, the Project would also be consistent with the SFVSP.

*Architecture*

As is discussed in Section 2.1.5, the Project architecture includes low-pitched hipped roofs with boxed eaves that it would extend only a short distance from the walls. Windows would be grouped and rectangular in shape on the second floor, with many arched windows on the first floor. There would be an open beam arcade with fieldstone-faced pillars on the west side and tower-like structures on the south and north façades. The exterior finish would be predominately stucco painted in earth tones, with the towers faced in fieldstone. The general impression of the building would be one of an asymmetrical layout of multiple levels tied together with vertical elements such as towers. The design of the sanctuary/administrative building would be continued in each of the four additional buildings to create a cohesive and consistent campus design. This architectural design is similar to that used in nearby commercial centers, residential development, and a local school. The Project was deigned to ensure continued visual

compatibility for the Project, and to promote a cohesive and consistent community design theme, consistent with the guidelines contained in the SFVSP. Therefore, the Project would also be consistent with the SFVSP.

*Walls/Fences*

The proposed walls and fences have been designed in conformance with the SFVSP Community Design Element, which calls for earth tones and off-white colors and the avoidance of the monotonous, horizontal form of continuous walls. The use of landscaping, pilasters or plan offsets is encouraged. The majority of the Project perimeter would feature a 6-foot-tall vinyl coated chain-link fence. Fencing along the Project driveway, west-facing parking lot, and parts of the south-facing boundary would be 6-foot-tall wrought iron with stone columns. All fencing would be of open construction, allowing the public visual access to the Project site and guests to the site visual access to adjacent biological open space and development areas. Therefore, the Project would also be consistent with the SFVSP.

*Site Lighting*

The Project includes landscaped buffers separating the development from adjacent single-story development to reduce spillover effects. The Project has been designed to comply with the County's Light Pollution Code (LPC) through reduced hours and type of lighting. A study was conducted for dark skies and glare to determine whether the Project meets the Guidelines listed in Section 4 of the *Guidelines Determining Significance – Dark Skies and Glare* (Photometric Study; 2013). The study concluded that the Project would conform to all governmental requirements related to dark skies or glare and to the San Diego County Light Pollution Ordinance. Therefore, the Project would also be consistent with the SFVSP.

*Signs*

All proposed signage would be designed and installed in conformance with the SFVSP. The SFVSP Community Design Element states that signs should be limited to that needed for adequate identification, should be constructed to high-quality durable materials, and should be designed to coordinate with Project architecture. Monument signs as low to the ground as feasible are preferred and wall signs are allowed. Several types of signs are strongly discouraged, such as roof signs, pole signs, and rotating, revolving, flashing, or moving signs. The Project would utilize two low monument signs at the Project entrance at Four Gee Road, one on each side of the entrance, each positioned at a 45 degree angle to the roadway and driveway. Therefore, the Project would also be consistent with the SFVSP.

*Landscaping*

Proposed landscaping features the use of drought-tolerant native and historical species designed to complement the overall native landscape setting of the SPA. The planting of invasive species would be avoided. Transition areas would be provided to make the transition from the landscaped church campus to the adjacent biological open space

located to the north and west. Therefore, the Project would also be consistent with the SFVSP.

*Noise*

The Church's hours of operation have been limited to 8:00 AM to 10:00 PM to reduce potential nighttime noise impacts to surrounding properties. Landscaped buffers also would serve to reduce noise impacts on adjacent development.

*Aesthetics*

The Project would be required to, and does, comply with both the San Dieguito Community Plan and SFVSP Design Guidelines. And as is discussed under the sections above, conformance to these recommendations would assure that the architecture, landscaping, signage and lighting associated with the Project would be consistent with the surrounding development. Therefore, the Project would also be consistent with the SFVSP.

*Traffic*

Any special events, other than typical church holidays, including non-church community events, would be performed during off peak hours and outside typical church daily operation schedules. Peak traffic hours include Monday thru Friday 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM.

As discussed in the traffic impact analysis, the Project's main access point would be from Four Gee Road which operates at an acceptable LOS under all conditions. However, due to the Project access' proximity to the Rancho Santa Fe fire station, the applicant will install a traffic signal for the Project entrance that can be interconnected with the signaling of the Four Gee Road and Camino Del Sur intersection to the south. Interconnecting the two signals could allow for traffic to travel more smoothly and quickly with maximum green-light time, through the corridor. This essentially gets the greatest number of vehicles through the system with the fewest stops and/or travel time.

The interconnected traffic signals will assist pedestrians and bicyclists use by controlling the movement of vehicles at intersections, thereby allowing for orderly flow of pedestrians and bicycles to also access the Project and surrounding streets. In addition, the proposed traffic signals would promote pedestrian and bicyclist safety to and from the site and surrounding properties, a feature that currently does not exist. The proposed circulation on-site encourages pedestrians to easily access parking and the various structures as well as Four Gee Road. The general flow of on-site automobiles are in a counter-clockwise direction, encouraging pedestrian and bicycle safety. Bicycle accommodations are also proposed by providing a bike rack located adjacent to proposed Building B.

In summary, the Project would not conflict with the land use goals, objectives, policies, and recommendations of the adopted County of San Diego General Plan, San Dieguito Community Plan, Santa Fe Valley Specific Plan, County of San Diego Zoning Ordinance, and any other applicable plans, policies, ordinances, guidelines or regulations.

Physical Compatibility with Surrounding Areas/Community Character

Guideline for Determination of Significance

The Project would have a significant impact related to land use if it would be:

- Physically incompatible with surrounding areas

*Guideline Source*

This land use guideline was developed to analyze issues related to community character and physical compatibility with the surrounding area.

Analysis

*Bulk and Scale*

The size of the proposed learning centers, fellowship hall, and Christian education, and religious meeting buildings would be within the range of commercial and institutional buildings along Camino Del Norte and in the developments to the north and south of the Project site. Specifically, proposed buildings would be in the range of about 44,000 SF (at Phase 2 buildout) for the sanctuary/administration building (Building A); approximately 13,000 SF for the education building (Building B), approximately 6,000 SF for the religious meeting building (Building C), approximately 13,000 SF for the fellowship hall (Building D), and approximately 13,000 SF for the learning center (i.e., classroom) (Building E).

Existing buildings in the Project area include the Jerome's store with approximately 384,000 SF and numerous industrial buildings varying between approximately 95,000 SF and 30,000 SF Commercial buildings along Camino Del Norte vary considerably in size, ranging from approximately 34,500 SF for a fitness center to 10,000 to 15,000 SF for buildings in the small commercial center at Camino Del Norte and Dove Canyon Road. Building sizes in the large commercial center located north of Camino Del Norte range between approximately 7,000 SF to over 124,000 SF Overall, the larger of the proposed buildings fall well within the range of existing medium-sized commercial buildings in the surrounding community.

Residential units in the surrounding community also range considerably in size. Many multi-family structures are in the 13,000 to 14,000 SF range, a size similar to the proposed learning center and education buildings. Therefore the proposed bulk and scale of the building for the Project are consistent and compatible with the bulk and scale of buildings in the vicinity.

The Project site is located north of the City of San Diego and is separated from the City's jurisdiction by Camino Del Norte/Camino Del Sur, a 4-lane collector road that provides access to a variety of land use types and densities. The Project would support nearby County Villages, located north and northeast of the surrounding residential communities to provide a greater choice to those living in the community.

The General Plan Regional Categories Map designates the Project site as "Semi-Rural," and it is adjacent to 4S Ranch, which is designated as "Village." The General Plan's Guiding Principles for Land Use state that "Ideally, a Village would reflect a

development pattern that is characterized as compact, higher density development that is located within walking distance of commercial services, employment centers, civic uses, and transit." The Project is consistent with the bulk and scale of the adjacent Village residential and commercial areas.

*Height*

Three of the proposed buildings would be two stories (Building A, Main Sanctuary; Building B, Christian Education Building; and Building E, Fellowship Learning Center), with the other two buildings (Building C, Religious Meeting Building and Building D, Fellowship Hall) being one story. The main sanctuary building includes two architectural features (towers) that would equate in height to a three-story building. The MUP may authorize a waiver of the height requirements for the proposed towers.

As shown on Figure 3.1-7, Tallest Buildings and Towers Within One Mile of the Project Site, the surrounding community is composed predominately of two-story buildings. Most of the multi-family residential buildings are two or three stories (ranging from approximately 40-45 feet in height), and the single-family dwellings are also predominately two-story. In Photographs 4 and 5 several three-story buildings can be seen looking east and southeast from the edge of the Project site. In addition, existing commercial and institutional buildings are mostly two-story, as are the care center to the east and the K-8 9+ and high schools. The fire station directly to the west of the Project site has a training tower that is approximately ~~four stories (53~~ 44 feet) in height. A 70-foot-high tower was approved for the Maranatha Chapel MUP and the four light towers for the Del Norte High School, while not buildings, are also 70 feet tall. The tower at Del Sur Elementary is 48 feet high, the Ralph's building in 4S Commons has a tower that is 44 feet high, and the administration building at Del Norte High School is 57 feet high. Therefore the proposed heights of the building for the Project are consistent and compatible with building heights in the vicinity.

*Lot Size and Coverage*

The lot size of the Project is well within the parameters of previously approved projects in the neighborhood. The Project's lot size is approximately 396,000 SF (9.09 acres), not including the open space.

As shown on Figure 3.1-8, Largest Buildings and Projects Within One Mile of Project site, and Table 3.1-19, Site Coverage Comparison, lot sizes for large multi-story buildings within a mile of the Project site range from approximately 105,000 SF for the Rancho Del Norte apartments to the south to almost 3 million SF for the Del Norte High School with building footprints ranging from 54,000 SF for the Project to 364,560 SF for the Jerome's Warehouse.

Table 3.1-19 also shows that site coverage percentages range from 3.5 to 47 percent, with the Project, at 13.6 percent, lying within the lower end of that range. The proposed Chinese Bible Church is located on a 9.1-acre lot with 13.6 percent coverage.

For comparison, the residential properties to the north (Salviati), northeast (Travata), and east (San Moritz) have coverage of 22.8, 34.7, and 44.8 percent, respectively. To the southeast, the coverage is from 19 to 47.8 percent. To the south, the coverage is from 3.5 to 47.1 percent. To the southwest, the coverage is from 30 to 31.7 percent.

The areas to the west and northwest have coverage of 9 to 28 percent. Therefore the lot size and coverage for the Project is consistent and compatible lot sizes and coverage in the vicinity.

*Grading and Landform Alteration*

Grading and landform modification for the Project would be similar to existing developments in the neighborhood, thus matching the character of the adjacent properties and avoiding a potential harmful effect upon neighborhood character. The vast majority of lots have been graded basically level for existing development, altering natural land contours. Small to moderate drainages have been filled, and hills have been flattened to utilize the parcels most efficiently. The residential developments north of Camino Del Norte have been graded in large pads that step up the slope. Thus, the Project's grading to roughly a single elevation would be similar to the developed landform in the surrounding area. Furthermore, the elevation of the Project site would be lower than that of surrounding development, thus reducing the perceived bulk and scale of the Project buildings.

*Architectural Design*

The Project has been designed to be consistent with the Community Design Element found in Chapter 7 of the SFVSP. The Community Design Element contains policies to protect existing scenic resources, ensure continued visual compatibility, and promote a cohesive community design theme. The guidelines are to be considered in the review of discretionary permits for development projects within the SPA, including use permits. It is an objective to ensure a distinctive image through high-quality architectural and landscape design in Santa Fe Valley. Furthermore, there are additional guidelines applicable to the Project addressing pedestrian circulation, parking lots, walls and fences, site lighting, signage, and landscaping, all of which have been carefully considered in Project design. For example, the parking lots, walkways, and courtyards have been designed to promote pedestrian movement and to reduce the impersonal expansiveness of large space. Pedestrian-scaled courtyards or plazas are encouraged as community focal points, and the five proposed buildings are constructed around a central courtyard lawn area, with landscaped parking areas on the Project perimeter. Roof color will be muted to better blend with landscape elements.

The proposed two-story sanctuary/administrative building (Building A) would be situated in the center of the site, with single-story buildings between it and Camino Del Norte. The sanctuary would have only two levels, but with architectural features (towers), the proposed height would equate to a three-story building. Because of its location and the fact that would include two towers, the sanctuary/administrative building would be the most visually prominent building on-site.

The main architectural elements of the sanctuary/administration building include low-pitched hipped roofs with boxed eaves that it would extend only a short distance from the walls. Windows would be grouped and rectangular in shape on the second floor, with many arched windows on the first floor. There would be an open beam arcade with fieldstone-faced pillars on the west side and tower-like structures on the south and north façades. The exterior finish would be predominately stucco painted in earth tones, with

the towers faced in fieldstone. The general impression of the building would be one of an asymmetrical layout of multiple levels tied together with vertical elements such as towers. The design of the sanctuary/administrative building would be continued in each of the four additional buildings to create a cohesive and consistent campus design.

Several existing commercial and institutional buildings in the surrounding area exhibit similar architectural features. Buildings in both commercial centers at Camino Del Norte/Dove Canyon Road and 4S Ranch Parkway/Rancho Bernardo Road have low-pitched roofs, groupings of rectangular windows, tower-like façade extensions over main doors, and stucco exterior finishes with fieldstone wall sections. Most stucco façades are painted in earth tones. Both centers also have open beam arcades supported by fieldstone-faced pillars. The primary school at Paseo Del Sur and Paseo Montanero has shallow-pitched roofs and boxed eaves with a tower-like front entrance. Windows are grouped. A segment of the first floor has an arched arcade and there is an open beam arcade in front of the main entrance. The two-story duplexes along Paseo Del Sur have low-hipped roofs with boxed eaves, grouped rectangular windows, and tower-like front façade sections. Many have a combination of stucco and fieldstone exterior finishes. Other residential developments in the neighborhood exhibit various combinations of the architectural elements on the sanctuary/administration building. The Rancho Santa Fe Fire Station No. 2, located opposite the Project driveway on Four Gee Road, features a stucco finish on exterior building and wall surfaces with a tile roof on a building of varied heights equating to both single-story and two-story connected wings.

This assessment of existing commercial, residential, and civic development in the Project area was conducted to ensure continued visual compatibility for the Project, and to promote a cohesive and consistent community design theme, consistent with the guidelines contained in the SFVSP.

The proposed education building, learning centers, fellowship hall, and meeting building would exhibit a more horizontal orientation, with flat roofs and evenly placed windows predominating. Rooflines would have molded copings. Architectural details such as arched windows, arched arcades, and towers with hipped roofs would be smaller and situated only on single corners or at main entrances. Exterior finishes would be predominately stucco, with fieldstone facings limited to towers or arcades. Please see Figures 1-3 through 1-6 in Chapter 1, for sample architectural elevations.

These architectural elements are also very common in the surrounding community. The fieldstone towers with hipped roofs, although not dominant features, reflect the architecture described above. Portions of the buildings in the commercial center at Camino Del Norte/Dove Canyon Road have flat roof lines with molded copings, and entrances are often emphasized with fieldstone. The elementary school at Paseo Del Sur and Paseo Montanero has long, flat roofs and arched arcades. Please see Figure 3.1-7, Tallest Buildings and Towers within One Mile of Project site, for some examples. These can be compared to Figures 1-3 through 1-6, the elevations for the Project.

The site design for the church incorporates buffers from the adjacent uses on all four sides. The proposed church includes a 43 foot ~~51-foot 4-inch~~ tower (measured from average roof height), but the buildings would be setback from the property perimeter

with vine fences, trees, and trellises that partially screen the view from surrounding properties.

For comparison, to the east and northeast, there are dense two-story single-family subdivisions and three-story multi-family residences that vary between 27 and 37 feet, with minimal road setbacks. To the southeast is the village core consisting of large regional shopping structures and a parking center in addition to three-story multi-family and two-story single-family residences that measure 24 to 44 feet in height with minimal street setbacks. To the south are two public schools with maximum heights of between 52 and 57 feet in height, and three-story multi-family residences between 24 and 40 feet in height. To the southwest is a large shopping retail center and associated parking lot as well as two-story multi-family residences with minimal road setbacks and structures that range between 28 and 30 feet. To the west and northwest are two-story residences (32 feet in height) and civic areas that include a fire station, planned park, and future school site. The fire station includes a 44~~53~~ foot tower.

*Landscaping/Design Features*

Existing landscaping throughout the vicinity of the Project site consists of a variety of groundcover, shrubs of various heights, and trees predominately of medium height. The size of the trees is at least partially due to their relatively recent planting. As time goes by, some will increase substantially in height. Landscape palates are mainly composed of non-native plants popular for the last 10 to 15 years. Most landscaping in the neighborhood is primarily located along the perimeter of the developments, partially screening them from adjacent road traffic and vice versa.

The conceptual landscape palate proposed for the Project contains similar ground cover, shrubs, and trees. The Project perimeter will be heavily planted with trees and vined fences and parking paved with a natural colored decomposed granite ("DG") to have a rural feel. The eastern end of the church property will be a combination of citrus grove, vegetable garden, DG paving, trees and plantings to enhance the rural character of the site. Therefore, proposed landscape and design features would be consistent and compatible with other landscaping design in the vicinity.

In summary, the Project is consistent with surrounding areas as it relates to bulk and scale, building height, lot size/coverage, grading/landform alteration, architectural design and landscaping/design features and impacts related to physical incompatibility with surrounding areas would be **less than significant**.

*Operations*

This section analyzes the operations of the Project in light of other uses in the Project vicinity.

Six potential church sites were designated under the 4S Ranch Specific Plan; however, none have been implemented. The Project would provide civic uses for the village in addition to the Santa Fe Valley community.

Proposed operating hours of the Project are as follows. Hours for specific activities may vary, but operational hours would ~~generally~~ remain within the 8 AM to 10 PM timeframe, with gates locked at 10 PM. S~~s~~pecial indoor nighttime activities allowed, as detailed below:

| Day | Time | Activity |
|---|---|---|
| Monday through Friday | 8 AM to 6 PM | Pastoral offices, administration |
| | 10 AM to 3 PM | Recreation, fellowship, church-related activities |
| | 6 PM to 10 PM | |
| | 8 AM to 10 PM | Church café and Bible ~~bible~~ bookstore |
| Saturday and Sunday | 9 AM to 10 PM | Church café and Bible ~~bible~~ bookstore |
| | | Recreation, fellowship, church-related activities |
| | 6 PM. to 10 PM | Worship, prayer, Bible ~~bible~~ study, church-related activities |
| Sunday | 9 AM to 10:00 PM | Main worship services |

Special nighttime activities would be held by the church occasionally, which include prayer meetings, chaperoned restricted-access overnight events for teenagers, and other normal church-related meetings. These special nighttime activities would be held indoors between the hours of 10:00 PM and 8:30 AM to reduce noise and lighting in order to comply with the County standards. Table 3.1-19A provides details.

The seating capacity for the church would be 1,500 seats and the parking capacity would be 417 parking spaces, exceeding County requirements. The maximum building capacities for each building would be established by the Fire Marshal.

The proposed Sanctuary building is anticipated to include a church bell. The exact specifications and operation schedule of the bell have not yet been determined. It is anticipated that the church bell will only operate during daytime hours, and will therefore be required to meet the single family residential hourly-average noise limit of 50 dBA.

No formal activities or amplification of sound are planned to take place outdoors. Any events that could potentially occur outdoors are anticipated to take place during daytime hours, and would therefore need to meet the daytime noise limit of 50 dBA, enforced by both the County of San Diego and the City of San Diego, at all surrounding residential property lines. In addition, if any outdoor events are proposed to include more than 500 people or will extend after the hours of 7 PM, the noise impacts of the specific event must be evaluated to determine design features and mitigation measures required to comply with the applicable noise regulations at that time. See Section 2.5 of the DSEIR for more information related to noise generated by the Project.

Outdoor use and events would not be prohibited. In order to ensure noise from outdoor events remains in compliance with applicable noise regulations, a condition of approval would be implemented as follows: If any outdoor events are proposed to include more than 500 people, or will extend after the hours of 7 PM, the noise impacts of the specific event must be evaluated to determine design features and mitigation measures required to comply with the applicable noise regulations at that time. Results will be reported to the County 30 days prior to the event. Furthermore, if an outdoor audio system is to be used, the church would use updated sound equipment that directs sound to designated areas. The church would also have speakers face exterior buildings to help contain the sound in the areas around the buildings and would not exceed maximum sound levels at the property lines.

The greatest amount of activity would occur on the weekends. As introduced in the preceding paragraph, activities anticipated to occur during the weekend include the main worship, to take place between 9:00 AM and 10:00 PM on Sunday, as well as recreation fellowship and other normal church-related activities such as bible study and prayer groups. In addition, the church café and bible bookstore would be open on the weekends from 9:00 AM to 10:00 PM.

The Project has been planned with adequate parking to ensure on-site accommodations which would reduce on-street parking and the potential for impacts to adjacent neighbors. The proposed use, while an intensification of the existing use on the Project site, would be similar to other religious facilities in the area where most traffic is generated during weekend events and services. This is also similar to the neighboring commercial centers where weekend traffic is heaviest. Overflow parking would be closed by 6 PM except for special events. Barriers, signage and announcements will be used to enforce this restriction.

Proposed weekday activities (daytime (8:00 AM to 6:00 PM) include fellowship, recreation, and other normal church-related activities. During the daytime, the pastoral offices would be open. During the weekday evenings (6:00 PM to 10:00 PM) events such as nighttime worship, bible study meetings and/or classes, and recreational fellowship activities are anticipated. The church café and bible bookstore would also be open during the evening hours. Truck deliveries will not be permitted on the east side of the property.

Off-peak traffic in and out of the Project site would be similar to the existing commercial shopping center, as well as the activity anticipated with construction of the proposed high-density, mixed-use village core associated with BMR, located southwest of the site.

A full schedule of special events and holidays anticipated by the church is detailed in Table 3.1-19A ~~Attachment 1 of the Land Use Report (Appendix O~~ of the DSEIR ~~)~~ and are limited to 11 events spanning 24 days. These include special events related to holidays including New Year's Eve and the Chinese New Year, Thanksgiving, Christmas, and Good Friday, as well as a Women's Celebration, Harvest Fair, Service Fair, and Youth Expo. Other events that would occur on a semi-regular basis would be small and large weddings, community outreach events, and miscellaneous special events during both the weekdays and weekend. The church would also serve as a local polling station if needed. All anticipated special events, other than typical church holidays, including non-church community events, would be performed outside of the weekday hours of 7 to 9 AM and 4 to 6 PM (peak traffic hours) and outside of the typical church daily operation schedule.

Overall, the Project design and operations would not change the character of the neighborhood. The Project would be within an area with mixed-density residential uses, nearby commercial centers and other civic facilities, including a fire and police station. Operation of the proposed church, at buildout, would not alter the community character or result in land use compatibility issues within the neighborhood. The Project would be located in a neighborhood that consists not only of existing large-lot residential units but also of existing multi-family residential units, denser single-family units, large commercial developments and civic uses. In addition, the planned future character of the community will be composed of vibrant urbanized mixed uses; employment opportunities; and civic, residential, and commercial uses. The MUP would allow long-term facility operations as described above by prescribing conditions which would assure that the proposed use and operations is maintained as intended. Impacts would be less **than significant**.

Goals, Policies and Objectives of Applicable Habitat Conservation Plans

Guideline for Determination of Significance

The Project would have a significant impact related to land use if it would:

- Conflict with the land use goals, objectives, policies, and recommendation of the adopted County of San Diego Resource Protection Ordinance, Natural Community Conservation Plan, or any other applicable habitat conservation plan or natural community conservation plan.

*Guideline Source*

This land use guideline is based upon Appendix G of the CEQA Guidelines.

Analysis

As described in Section 2.2, Biological Resources, the Project would not conflict with the adopted Resource Protection Ordinance or Natural Community Conservation Plan.

The County's Resource Protection Ordinance identifies wetlands as a sensitive habitat. Emergent wetlands do occur on the Project site; however, this area would be preserved

onsite within an existing open space conservation easement and would not be impacted by implementation of the Project. The Project site does not support any other land identified as sensitive in the County's Resource Protection Ordinance. **No impact** would occur.

Additionally, the Project site is within a Take Authorized Area of the MSCP. The Project site is not located within or adjacent to a Biological Resources Core Areas. No MSCP narrow endemic species have been identified within the site or surrounding area. Furthermore, no federal or state listed species have been identified within the Project site or surrounding area. Accordingly, implementation of the Project would not impact any core populations nor reduce the likelihood of survival and recovery of these species. No other habitat conservation plan or natural community conservation plan is in place for the Project site. Implementation of the Project would not preclude or prevent the preparation of a subregional NCCP. In summary, **no impact** is identified.

Division of an Established Community

Guideline for Determination of Significance

The Project would have a significant impact related to land use if it would:

- Physically divide an established community.

*Guideline Source*

This land use guideline is based upon Appendix G of the CEQA Guidelines.

Analysis

The Project would develop a church and ancillary uses on the site of two existing residences. The Project vicinity includes residential uses to the north, northwest, northeast, south and southeast. Southwest of the site of a Target store and other commercial uses within the Black Mountain Ranch development. Other uses in the Project vicinity include schools, and a fire station. The Project vicinity as a whole is building out in conjunction with 4S Ranch and Black Mountain Ranch. The Project does not physically divide an established community. It provides roadway and infrastructure improvements to enhance traffic flow along 4 Gee Road. The existing sidewalk on the east side of 4 Gee Road in front of the Project site will be retained to ensure pedestrian can still move safely. There are no aspects of the Project that would physically divide an established community. Impacts would be **less than significant.**

### 3.1.4.4 *Cumulative Impact Analysis*

One factor to consider in making a land use compatibility determination is whether approval of the Project would set a precedent for similar projects, which when taken cumulatively, would result in a change in the community character.

The existing vicinity of the Project site includes both single-family and multi-family residential uses, commercial shopping centers, and civic uses. Future planned uses include two additional schools and the high-density, mixed-use village core of North Village at BMR. In addition, other civic uses surrounding the property have structures

similar in height to the structures proposed (40 feet in height allowance, equivalent to three-stories). Eight structures within one half-mile radius are 40 feet or more in height and five multi-family projects are three-story buildings. The SFVSP is largely developed and the lands surrounding the Project site are either developed, approved for future development, or preserved in open space. The lack of available land would preclude a foreseeable precedent that could be set by the approval of this Project. Notwithstanding the availability of land, any future proposal would be required to undergo a discretionary review process, and would need to make similar findings for the approval of a MUP.

Therefore, no cumulative land use impacts are identified for the Project.

#### 3.1.4.5 *Significance of Impacts*

Based on the analysis in this section, all Project and cumulative land use impacts would be less than significant. The Project would not physically divide an established community, nor conflict with any land use or habitat conservation plans, policies, ordinances, guidelines, or regulations. Therefore, no mitigation is required.

#### 3.1.4.6 *Conclusion*

Based upon the analysis presented above, the Project would not alter the community character of the area. The Project is compatible with the community character of the surrounding neighborhood in terms of use, design, bulk and scale.

The Project area is defined by residential uses along with existing and planned mixed-use, civic, employment, and commercial uses. Single-family residential areas vary from larger lots, which are further from the site, to smaller and multi-family lots located in closer proximity to the Project site. Additionally, the high-density urban core of the BMR North Village has been approved for development northwest of the site. Other civic uses in the vicinity include multiple churches, four existing and two proposed schools, a fire house, and a police substation.

The physical characteristics of the Project (building size, height, lot size, architectural design, landscaping, and grading) would be compatible with the surrounding neighborhood. Additionally, the church has buffers between itself and other uses on all four sides that are compatible with the existing open space. The proposed church includes a 51-foot 4-inch tower (measured from average roof height), but the buildings would be setback from the property perimeter with vine fences, trees, and trellises that screen the view from surrounding properties.

The Project is able to demonstrate consistency with the ten guiding principles of the General Plan as well as the goals and policies of the San Dieguito Community Plan and Santa Fe Valley Specific Plan. Land use design features presented in Chapter 7 of this DSEIR further assist in compatibility.

The overall use of the site, including the off-peak activities, would be greater than what currently exists, but would generally be compatible with the other existing and proposed uses. It is not anticipated that additional, similar applications could be processed in the Project area due to the lack of available sites. In summary, Project- and cumulative-level land use impacts would be **less than significant**.

### 3.1.5 Public Services

The assessment of the Project's potential to have an adverse effect on public services (fire protection and police protection) is based on technical studies and information provided by local service providers. The results of this analysis and research are presented below and are included as appendices to this DSEIR:

- Appendix H: Fire Protection Plan Chinese Bible Church of San Diego (Robin Church, 2015)
- Appendix Q: Project Facility Availability Form – Fire (Rancho Santa Fe Fire Protection District, 2015)

The Santa Fe Valley Specific Plan (SFVSP) EIR (SP95-001) was also reviewed. The SFVSP EIR identified significant and mitigated impacts to Public Services.

Comments received in response to the Notice of Preparation (NOP) include concerns related to fire response times. This concern is addressed in the Fire Protection Plan (FPP) and summarized in this section. A copy of the NOP and comment letters received on the NOP are included in Appendix A.

#### 3.1.5.1 *Background*

The previously certified EIR found significant and mitigable impacts to Public Services. Original mitigation measure 10A required the subdivider to obtain a "will serve" letter from the appropriate fire agency and develop a fire management plan. Mitigation measure 10B required the subdivider to obtain secured mitigation agreements with affected school districts or conform to affected school district's policies to finance the development of needed school facilities.

Changes Requiring New Analysis

Since the preparation of the previous EIR, time has passed such that overall development, and likely associated population, in the area surrounding the Project has increased, which is the basis for assessment of services impacts.

The Project would result in a different land use than was assumed in the previously certified EIR, i.e., church versus residential units. Because there would be no residential units developed under the Project, there would be no impact to schools and original mitigation measure 10B, mentioned above, would no longer apply. Because time has passed and a new land use is proposed, the fire and police protection services analysis requires an update with current capacity, service ratios and/or response times, as appropriate. Therefore, the impacts to fire and police services are being evaluated in this DSEIR.

#### 3.1.5.2 *Existing Conditions*

Fire Protection

The Project is located within the Rancho Santa Fe Fire Protection District (RSFPD). The RSFPD spans approximately 38 square miles and protects over 29,000 citizens. The full-time fire protection agency is comprised of one Chief, one Deputy Chief, one Battalion Chief/Training Officer, three Battalion Chiefs, 39 paid fire suppression positions, three fire prevention positions, and administrative and support staff.

The closest fire station to the Project site is Fire Station No. 2, which is located directly across the street from the Project site at 16930 Four Gee Road. The fire companies assigned to Station No. 2 respond to emergencies in the communities of 4S Ranch, Santa Fe Valley, Bernardo Lakes Estates, Bernardo Point, and Summit of Rancho Bernardo. Fire Station No. 2 is also a regional training facility. The facility houses a four-story training tower with three burn rooms, three underground vaults simulating confined-space rescue incidents, an extrication area where firefighters practice cutting cars apart to free victims of traffic collisions, three roof props to simulate ventilation techniques, a 33,000 gallon drafting pit, and a splash wall. The facility also holds an on-site classroom. Multiple fire agencies use this facility for live fire training exercises which can produce smoke and flames.

The Safety Element of the 2011 County General Plan states that for Semi-Rural areas, the maximum travel time for emergency response should be under five to ten minutes. Because of the proximity of Fire Station No. 2 to the Project site (across the street), it is expected that this station would be able to reach the Project site in approximately two minutes.

Police Protection

The San Diego County Sheriff's Department (Department) is the chief law enforcement agency in San Diego County. The Department is comprised of approximately 4,000 employees, both sworn officers and professional support staff. The Department provides general law enforcement, detention, and court services for the people of San Diego County in a service area of approximately 4,200 square miles. In addition, the Department provides specialized regional services to the entire County, including the incorporated cities and the unincorporated areas of the County.

The Project would be serviced by the 4S Ranch Substation, located at 10282 Rancho Bernardo Road, which is only a few hundred feet from the Project's southeast corner. A substation of the Poway Station, the 4S Ranch Substation was opened in November 2007. The substation serves the 4S Ranch community, an unincorporated area surrounded by Rancho Bernardo, Rancho Santa Fe, Black Mountain Ranch, Rancho Peñasquitos and Lake Hodges.

According to the 2011 San Diego County General Plan Update EIR, the average response time as of 2007 for priority calls from this substation is 8 minutes, and for non-priority calls is 15 minutes. Due to the proximity of the substation to the Project site, it is expected that response time would be approximately two minutes.

Response time standards are typically applied in a facility-based model where the emergency services always start at a defined point (i.e., a fire station). The Department does not have adopted response time standards. The substation employs 15 officers, including patrol deputies and detectives, and support staff. Patrol deputies are trained in

the Community Oriented Policing and Problem Solving philosophy. Additional law enforcement services including neighborhood watch, residential and commercial security checks, personal safety presentations, and children's programs, among others, are provided by the 4S Ranch Crime Prevention Specialist stationed at the Poway Station.

Applicable Plans and Policies

San Diego County General Plan – Safety Element

The following policies identified in the County of San Diego General Plan (August 2011) Safety Element are applicable to the Project:

1. **Goal S-6: Adequate Fire and Medical Services.** Adequate levels of fire and emergency medical services in the unincorporated County.
    a. **Policy S-6.1: Water Supply.** Ensure that water supply systems for development are adequate to combat structural and wildland fires.
    b. **Policy S-6.3: Funding Fire Protection.** Require development to contribute its fair share towards funding the provision of appropriate fire and emergency services as determined necessary to adequately serve the project.
    c. **Policy S-6.4: Fire Protection Services for Development.** Require that new development demonstrate that fire services can be provided that meet the minimum travel times identified in Table S-1 of the County's Safety Element.

Safety Element policies S-3.1, S-3.3, S-3.4, S-3.5, S-3.6, S-3.7, which addresses the minimization of injury, loss of life, and damage resulting from wildland fire are addressed in Section 2.4, Hazards/Fire Safety.

Santa Fe Valley Specific Plan

The SFVSP identifies the following objective related to public services:

2. **Objective PF-5:** Ensure that adequate fire protection services and facilities are provided concurrent with need.

### 3.1.5.3 *Analysis of Project Effects and Determination as to Significance*

Guideline for Determination of Significance

A significant impact related to fire and police protection would occur if the Project would result in:

- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; and/or
- The need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire and police protection.

Guideline Source

This guideline is based upon Appendix G of the CEQA Guidelines.

Analysis

Fire Protection

The Deputy Fire Marshal from the RSFPD has indicated that the Project is eligible for service. The required response time for semi-rural areas, per the Safety Element of the County General Plan, is five to ten minutes. As identified above, it is expected that Fire Station No. 2 would be able to reach the Project site in approximately two minutes.

Details regarding Project access requirements, mitigation related to signalization of intersections, and design measures intended to reduce potential fire hazards are included in Section 2.4, Hazards/Fire Safety of this DSEIR, and within the FPP (Appendix H), specifically, MM-HZ-1. This mitigation measure requires the installation of signal light controls such as strobes at the intersections of Camino Del Sur/Four Gee Road and Four Gee Road/Grace Way that can be activated from within Fire Station No. 2 so that emergency vehicles can exit the area unimpeded. Additionally, “Do Not Block” road striping shall be placed in front of the Fire Station entrance on Four Gee Road. Further, per the 2013 California Fire Code, the following fuel management, landscaping, and maintenance Project design features would be implemented:

- The driveway access to the Project site shall be fully signalized and interconnected to the signal at Camino Del Sur to improve emergency access response.
- Trees/shrubs placed on the Project site shall not obstruct line of sight, which shall be clear from vegetation higher than 36 inches or any other obstacles.
- Roadways serving the Project site shall have a minimum improved paved width of 24 feet. Maximum grade is 20 percent. Surface material shall be a paved all-weather surface that supports 75,000 pounds. All other roadway features must meet the design criteria of the RSFPD. The turning radius for a private driveway shall be a minimum of 28 feet.
- All fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 feet, six inches. The turning radius of a fire apparatus access road shall comply with the County public and private road standards approved by the Board of Supervisors.
- Access roads shall be required for every building constructed when any portion of an exterior wall of the first story is located more than 150 feet from the closest point of fire department vehicle access. The first layment shall be in place and serviceable prior to the delivery of combustible materials to the site.
- Any proposed gates that cross over fire access roads or hinder access into a facility shall require an approved emergency Knox key switch and Knox box with keys to all appropriate doors and/or locked gates.
- Fire hydrants and an adequate water supply shall be installed at locations acceptable to RSFPD according to the type of occupancy. The required fire flow

for the Project is 2,500 gallons per minute at 20 pounds per square inch residual pressure. Fire hydrants shall be in place and serviceable prior to the delivery of combustible construction materials to the site.

- Building construction shall comply with the requirements in the current edition of the County of San Diego amendments of Chapter 7A of the California Building Code and the requirements in RSFPD Ordinance #2014-01.
- Landscape plans are required for all commercial buildings and shall be submitted and approved by the RSFPD prior to the framing inspection.
- Automatic fire sprinklers and alarms shall be installed according to the occupancy and related codes
- Fire lanes shall be marked and fire alarms installed.

Per the Project Availability Form dated December 30, 2015 (Appendix P), RSFPD indicated that, based on the capacity and capability of the RSFPD's existing and planned facilities, fire protection facilities are currently adequate or will be adequate to serve the Project. No new or expanded facilities would be required as a result of implementation of the Project. Therefore, potential Project impacts to fire protection services would be **less than significant**.

*Consistency with General Plan Safety Element*

The Project is consistent with the applicable goal and policies of the General Plan Safety Element. The Project will provide an adequate level of fire and emergency medical service. Per the General Plan, emergency response times to the Project site should be five to ten minutes. The RSFPD has indicated the response time to the Project site will be approximately two minutes. The Project will contribute to funding of fire protection resources through property taxes and other revenues to the County. Thus the Project meets Goal S-6 and Policies S-6.3 and S-6.4.

Based upon the analysis in the FPP (Appendix H) there is adequate water supply for the development to combat structural and wildland fires. The Project site is located within the Olivenhain Municipal Water District (OMWD). The main capacity for the Project shall be 2,500 gallons per minute at 20 psi residual pressure in conformance with the Consolidated Fire Code and the RSFPD Fire Code. Fire hydrants will be installed in locations acceptable to the RSFPD and within 300 feet to all parts of buildings. Further, the water supply system will be installed prior to bringing flammable building materials on site. The Project will have sufficient water supplies available to serve the Project from the OMWD (see Section 3.1.7, Utilities and Service Systems). Therefore the Project is consistent with Policy S-6.1.

*Consistency with Santa Fe Valley Specific Plan*

The Project meets the applicable objective in the SFVSP related to fire protection services. Per the Project Availability Form dated December 30, 2015 (Appendix P), RSFPD indicated that, based on the capacity and capability of the RSFPD's existing

and planned facilities, fire protection facilities are currently adequate or will be adequate to serve the Project. No new or expanded facilities would be required as a result of implementation of the Project. Therefore, the Project is consistent with Objective PF-5.

Police Protection

As stated above, the nearest Department substation is the 4S Ranch Substation located at 10282 Rancho Bernardo Road, which is only a few hundred feet from the Project's southeast corner. It is expected that response time from the substation to the Project site would be approximately two minutes.

Staffing goals and facility plans are based upon population. Generally, the Department has a goal of providing one patrol position per 10,000 residents. According to the 2011 San Diego County General Plan Update EIR, the 4S Ranch Substation is forecast to be responsible for patrol of a population of 7,682. Therefore, according to this staffing goal, only one position is required.

The Department has indicated that current police protection facilities and equipment are adequate to support the Project. No new or expanded facilities would be required as a result of implementation of the Project. Therefore, potential Project impacts to police protection services would be **less than significant**.

#### 3.1.5.4 *Cumulative Impact Analysis*

Fire Protection

The Project would be serviced by the RSFPD, which has adequate facilities and services to support the Project. Complying with design requirements (listed above and in Section 2.4, Fire Hazards/Fire Safety, of this DSEIR) would avoid significant fire-related impacts from Project development. Cumulative projects considered in this analysis are those that are located within the service area of the RSFPD, as these projects will add to the demand for services from RSFPD. Of the 20 cumulative projects considered for this Project, the majority are located within the service area of RSFPD.

It is anticipated that any need for expanded fire protection services would be funded from increased property taxes and other revenues to the County resulting from the Project, as well as from other cumulative developments in the area surrounding the Project site (that also would be served by RSFPD) that have contributed or will contribute to the increased demands on fire protection services. Accordingly, potential contributions to cumulative impacts to fire protection would be less than considerable and less than significant.

Police Protection

The Project would be serviced by the Department, which has adequate facilities and services to support the Project. Of the 20 cumulative projects considered for this Project, 14 of the cumulative projects are within the service area of the Department. These projects will add to the demand for services from the Department.

It is anticipated that expanded police protection services would be funded from increased property taxes and other revenues to the County resulting from the Project, as well as from other cumulative developments in the area surrounding the Project site

(that also would be served by the Department) that have contributed or will contribute to the increased demands on police protection services. Accordingly, potential contributions to cumulative impacts to police protection would be less than considerable and **less than significant**.

#### 3.1.5.5 *Significance of Impacts*

Impacts related to fire and police protection services are less than significant. No construction of new fire or police facilities would be required to meet recommended response times. Therefore, no mitigation is required.

#### 3.1.5.6 *Conclusion*

Development of the Project would not substantially increase demand on fire and police protection services. Existing facilities are adequate to service the Project. Due to the proximity of the closet fire station and sheriff substation, response times from either agency to the Project site would be approximately two minutes. Therefore, the Project would meet recommended response times and no new facilities would need to be constructed. In summary, impacts related to fire and police protection service would be **less than significant**.

### 3.1.6 Traffic

The assessment of the Project's potential to have impacts related to traffic is based on the traffic technical study for the Project. The results of the analysis are presented below and are included in the appendices to this DSEIR as:

- Appendix B: Santa Fe Valley *Chinese Bible Church of San Diego Traffic Impact Study* (KOA Corporation, March 2017)

The Santa Fe Valley Specific Plan (SFVSP) EIR (SP95-001) was also reviewed. The SFVSP EIR identified several impacts to roadways and intersections and recommended several mitigation measures to reduce those impacts to below a level of significance.

Comments received in response to the Notice of Preparation (NOP) related to traffic include:

- General increase in traffic in the surrounding neighborhood;
- Assessment of traffic along Camino Del Sur and the Four Gee/Camino Del Sur intersection;
- Consideration of traffic during non-weekend church holidays (e.g., Christmas, Easter)
- Coordination with City of San Diego as it relates to traffic signal;
- Ingress and egress for La Viña residents;
- Consistency with County standards related to ingress and egress;

- Parking;
- Pedestrian safety;
- Fire response/emergency response;

With the exception of fire/emergency response, these concerns are addressed in this DSEIR section. Please see Section 3.1.5, Public Services, for fire/emergency response. A copy of the NOP and comment letters received in response to the NOP are included in Appendix A.

### 3.1.6.1 *Background*

Traffic was addressed in Subchapters 4.5 and 8 in the previously certified SFVSP EIR in 1995. Traffic volumes on area roads have changed since completion of the traffic technical study for the 1995 EIR. Substantial time has passed such that overall development density in the area surrounding the Project has increased.

After the 1995 EIR was certified, the County developed an overall programmatic solution that addresses projected future road deficiencies in the unincorporated portion of the County. This includes the adoption of a Transportation Impact Fee (TIF) program to fund improvements to roadways necessary to mitigate potential cumulative impacts caused by traffic from future development.

Because of the increase in projected ADT under the Project as compared with the previous use assumed by the SFVSP, changes in existing roadway conditions, and the development of the TIF program, substantial changes have occurred with respect to the circumstances under which the Project would be undertaken, and there is new information of substantial importance that would result in significant effects not previously discussed. As a result, a new traffic analysis was prepared.

### 3.1.6.2 *Existing Conditions*

Existing Roadway Characteristics

The traffic impact study area (study area) was based on the criteria identified in the County's *Report Format & Content Requirements: Transportation & Traffic*, August 24, 2011. Based on the County's criteria, "the scope of the full direct and cumulative traffic assessment shall include those roads and intersections that will receive 25 directional peak hour trips." In addition, the County criteria states that a full traffic impact study should include all regional arterials (including all State surface routes), intersections, and mainline freeway locations where the proposed Project will add 50 or more peak hour trips to the existing roadway traffic.

Based on these criteria, the study area includes 8 roadway segments and 10 intersections, including one Project driveway. The principal roadways in the Project study area are described briefly below. The description includes the physical characteristics, adjacent land uses, and traffic control devices along these roadways. The Project study area is shown in Figure 3.1-9, Project Traffic Study Area, while Figure 3.1-10, Existing Circulation Network, shows the classifications of area roadways. As

shown, the study area for the Project falls within both the unincorporated County and City of San Diego jurisdictions.

**Camino Del Norte** runs east/west connecting the major arterials in the unincorporated area of the County and City of San Diego. It functions as a 4-lane major road and transitions to a 6-lane prime arterial within the study area. The Mobility Element recommends an ultimate classification as a 6-lane prime arterial. Camino Del Norte has a paved roadway width of approximately 75 to 135 feet with a raised median with median breaks. The roadway has Class II bike lanes and sidewalks. The posted speed limit ranges from 50 to 55 MPH. The roadway provides driveway access to adjacent institutional land uses. Bus route 20 runs along Camino Del Norte from Paseo Lucido north to Bernardo Center Drive.

**Four Gee Road**, which has a functional classification in the Mobility Element as a Light Collector roadway, serves a main corridor for Project trips originating or destined for areas east or west on Camino Del Norte. Four Gee Road operates as a north-south roadway and has direct access to the Project driveway. There is a speed limit of 25 MPH in the study area. There are some residential areas along Four Gee Road and parking and sidewalks exist along both sides of the roadway. On the west side of the street, the sidewalk begins south of Campania Avenue. There is no bike lane on Four Gee Road.

**Rancho Bernardo Road** has a functional classification in the Mobility Element as a 4-lane Major Road within the study area with a posted speed limit of 25 MPH. Rancho Bernardo Road operated as a north/east-south/west roadway. There is no parking on the roadway and sidewalks were observed on both sides of the road during the site field review. Class II bike lanes are present along the roadway.

**4S Ranch Parkway** has a functional classification in the Mobility Element as a 4-lane Collector, which serves the Project area via Camino Del Norte. 4S Ranch Parkway Road operates as a north-south roadway with a posted speed limit of 35 MPH in the study area. There is no parking on the roadway and sidewalks were observed on both sides of the road during the site field review. There is no bike lane on 4S Ranch Parkway.

**Dove Canyon Road** has a functional classification in the Mobility Element as a 4-lane Major roadway, which serves the Project area via Camino Del Norte. Dove Canyon Road operates as a north-south roadway with no posted speed limits in the study area. There is no parking on the roadway and sidewalks were observed on both sides of the road during the site field review. Class II bike lanes are present along the roadway.

**Bernardo Center Drive** has a functional classification in the Mobility Element as a 4- to 6-lane major roadway, which serves the study area via Camino Del Norte for trips in and around the community. Bernardo Center Drive operates as a mostly north-south roadway with a posted speed limit of 45 MPH to 50 MPH in the study area. There is no parking on the roadway and sidewalks were observed on both sides of the road during the site field review. Class II bike lanes are present along the roadway.

**Paseo Montanoso** has a functional classification in the Mobility Element as a 2-lane light collector roadway which serves the study area via Camino Del Norte for trips in and around the community. Paseo Montanoso operates as a north-south roadway with a posted speed limit of 30 MPH. Parking on the roadway and sidewalks were observed on both sides of the road during the site field review. There is no bike lane on Paseo Montanoso.

**Lone Quail Road**, which has a functional classification in the Mobility Element as a 2-lane light collector roadway, serves the Project area via Dove Canyon Road and 4S Ranch Parkway. Lone Quail Road operates as an east-west roadway with a posted speed limit of 25 MPH in the study area. There is no parking on the roadway and sidewalks were observed on both sides of the road during the site field review. There is no bike lane on Lone Quail Road.

**Interstate 15** (I-15) is an 8-lane divided highway, which serves the study area via Camino Del Norte, Rancho Bernardo Road, and Bernardo Center Drive on- and off-ramps. I-15 operates as a north-south highway with posted speed limits of 65 MPH. Bus routes 280, 290, 235, 237 run along I-15 in the Project area.

Existing Traffic Volumes and Levels of Service

Existing traffic volumes are based on peak period counts and average daily traffic (ADT) volume counts conducted in January 2017. The intersection turning movement counts were conducted during the weekday morning peak period from 7:00 AM to 9:00 AM, evening peak period from 4:00 PM to 6:00 PM, and weekend Sunday peak period from 8:00 AM to 1:00 PM.

Level of service (LOS) designations comprise a professional industry standard by which the operating condition of a given roadway, state route, freeway segment, or intersection is measured. LOS designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments. LOS is defined using letter designations from “A” to “F”, wherein LOS A represents the best operating conditions and LOS F represents the worst operating conditions. LOS A facilities are characterized as having free-flowing traffic conditions with no restrictions on maneuvering or operating speeds; traffic volumes are low and travel speeds are high. LOS F facilities are characterized as having highly unstable, congested conditions and low operating speeds. LOS E and F generally are considered not acceptable for urban design purposes.

The volume-to-capacity ratio (V/C) is a measure of traffic demand on state and local facilities (expressed as volume) compared to its traffic-carrying capacity. In evaluating the performance of roadway segments under the existing conditions, V/C is considered together with LOS.

As previously detailed, the study area is within both the County and City of San Diego. The County significance criteria are based on the *Report Format & Content Requirements Transportation and Traffic* (County of San Diego 2011). The City of San Diego’s significance criteria is based on the *Significance Determination Thresholds* (City of San Diego 2011).

Table 3.1-20, County of San Diego Significant Traffic Impact Thresholds, provides the County of San Diego Significant Traffic Impact Thresholds and Table 3.1-21, City of San Diego Significant Traffic Impact Thresholds, provides the City of San Diego Significant Traffic Impact Thresholds for freeways, roadway segments, intersections, and ramp metering.

Existing Roadway Segments

Street segment analysis is based upon the comparison of average ADTs to the County of San Diego and City of San Diego *Roadway Classification, Level of Service, and ADT Tables*, depending on the jurisdiction. These provide segment capacities for different street classifications, based on traffic volumes and roadway characteristics.

The roadway segments within the study area include roadways in the jurisdiction of the County and in the City of San Diego, as detailed below:

County of San Diego Jurisdiction

- Four Gee Road between Camino Del Norte and the Project Driveway
- Camino Del Norte between Rancho Bernardo Road and 4S Ranch Parkway
- Camino Del Norte between 4S Ranch Parkway and Dove Canyon Road
- Camino Del Norte between Dove Canyon Road and Bernardo Center Drive
- Dove Canyon Road between Camino Del Norte and Lone Quail Road

City of San Diego Jurisdiction

- Camino Del Norte between Bernardo Center Drive and Paseo Montanoso
- Camino Del Norte between Paseo Montanoso and I-15 Ramps
- Camino Del Sur between Four Gee Road to Rancho Bernardo Road

Existing roadway operations are provided in Table 3.1-22, Existing Segments ADT Volumes and Levels of Service. As shown, all of the segments operate at LOS C or better during weekday and weekend peak hours under existing conditions.

Existing Intersections

Signalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 16 of the 2000 Highway Capacity Manual (HCM), with the assistance of the Synchro (version 7.0) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection LOS. Unsignalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay and LOS were determined based upon the procedures found in Chapter 17 of the HCM, with the assistance of the *Synchro* (version 7.0) computer software.

The intersections within the Project's specific study area include intersections in the jurisdiction of the County and in the City of San Diego, as detailed below:

County of San Diego Jurisdiction

- Project Driveway at Four Gee Road (unsignalized)
- Camino Del Norte at 4S Ranch Parkway (signalized)
- Camino Del Norte at Rancho Bernardo Road (signalized)
- Lone Quail Road at Dove Canyon Road (signalized)

City of San Diego Jurisdiction

- Camino Del Sur at Four Gee Road (signalized)
- Camino Del Norte at Dove Canyon Road (signalized)
- Camino Del Norte at Bernardo Center Drive (signalized)
- Camino Del Norte at Paseo Montanoso (signalized)
- Camino Del Norte at I-15 Southbound Ramps (signalized)
- Camino Del Norte at I-15 Northbound Ramps (signalized)

Existing intersection LOS is provided in Table 3.1-23, Existing Intersections Levels of Service. As shown, all intersections operate at LOS C or better under existing conditions with the following exception:

- Camino Del Norte at Bernardo Center Drive – LOS D (weekday PM peak hour)

Existing Parking, Transit and On-Site Circulation

Parking: The existing uses on the Project site currently provide adequate parking that is consistent with Section 6758 of the County's Zoning Ordinance.

Transit: Transit service is offered by the Metropolitan Transit Service (MTS) throughout the urbanized area in the County. The Rancho Bernardo Transit Station is located approximately 3.5 miles northeast of the Project site. MTS routes that serve this transit station include:

- Route 20 - Express: Downtown San Diego - Mira Mesa - Rancho Bernardo Transit Station
- Route 235 - Rapid: Escondido - Downtown San Diego via I-15
- Route 237 - Rapid: Rancho Bernardo Transit Station - UC San Diego
- Route 290 - Rapid Express: Rancho Bernardo Transit Station - Downtown San Diego
- Route 945 - Poway - Rancho Bernardo Transit Station

Additionally, MTS Premium Express Bus Route 880 currently serves the 4S Ranch and Rancho Bernardo communities with limited stop service to the Sorrento Valley and Golden Triangle areas. The bus stops at 4S Ranch Commons approximately 0.5 mile from the site. Three morning rush hour and three evening rush hour trips are currently offered on Route 880. The Route 20 stop, located on Camino Del Norte, just east of Bernardo Center Drive, is approximately 3 miles from the Project site. A transit station is

planned in Black Mountain Ranch approximately 0.3 miles from the site and within walking distance of the site.

On-Site Circulation: The on-site circulation network currently consists of a private driveway that connects existing uses on the subject property to Four Gee Road.

Methodology

Street system operating conditions are typically described in terms of LOS as defined above. The methods used to determine LOS are outlined in the traffic impact study included as Appendix B to this DSEIR.

The traffic report analyzed the Project under the following scenarios:

- Existing conditions, reflecting traffic patterns as they currently exist; (see Section 3.1.6.2, above)
- Existing conditions plus Project conditions, reflecting how existing conditions would change with the addition of Project-related trips;
- Existing plus ambient plus cumulative conditions reflecting conditions with ambient growth plus future projects known to be underway that would also contribute to the overall traffic scenario for the area;
- Existing plus ambient plus cumulative plus Project, reflecting how existing plus ambient plus cumulative conditions would change with the addition of Project-related trips; and
- General Plan plus Project conditions, representing traffic conditions in 2050 per the General Plan 2050 traffic forecast model.

Regulatory Framework

Transportation and circulation for the Project are directed by guidance from regional transportation programs and the Mobility Elements within both the County's General Plan Update (2011) and City of San Diego General Plan (2008). Applicable regulations are discussed below.

Regional

*SANDAG Standards - Congestion Management Program*

State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare a Congestion Management Program (CMP). The purpose of the CMP is to monitor the performance of the region's transportation system, develop programs to address Existing + Ambient + Cumulative and Buildout congestion, and better integrate transportation and land use planning. SANDAG has prepared the CMP for the San Diego region that establishes significance criteria identifying LOS D as the minimum acceptable LOS for peak hour operation. Any roadway segment operating at LOS E or F is considered to be operating deficiently. SANDAG provided regular updates

for the state CMP from 1991 through 2008. In October 2009, the San Diego region elected to be exempt from the State CMP and, since this decision, SANDAG has been abiding by 23 CFR 450.320 to ensure the region's continued compliance with the federal congestion management process.

County of San Diego

*General Plan Mobility Element*

The Mobility Element "provides a framework for a balanced, multi-modal transportation system for the movement of people and goods within the unincorporated areas of the County of San Diego." The following policies identified in the County of San Diego General Plan (August 2011) Mobility Element are applicable to the Project:

1. **Goal M-2: Responding to Physical Constraints and Preservation Goals.** A road network that provides adequate capacity to reasonably accommodate both planned land uses and regional traffic patterns, while supporting other General Plan goals such as providing environmental protection and enhancing community character.
    a. **Policy M-2.1: Level of Service Criteria.** Require development projects to provide associated road improvements necessary to achieve a level of service of "D" or higher on all Mobility Element roads except for those where a failing level of service has been accepted by the County pursuant to the criteria specifically identified in the accompanying text box (Criteria for Accepting a Road Classification with Level of Service E/F). When development is proposed on roads where a failing level of service has been accepted, require feasible mitigation in the form of road improvements or a fair share contribution to a road improvement program, consistent with the Mobility Element road network.
2. **Goal M-3: Transportation Facility Development.** New or expanded transportation facilities that are phased with and equitably funded by the development that necessitates their construction.
    a. **Policy M-3.2: Traffic Impact Mitigation.** Require development to contribute its fair share toward financing facilities, including mitigating the associated direct and cumulative traffic impacts caused by their project on both local and regional road networks.
    b. **Policy M-3.3: Multiple Ingress and Egress.** Require development to provide multiple ingress/egress routes in conformance with State law and local regulation.
3. **Goal M-4: Safe and Compatible Roads.** Roads designed to be safe for all users and compatible with their context.
    a. **Policy M-4.4: Accommodate Emergency Vehicles.** Design and construct public and private roads to allow for necessary access for appropriately-sized fire apparatus and emergency vehicles while accommodating outgoing vehicles from evaluating residents.

*Transportation Impact Fee Program and Ordinance*

In 2005 the County adopted the TIF Ordinance that establishes the TIF program. The primary purpose of the TIF is to fund the construction of identified roadway facilities needed to reduce or mitigate projected cumulative traffic impacts and to allocate the costs of these roadway facilities proportionally among future developing properties based upon their individual cumulative traffic effects, according to *County of San Diego Guidelines for Determining Significance-Traffic*. TIF fees provide for improvements to cumulatively impacted County or other identified roadway facilities (state highway and ramps). The TIF is collected as a condition of approval or prior to the issuance of a building permit.

The program provides a mechanism for contributions towards improvements to address cumulative effects identified within each TIF Local Area and TIF Region. The TIF is designed to be updated when there is an adopted change to the General Plan land uses and/or Mobility Element. As stated in the TIF program, "[t]here is a reasonable relationship between the amount of the fee and the cost of transportation facilities, or portions thereof, attributable to future development because the TIF is derived from a Travel Demand Unit (TDU) formula that considers trip generation rates and vehicle miles traveled by land use type to correlate impact to specific development types" (Section 77.203[5]).

*San Diego County Public and Private Road Standards*

The standards provide minimum design and construction requirements for public and private roads. LOS is established for Mobility Element roads. Levels of service are not applied to the non-Mobility Element residential roads. Target design capacities, however, have been identified for these non-Mobility Element residential roads. Levels of service are not established for private roads. Minimum design and construction requirements, however, are established based upon the projected ADT volume on the road.

*Santa Fe Valley Specific Plan*

The SFVSP identifies the following objectives related to transportation and circulation:

1. **Objective CE-2:** Provide for emergency access to all areas of Santa Fe Valley consistent with the standards of the Rancho Santa Fe Fire Protection District.
2. **Objective CE-3:** Provide consistent access to regional public transit system to serve planned development in Santa Fe Valley.
3. **Objective CE-4:** Provide for adequate and convenient non-vehicular circulation within the SPA that is sensitive to environmental resources.

City of San Diego

*Traffic Impact Study Manual*

The City of San Diego prepared a "Traffic Impact Study Manual" to provide guidelines to consultants on how to prepare traffic impact studies in the City of San Diego and to ensure consistency in the preparation of these studies. Impacts are identified if a project would increase the traffic volume on a road segment above an identified allowable

increase. The better the initial LOS on the road segment, the higher the allowable volume increase.

*Significance Determination Thresholds*

Originally prepared in 1991 and updated periodically, the thresholds presented in this document provide technical guidance for the evaluation of a project's potential environmental impacts within the City of San Diego. These thresholds are used to determine whether a project would result in a significant impact to the environment over 19 issue areas including transportation and traffic. Similar to the County Guidelines discussed above, this document does not provide an exhaustive listing of applicable significance thresholds but presents a consistent baseline of criteria to consider for projects within the City. As described further below, the guidelines listed in this document were used in conjunction with the County Guidelines to analyze the Project's potential impacts to transportation and traffic within the Project vicinity.

*General Plan Mobility Element*

The City's Mobility Element seeks to improve and create a sustainable mobility strategy through development of a balanced, multi-modal transportation network while minimizing impacts to the environment and neighborhoods. The Element envisions a circulation system that "enhances safety, efficiency, and capacity" thereby enhancing mobility (City of San Diego, p. ME-21). The Mobility Element includes high-priority goals and policies related to walking, streets, and transit. Goals that consider regional collaboration, bicycling, and parking are also included, as are goals on preserving automobile mobility while also reducing vehicle congestion. The Element specifies policies that focus on transportation system planning and street layout, design, and operations. City significance thresholds are provided in Table 3.1-21.

### 3.1.6.3 *Analysis of Project Effects and Determination as to*

The analysis of potential traffic impacts is based on the County's Guidelines for Determining the Significance for Transportation and Traffic (2011), and City of San Diego Significance Determination Thresholds (2011).

Project Trip Generation

The traffic impact study forecasts the number of vehicle trips that are projected to begin or end at the Project site, which is called the Project's "trip generation." These trips are added to existing traffic patterns, and therefore are expected to result in an increase in vehicles on the streets where they occur. The estimates found in the analysis rely on standard rates established in the SANDAG "Not So Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region" (2002) for weekday trips and on ITE trip generation rates from the 8th edition for weekend trips. This manual provides standards and recommendations for the probable traffic generation of various land uses based upon local, regional, and nationwide studies of existing developments in comparable settings.

Currently, church members attend three other existing church facilities. These facilities are located within the vicinity of the Project site. One is located at Maranatha Christian School approximately one mile west of the site. A second is located in Rancho Bernardo, approximately 3.0 miles east. A third is located at a commercial center approximately 1.5 miles from the site. Church activities at these three locations would be discontinued once the new facility is constructed and operated. Project trips would be redirected to the new facility. While this may cause the number of trips to and from the existing facilities to decrease, implementation of the Project would result in an overall increase in total trips.

Diverted trips can be characterized as trips that are redistributed within the study area. Existing trips to the three other existing church facilities would be diverted to the Project site upon completion. The resulting diverted trips would create an increase, decrease, or no change in the traffic volumes along roadway segments and intersections located within the area of influence. Project trip redirection has only been applied to weekends. The church weekend trip rate is based on seats because the church would have services during the Sunday peak hour.

Table 3.1-24, Weekday Project Trip Generation, summarizes the trips generated by the Project during weekday AM and PM peak hours. As shown in the table, the Project would add 392 ADT to the circulation network, with 20 trips occurring during the AM peak hour and 31 trips occurring during the PM peak hour on weekdays. Table 3.1-25, Weekend Project Trip Generation, summarizes the trips generated by the Project during the weekend (Sunday) peak hour. As shown in the table, the Project would add 2,775 ADT to the circulation network, with 925 trips occurring during the weekend (Sunday) peak hour.

Project Trip Distribution

Trip distribution and assignment is the process of identifying the probable destinations, directions, or traffic routes that Project-related traffic would likely affect. In this case, the Project trip distribution was estimated from observed traffic patterns, considerations of surrounding land uses, and zip code location of current parishioners. Figure 3.1-11 shows the Project trip generation and distribution. As shown, it is expected that 100 percent of the Project traffic would use Four Gee Rd to enter and exit the site, with almost all traffic (99.4 percent) heading south on Four Gee Rd to Camino Del Sur where approximately 91 percent of trips would turn east on Camino Del Sur and approximately 9 percent would turn west.

Roadway Segment Analysis

Guidelines for the Determination of Significance

*County of San Diego*

As identified in Table 3.1-20, and according to the *County of San Diego Guidelines for Determining Significance, Transportation and Traffic* (County of San Diego, August 24, 2011), a significant traffic impact would occur if:

- The additional or redistributed ADT generated by the Project would cause on-site Mobility Element Roads to operate below LOS C during peak traffic hours;
- The additional or redistributed ADT generated by the Project would significantly increase congestion on a Mobility Element Road or State Highway currently operating at LOS E or LOS F, or would cause a Mobility Element Road or State Highway to operate at LOS E or LOS F as a result of the Project; or
- The additional or redistributed ADT generated by the Project would cause a non-Mobility Element residential street to exceed its design capacity.

*City of San Diego*

As identified in Table 3.1-21 and according to the City of San Diego, Significance Determination Thresholds (2011), a project is considered to have a significant traffic impact if the project:

- Degrades a roadway segment from acceptable LOS D to unacceptable LOS E or F; or
- Increases existing LOS E roadways by more than 0.02 (volume to capacity) or 1.0 MPH.
- Increases existing LOS F roadways by more than 0.01 (volume to capacity) or 0.5 MPH.

Analysis

Table 3.1-26, Existing + Project Segments – ADT Volumes and Levels of Service, summarizes the existing roadway segments' ADT volumes and Levels of Service both without and with the Project. As shown, all of the analyzed roadway segments would operate at LOS D or better with implementation of the Project. Therefore, impacts to roadway segments under Existing Plus Project conditions would be **less than significant**.

Signalized Intersections

Guidelines for the Determination of Significance

*County of San Diego*

According to the *County of San Diego Guidelines for Determining Significance, Transportation and Traffic* (2011), a significant traffic impact would occur if the additional or redistributed ADT generated by the Project would significantly increase congestion on a signalized intersection currently operating at LOS E or LOS F, or would cause a signalized intersection to operate at LOS E or LOS F as identified in Table 3.1-20.

*City of San Diego*

According to the City of San Diego, Significance Determination Thresholds (2011), a project is considered to have a significant impact if the project:

- Degrades an intersection from acceptable LOS D to unacceptable LOS E or F; or

- Increases existing LOS E intersection or ramp metering delays by more than 2.0 seconds; or
- Increases existing LOS F intersection or ramp metering delays by more than 1.0 second.

Analysis

Table 3.1-27, Existing + Project Intersections – Levels of Services, summarizes the existing intersection LOS both without and with the Project. It should be noted that the intersection of the Project Driveway at Four Gee Road is unsignalized in the existing condition and would be signalized after construction. As shown in Table 3.1-27, all of the analyzed intersections would operate at LOS D or better without and with implementation of the Project. The Project would not significantly increase congestion at a signalized intersection, nor cause a signalized intersection to operate at LOS E or LOS F. Therefore impacts to signalized intersections under Existing Plus Project conditions would be **less than significant**.

Unsignalized Intersections

Guidelines for the Determination of Significance

According to the *County of San Diego Guidelines for Determining Significance, Transportation and Traffic* (2011), a significant traffic impact would occur if:

- The additional or redistributed ADT generated by the Project would add 21 or more peak hour trips to a critical movement of an unsignalized intersection, and cause an unsignalized intersection to operate below LOS D;
- The additional or redistributed ADT generated by the Project would add 21 or more peak hour trips to a critical movement of an unsignalized intersection currently operating at LOS E;
- The additional or redistributed ADT generated by the Project would add six or more peak hour trips to a critical movement of an unsignalized intersection, and cause the unsignalized intersection to operate at LOS F;
- The additional or redistributed ADT generated by the Project would add six or more peak hour trips to a critical movement of an unsignalized intersection currently operating at LOS F; or
- Based upon an evaluation of existing accident rates, the signal priority list, intersection geometrics, proximity of adjacent driveways, sight distance or other factors, the project would significantly impact the operations of the intersection.

Analysis

As noted above, the intersection of Project Driveway at Four Gee Road is unsignalized only in the existing condition and would be signalized after construction. All other Project intersections are signalized. As shown in Table 3.1-27, the intersection of Project Driveway at Four Gee Road operates at LOS A in both the morning and evening

weekday peak hours and weekend Sunday peak hour under existing conditions. As shown, this intersection would operate at LOS B with implementation of the Project.

Although the intersection of Project Driveway at Four Gee Road would operate at an acceptable LOS under all conditions, the Project includes the installation of a traffic signal at this intersection as a Project design feature. Due to the proximity of the Project Driveway to the adjacent Rancho Santa Fe fire station, this traffic signal would connect with the traffic signal at the intersection of Four Gee Road and Camino Del Sur.

An operational analysis to evaluate the vehicular queue was performed at the Project Driveway/Four Gee Road and Four Gee Road/Camino Del Sur intersections. The proposed improvements at the intersection of Four Gee Road and Camino Del Sur (as part of the Camino Del Sur widening projects) are accounted for in the operational analysis. The operations analysis is based on vehicle queuing for high demand movements at these intersections. The 95th percentile queue was reported. This analysis provided a basis for estimating the future storage requirements at these intersections. The future queue estimates are provided in Table 3.1-28, Future Queue Analysis.

The operations analysis indicates that the estimated maximum vehicle queue for the southbound leg at the intersection of Four Gee Road and Camino Del Sur would not exceed the capacity. The estimated maximum vehicle queue for the southbound leg at the intersection of Four Gee Road and Camino Del Sur would, at times, exceed the capacity prior to traffic signal installation. However, as a Project mitigation for fire safety (Chapter 2.4), the Project will install a traffic signal at the Project entrance and Four Gee Road prior to Project operation. The Project will also interconnect this new signal with the signal at Four Gee Road and Camino Del Sur. This would avoid the queues. Therefore, a **less than significant impact** to unsignalized intersections under Existing Plus Project conditions would occur.

During the NOP process, comments were raised about ingress and egress for La Viña residents. The La Viña community is located south of the Project site and is accessed via Tallus Glen. Tallus Glen intersects Four Gee Road north of Camino Del Sur. As discussed above, the future signal at the Project driveway on Four Gee Road will interconnect with the signal at Four Gee Road and Camino Del Sur to ensure coordinated operation. The intersection of Four Gee Road and Camino Del Sur will operate at an adequate level of service. Excessive queuing along Four Gee Road was not identified during the analysis. Thus ingress and egress issues at the La Viña community are not anticipated. Impacts would be **less than significant**.

Freeway Segments and Ramp Intersections

Guidelines for the Determination of Significance

According to the *County of San Diego Guidelines for Determining Significance, Transportation and Traffic* (2011), a significant traffic impact would occur if:

- The Project would cause a freeway segment or ramp intersection operating at LOS E or F with the Project to exceed a change of 0.01 V/C ratio for freeways or 2 second delay for intersections.

Analysis

No freeway segments were included within the study area in the traffic analysis. Typically a freeway would be analyzed if a project contributed 50 trips in peak direction. The Project contributes less than 50 trips.

As shown in Table 3.1-27, the intersection of Camino Del Norte at I-15 southbound ramps would operate at acceptable LOS D or better both without and with the Project during the weekday AM and PM peak hours and Weekend (Sunday) peak hour. The Project would increase delay at this intersection by 0.2 seconds during the weekday AM peak hour, 0.1 seconds during the weekday PM peak hour, and decrease delay by 1.0 second during the weekend (Sunday) peak hour.

The intersection of Camino Del Norte at I-15 northbound ramps would operate at acceptable LOS D or better both without and with the Project during the weekday AM and PM peak hours and Weekend (Sunday) peak hour. The Project would increase delay at this intersection by 0.3 seconds during the weekday AM peak hour, 0.3 seconds during the weekday PM peak hour, and 1.8 second during the weekend (Sunday) peak hour. These two intersections do not meet the significance criteria for ramp delay as they will operate at acceptable LOS D or better during all peak hour scenarios. Therefore, **no impact** to freeway segments or ramps would occur under Existing Plus Project conditions.

Traffic Hazards Due to an Existing Transportation Design Feature

Guidelines for the Determination of Significance

According to the *County of San Diego Guidelines for Determining Significance, Transportation and Traffic* (2011), the determination of significant hazards to an existing transportation design feature would be on a case-by-case basis, considering the following factors:

- Design features/physical configuration of access roads may adversely affect the safe movement of all users along the roadway;
- The percentage or magnitude of increased traffic on the road due to the Project may affect the safety of the roadway;
- The physical conditions of the Project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers, may result in conflicts with other users or stationary objects; and
- Conformance of existing and proposed roads to the requirements of the private or public road standards, as applicable.

Analysis

The Project circulation system, including driveway corner sight distances, was designed in conformance with County of San Diego Public Road Standards and would not have a significant impact related to the safe movement of users along the area roadways.

The Project's main access point is from Four Gee Road at the proposed Grace Way. The proposed improved width is 44 feet, which is more than the minimum required width

of 24 feet, as identified in the County of San Diego Public Road Standards. The intersection of the Project driveway and Four Gee Road is the first location from which a car may turn left or right to leave the area. This intersection will be signalized to allow safe ingress and egress.

The Project does not provide nor is it required to provide secondary access. The internal loop road allows for fire truck access to within 150 feet of all portions of the buildings when a truck is parked perpendicular to parked cars as required by Section 503 of the Consolidated Fire Code. Section 2.4 (Hazards/Fire Safety) of this DSEIR includes a list of access road design considerations to ensure emergency access would be designed appropriately and in accordance with all applicable regulations. The internal loop road is consistent with the San Diego County Standards for Private Roads. These standards require a 24-foot wide improved road width. The Project will have a 26-foot improved width (exclusive of parking) and exceeds the County standard.

Policy M-4.4 of the Mobility Element addresses road design to accommodate emergency vehicles. The internal road loop has been designed to meet Section 503 of the Consolidated Fire Code, County Ordinance 10148, and District Ordinance 2014-01A.

Objective CE-2 of the Santa Fe Valley Specific Plan addresses emergency access. The Project provides adequate emergency access consistent with the standards of the Rancho Santa Fe Fire Protection District.

Therefore, although the Project would result in increased traffic on new and existing roadways, impacts associated with safety of those roadways would be **less than significant**.

Traffic Hazards to Pedestrians or Bicyclists

Guidelines for the Determination of Significance

According to the *County of San Diego Guidelines for Determining Significance, Transportation and Traffic* (2011), the determination of significant hazards to pedestrians or bicyclists would be on a case-by-case basis, considering the following factors:

- Design features/physical configurations on a road segment or at an intersection that may adversely affect the visibility of pedestrians or bicyclists to drivers entering and existing the site, and the visibility of cars to pedestrians and bicyclists;
- The amount of pedestrian activity at the project access points that may adversely affect pedestrian safety;
- The preclusion or substantial hindrance of the provision of a planned bike lane or pedestrian facility on a roadway adjacent to the Project site;
- The percentage or magnitude of increased traffic on the road due to the Project that may adversely affect pedestrian and bicycle safety;

- The physical conditions of the Project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers that may result in vehicle/pedestrian or vehicle/bicycle conflicts;
- Conformance of existing and proposed roads to the requirements of the private or public road standards, as applicable; and
- The potential for a substantial increase in pedestrian or bicycle activity without the presence of adequate facilities.

Analysis

The Project would be constructed in accordance with County standards and would not include design features or physical configurations on a road segment or at an intersection that would adversely affect the visibility of pedestrians, bicyclists, or other non-motorized users to drivers entering and exiting the site, and the visibility of cars to pedestrians, bicyclists, and other non-motorized users. There is an existing sidewalk along the Project frontage on Four Gee Road that would remain with implementation of the Project. The Project driveway, therefore, would not conflict with existing pedestrian movements as it will be signalized with marked crosswalks to ensure pedestrian safety. The Project also would not preclude or substantially hinder the provision of a planned bike lane or pedestrian facility on a roadway adjacent to the Project site. For these reasons, impacts to pedestrian and bicyclist safety would be **less than significant**.

Objective CE-4 of the Santa Fe Valley Specific Plan calls for the provision of adequate and convenient non-vehicular circulation within the Specific Plan Area that is sensitive to environmental resources. Pedestrian facilities have been incorporated into the Project design and overall Project footprint. Any impacts to sensitive environmental resources would have already been identified for the overall Project footprint and would not be specific to pedestrian facilities.

Alternative Transportation

Guidelines for the Determination of Significance

According to the *County of San Diego Guidelines for Determining Significance, Transportation and Traffic* (2011), a significant impact to alternative transportation would occur if:

- The Project would not comply with the County's stated objective for alternative transportation in General Plan Public Facility Element Objective 4, which states, "Reduction in the demand on the road system through increased public use of alternate forms of transportation and other means."

The Public Facility Element is no longer part of the County's General Plan; however, this stated objective is consistent with current General Plan Mobility Element Goal M-9 and Conservation and Open Space (COS) Element Goal COS-16 pertaining to alternative sustainable mobility. Goal M-9 seeks to "Reduce the need to widen or build roads through effective use of the existing transportation network and maximizing the use of alternative modes of travel throughout the County." Goal GOS-16 encourages "Transportation and mobility systems that contribute to environmental and human

sustainability and minimize GHG [greenhouse gases] and other air pollutant emissions." Therefore, the stated Public Facility Element objective would be implemented through specific policies of the Mobility and COS Elements as detailed below.

Analysis

There are two policies under Goal M-9, Effective Use of Existing Transportation Network, that would be applicable to the Project, including:

- M-9.1: Transportation Systems Management. Explore the provision of operational improvements (i.e., adding turn lanes, acceleration lanes, intersection improvements, etc.) that increase the effective vehicular capacity of the public road network prior to increasing the number of road lanes. Ensure operational improvements do not adversely impact the transit, bicycle, and pedestrian networks.

No roadway widening or addition of road lanes is proposed as part of the Project. The closest MTS bus stop to the Project site is the Route 20 stop located on Camino Del Norte, just east of Bernardo Center Drive, approximately 3 miles from the Project site. A transit center is planned in Black Mountain Ranch (BMR) approximately 0.3 miles from the site. Construction of major components of BMR are ongoing.

The Project does not directly affect Route 20. Current transit service would not be affected since road closures and detours would not be required due to construction of the Project. Therefore, the Project would neither impede nor enhance transit opportunities.

- M-9.3: Preferred Parking. Encourage and provide incentives for commercial, office, and industrial development to provide preferred parking for carpools, vanpools, electric vehicles and flex cars. Encourage parking cash out programs to reimburse employees for the cost of "free" on-site parking to provide incentives to use alternate modes of travel and to reduce parking requirements.

Analysis

The Project applicant would provide at least 34 preferred parking spaces for electric and/or hybrid vehicles via painted indicators and signage in the parking lot in accordance with the 2010 California Green Building Standards Code and per Section 6792 of the Zoning Ordinance. In addition, the Church would provide two vans that would pick up patrons to minimize the use of single occupancy vehicles traveling to the Project site. These patrons would typically live within five to ten miles of the Project site. Therefore, the Project will provide incentives for electric and/or hybrid vehicles and also facilitate vanpool opportunities.

There are also three policies under Goal COS-16, Sustainable Mobility, that would be applicable to the Project, including:

- COS-16.1: Alternative Transportation Modes. Work with SANDAG and local transportation agencies to expand opportunities for transit use. Support the development of alternative transportation modes, as provided by Mobility Element policies; and

- COS-16.5: Transit-Center Development. Encourage compact development patterns along major transit routes.

Analysis

The Project site is not located along a major transit route. However, the closest bus route is the 880 express bus service of the MTS, located approximately 0.5 mile from the Project site. A Route 20 bus stop is located on Camino Del Norte, just east of Bernardo Center Drive, approximately 3 miles from the Project site. In addition, the BMR transit center is planned approximately 0.3 miles from the Project. The closeness of transit facilities will facilitate the use of mass transit. As previously mentioned, the Church would provide two vans that would pick up patrons to minimize the use of single occupancy vehicles traveling to the Project site. This service is currently a feature of the existing church operation, and would continue with the proposed Project. The Project would neither impede nor enhance transit opportunities

- COS-16.2: Single-Occupancy Vehicles. Support transportation management programs that reduce the use of single-occupancy vehicles.

Analysis

The Church would provide two vans that would pick up patrons. This would minimize the use of single occupancy vehicles traveling to the Project site.

Objective CE-3 of the Santa Fe Valley Specific Plan calls for consistent access to regional public transit systems to serve planned development in the Santa Fe Valley. An express bus transit route is located approximately 0.5 mile from the site, and Bus Route 20 stops approximately 3.0 miles from the site. A new transit station is planned in the newly constructed Del Sur Shopping Center approximately 0.3 miles from the site. The church will provide two vans to pick up church members for services and activities. The Project does not preclude the extension of public transit in the vicinity.

In summary, the Project would not conflict with the policies of the County's General Plan Goals M-9, Effective Use of Existing Transportation Network, or COS-16, Sustainable Mobility. For these reasons, impacts to alternative transportation would be **less than significant**.

Parking

Guidelines for the Determination of Significance

Section 6764 of the County of San Diego Zoning Ordinance identifies the parking requirements for civic uses, including public assembly/religious assembly uses. Per the Zoning Ordinance, 0.25 parking spaces per person, based on total occupancy of the largest assembly room, are required. Since the Project would have an ultimate buildout of a 1,500-seat sanctuary, a total of 375 off-street parking spaces will be required for the Project.

Analysis

Per Section 6764 of the County of San Diego Zoning Ordinance, a total of 375 off-street parking spaces would be required. The Project would provide 417 parking spaces on site, which is 42 spaces above the code requirement.

If additional parking spaces are needed during holiday services, an area on the east end of the Project site would have decomposed granite to accommodate any necessary overflow parking onsite. Impacts would be **less than significant**.

### 3.1.6.4 *Cumulative Impact Analysis*

The Project's cumulative study area was determined using current methodology in the County of San Diego's Guidelines for the Determination of Significance, Transportation and Traffic. Other future development projects, i.e., cumulative projects, in the vicinity of the Project have the potential to contribute additional vehicle trips and traffic impacts to the same road segments and intersections as those evaluated in the Project traffic analysis. A summary of the cumulative projects (which generate more than 500 ADT) is included with their respective and cumulative traffic generation in Table 3.1-29, Cumulative Project Traffic Generation. Projects which generate more than 500 ADT were selected as they had full traffic impact studies completed for more accurate assignments of cumulative trips to the Project study area.

Ambient growth would also result in increased vehicle trips and traffic impacts beyond those analyzed under Existing Conditions. The traffic analysis conservatively assumed that every parcel builds out to the General Plan designation and that all GPAs within the study area are approved and implemented. The SANDAG Series 12 is a Year 2050 development forecast, which assumes development of each parcel consistent with its General Plan land use. A 27 percent growth rate from existing to 2050 was derived and was then applied to the existing counts to reach the 2050 year forecasted volumes.

The impacts associated with the Project in combination with this cumulative traffic are addressed in two cumulative analysis scenarios: (1) Existing Plus Ambient Plus Cumulative Plus Project, in which existing traffic plus ambient traffic are combined with the Project traffic, and (2) General Plan Buildout, in which long-range 2050 traffic forecasts (prepared at SANDAG using the Series 12 Year 2050 model) are analyzed.

<u>Existing Plus Ambient Plus Cumulative Plus Project Impacts</u>

Roadway Segments

As shown in Table 3.1-30, Existing + Ambient + Cumulative + Project Segments - ADT Volumes and Levels of Service, the following roadway segments would operate at an unacceptable LOS both without and with the Project:

- Camino Del Norte from Paseo Montanoso to I-15 Ramps (LOS E during Weekday peak hour)

This segment is under City of San Diego jurisdiction. As shown, Project-related traffic would change the volume to capacity ratio by 0.01 second at along the roadway segments. This volume increase is below the City's significance threshold of 0.02 second for LOS E roadway segments (as specified in Table 3.1-21, City of San Diego

Significant Traffic Impact Thresholds). Therefore, a **less than significant impact** would occur under Existing + Ambient + Cumulative + Project street segment conditions.

Intersections

As shown in Table 3.1-31, Existing + Ambient + Cumulative + Project Intersections - Levels of Service, the following three intersections would operate at an unacceptable LOS both without and with the Project:

- Camino Del Norte at Bernardo Center Drive (LOS E during the Weekday AM and PM peak hour)
- Camino Del Norte at I-15 Southbound Ramps (LOS E during the Weekday AM peak hour)
- Camino Del Norte at I-15 Northbound Ramps (LOS E during the Weekday AM peak hour)

These intersections are all within City of San Diego's jurisdiction. As shown in Table 3.1-31, the change in delay at the intersection of Camino Del Norte at I-15 Southbound Ramps would not exceed the City's significance threshold of 2.0 seconds for LOS E intersections (as specified in Table 3.1-21, City of San Diego Significant Traffic Impact Thresholds) and impacts would be **less than significant**.

Additionally, per the County's Transportation Impact Fee Ordinance, the Project applicant is required to pay into the County TIF Program. The County TIF program enables projects to achieve CEQA compliance by paying a fair share toward the cost of improving roads in the future as the levels of service become unacceptable due to the increased traffic volume caused by the cumulative effects of various developments. The TIF Program provides funding for construction of transportation facilities needed to support traffic generated by new development and to meet state law requirements. As sufficient funds become available, the County will implement the improvements that it has planned. The potential growth represented by the Project was included in the growth projections upon which the TIF Program is based. Therefore, payment of the TIF, which would be required at issuance of building permits, in combination with other components of the program described above, would ensure potential cumulative traffic impacts from the Project are less than significant. Further, as noted in CEQA Guidelines Section 15130(a)(3), a project contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The Project's payment of TIF further supports the conclusion that cumulative traffic impacts are **less than significant**.

General Plan Buildout

General Plan conditions represent traffic conditions in 2050. This analysis reflects the conditions that are proposed in the General Plan. Traffic growth on area roadways is a function of the expected land development, economic activity, and changes in demographics. For this analysis, the General Plan 2050 traffic forecast model was used to develop General Plan base traffic volumes.

All circulation improvements are assumed to be completed under General Plan conditions. The effect of the Project on the study area circulation network was evaluated. Table 3.1-32, General Plan Segments – ADT Volumes and Levels of Service, shows the General Plan roadway segment conditions without and with the Project. As shown, the following roadway segments are projected to operate at unacceptable LOS both without and with the Project:

- Camino Del Norte from Bernardo Center Drive to Paseo Montanoso (LOS F during the Weekday)
- Camino Del Norte from Paseo Montanoso to I-15 Ramps (LOS F during the Weekday)

These two segments are within the County's jurisdiction. Along each of these segments, the change in volume to capacity ratio was calculated to be 0.01 second. Therefore, the Project was not determined to change the volume to capacity ratio in excess of the County's significance threshold of 0.01 second for LOS F roadway segments. Impacts would be **less than significant**.

#### 3.1.6.5 *Significance of Impacts*

Project- and cumulative-level impacts are less than significant. The analysis found that all roadway segments and intersections would continue to operate at acceptable levels of service with the addition of the Project. No direct or indirect impacts of any significance are anticipated, nor are any cumulative impacts identified for the Project. The Project would not create any traffic hazards due to an existing transportation design feature, to pedestrians or bicyclists, nor affect alternative transportation or parking. Payment of the TIF would ensure potential cumulative traffic impacts from the Project are less than significant. Therefore, no mitigation is required.

#### 3.1.6.6 *Conclusion*

This analysis of existing roadway segment and peak-hour intersection performance summarizes the traffic study prepared by a County-approved traffic consultant. The analysis found that all roadway segments and intersections are currently operating a LOS C or better. No direct or indirect impacts of any significance are anticipated, nor are any cumulative impacts identified for the Project.

The Project would not create any traffic hazards due to an existing transportation design feature, to pedestrians or bicyclists, nor affect alternative transportation or parking.

### 3.1.7 Utilities and Service Systems

The assessment of the Project's potential to have an adverse effect on utilities and service systems (water, wastewater, solid waste and energy) is based on information provided by local service providers. This information is included as a technical appendix to this DSEIR:

- Appendix P: Project Facility Availability Form – Water (Olivenhain Municipal Water District 2016)

- Appendix P: Project Facility Availability Form – Sewer (Rancho Santa Fe Community Facilities District 2015)

The Santa Fe Valley Specific Plan (SFVSP) EIR (SP95-001) was also reviewed. The SFVSP EIR found impacts related to utilities to be less than significant and no mitigation was required.

No comments were received in response to the Notice of Preparation (NOP) related to utilities and service systems. Comments related to drainage and stormwater are addressed in Section 3.1.3, Hydrology/Water Quality of this DSEIR. A copy of the NOP and comment letters received on the NOP are included in Appendix A

### 3.1.7.1 *Background*

The previously certified EIR analyzed public services and utilities in Section 4.13. The analysis considered impacts to public services including fire protection, law enforcement, schools, animal control, and parks and recreation and utilities including water, wastewater, solid waste, and gas and electricity. Impacts to public services are analyzed in Section 3.1.5, Public Services, of this DSEIR. This section focuses on impacts related to utilities. The previous EIR found impacts related to utilities to be less than significant and no mitigation was required.

Changes Requiring New Analysis

Since preparation of the previous EIR, time has passed such that overall development, and likely associated population, in the area surrounding the Project has increased, which is the basis for assessment of utilities impacts. Also, the Project would result in a different land use than was assumed in the previously certified EIR. Therefore, the utilities analysis requires an update with current capacity and impacts are discussed in this section. Project Facility Availability Forms are summarized below and included in Appendix P of this DSEIR.

### 3.1.7.2 *Existing Conditions*

Water Supply and Facilities

Water service would be provided to the Project site by Olivenhain Municipal Water District (OMWD). OMWD provides water, recycled water, and hydroelectricity to northern San Diego County, including portions of the cities of Encinitas, Carlsbad, San Diego, Solana Beach, and San Marcos plus all or portions of the unincorporated communities of Elfin Forest, Rancho Santa Fe, Fairbanks Ranch, Santa Fe Valley, and 4S Ranch. OMWD serves a population of approximately 83,000 over an area of 48 square miles. It provides potable water via 27,000 meters and 400 miles of pipeline. OMWD's David C. McCollom Water Treatment Plant treats up to 34 million gallons of water per day and the 4S Ranch Water Reclamation Facility produces up to two million gallons per day of recycled water.

OMWD is a member agency of the San Diego County Water Authority (SDCWA), which was established in 1943 to provide secure water resources for a growing population and

purchase water from wholesaler Metropolitan Water District (MWD). SDCWA's service area covers 1,486 square miles and a population of 3.2 million. SDCWA's 24 member agencies purchase water from SDCWA for distribution within their respective service areas. OMWD also maintains 17 water storage reservoirs with a combined capacity of approximately 80 million gallons of water.

OMWD prepared its 2015 Urban Water Management Plan (UWMP) in accordance with the Urban Water Management Planning Act and to update and restructure its 2010 UWMP to facilitate the Department of Water Resources review process. The UWMP compares projected water supply and demand through 2040. According to the UWMP, OMWD relies in large part on imported water supplies from the MWD via SDCWA but is also developing its own supplies to increase overall water supply reliability.

OMWD prepared its 2015 Potable and Recycled Water Master Plan to plan future facilities, budget accordingly, and reduce the need for imported water. This document identifies a ten-year and 20-year capital spending plan for a variety of pipeline replacement and rehabilitation, facility retirement, water supply, studies, and building and facility projects.

The Project site is located within Zone D-14 of OMWD's service area and, according to the Project Facility Availability Form dated February 2016, is eligible to receive domestic water service.

Wastewater Treatment

Wastewater service for the Project would be provided by Rancho Santa Fe Community Services District (RSFCSD). The Project site is not currently within the RSFCSD service area, but is located within their adopted sphere of influence. Annexation into the RSFCSD services area is one of the discretionary actions for the Project. Local Agency Formation Commission (LAFCO) approval for the annexation would be required.

RSFCSD currently provides sewer collection and treatment services to approximately 2,600 customers and operates two wastewater treatment plants: the Rancho Santa Fe Water Reclamation Facility and the Santa Fe Valley Water Reclamation Facility.

The Rancho Santa Fe Water Reclamation Facility has an average flow of 350,000 gallons per day and a rated capacity of 450,000 gallons per day. This facility generally provides treatment services for Rancho Santa Fe and other surrounding communities in the unincorporated areas of the county.

In 1997, the RSFCSD annexed the Santa Fe Valley Specific Plan Area, into their services area. In order to serve this area a 485,000 gallon per day 0.485 MGD treatment facility was constructed. The Santa Fe Valley Water Reclamation Facility produces tertiary recycled water, which is then sold to and distributed by OMWD for irrigation of local golf courses.

Solid Waste

Solid waste services for the Project would be provided by a private hauler and transported to a transfer station prior to final disposal at the Sycamore Sanitary Landfill in Santee. The Sycamore Sanitary Landfill has a daily permitted throughput of 5,000

tons/day of solid waste. An expansion of the landfill was approved in 2012 and is forecasted to provide capacity for waste until 2041 (CalRecycle 2015).

Energy

San Diego Gas and Electric (SDGE) is the electricity supplier for San Diego County. For 2012, SDGE reported available and planned resources of 16,614 gigawatt hours (GWh), balanced against the same amount of energy requirements. While no data was available for energy projections between 2013 and 2015, 2016 was reporting as showing an excess of 205 GWh of electricity from existing and planned sources.

Regulatory Setting

Senate Bills 610 and 221

Senate Bill (SB) 610 addresses the issue of water supply availability by requiring preparation of a Water Supply Assessment (WSA) when projects subject to CEQA and larger than certain specified thresholds are under evaluation. The Project does not exceed the specified size threshold of 500 residential units or equivalent, and, therefore, preparation of a WSA is not required. SB 221, a companion bill approved at the same time as SB 610, requires verification of water supplies as a condition of tentative map approval for residential subdivisions of 500 units or more. The Project water use is fewer than 500 residential units or equivalent; therefore, SB 221 is also not applicable to the Project.

Regional Water Supply Agency Plans

SDCWA's 2010 UWMP provides a comprehensive planning analysis at a regional level and includes water use associated with accelerated forecasts of residential development as part of its municipal and industrial sector demand projections. SDCWA utilizes the San Diego Association of Governments (SANDAG) regional growth forecast to calculate future demands within their service area. This provides for consistency between San Diego County planning efforts and SDCWA demand projections, thereby ensuring that adequate supplies are being planned for existing and future water users. The demand associated with accelerated forecasted growth is intended to account for SANDAG's land use development currently projected to occur between 2035 and 2050, but with the likely potential to occur on an accelerated schedule. SANDAG estimates that accelerated residential development could occur within the planning horizon of the 2010 UWMP update. These residential units are not yet included in local jurisdictions' general plans, so their projected demands are incorporated at a regional level. When necessary, this additional demand increment can be used by member agencies (including OMWD) to meet the demands of development projects not identified in the general land use plans, as part of GPAs, and/or new annexations. As documented in the 2010 UWMP, SDCWA is planning to meet future and existing demands, which include the demand increment associated with the accelerated forecasted growth.

State of California Executive Order B-29-15 - In an acknowledgement of California's continuing drought conditions, on April 1, 2015, Governor Brown signed Executive Order B-29-15 mandating state water restrictions for a 25 percent potable water reduction through February 28, 2016. These restrictions require California water

suppliers to California cities and towns to reduce usage as compared to the amounts used in 2013.

In response, and pursuant to its RUWMP, on April 14, 2015 the MWD Board of Directors approved a water supply cut of up to 15 percent to member agencies. The cuts began July 1, 2015. Individual member agencies will see varied supply cuts, which will be determined based on the availability of local water supply and existing water conservation efforts of each agency. On May 14, 2015 the SDCWA Board of Directors adopted measures to restrict landscape irrigation to no more than two days per week, approved water delivery reductions to member agencies for fiscal year 2016 ranging from 12 to 36 percent, and increased funding for conservation and drought outreach programs.

On May 13, 2015, the OMWD Board of Directors voted to move to Water Supply Shortage Level 2 water rates. Under these designations, water conservation measures are mandatory for all customers, with the goal of reducing water usage throughout each district. Subsequently, on May 27, 2015, OMWD's Board of Directors amended its Water Supply Shortage Condition Ordinance to include SWRCB regulations which limit all outdoor irrigation to ten minutes per station, commercial growers and nurseries excluded, to two days per week. On July 20, 2016 OMWD's Board of Directors approved to move out of a Level 2 Water Supply Shortage and into a Level 1 Water Supply Condition. On April 7, 2017, Governor Brown rescinded California's drought-related state of emergency in light of improved hydrological conditions.

AB 939

In 1989, the California Integrated Waste Management Board (CIWMB) passed Assembly Bill 939 (AB) which mandated a 25 percent reduction of waste being disposed of in the landfill system by 1995, and a 50 percent reduction by 2000. In response to AB 939, the CIWMB was established to monitor compliance with waste reduction requirements. According to the CIWMB, all counties within the State are required to have an approved Countywide Integrated Waste Management Plan, which outlines methods for waste diversion and demonstrates sufficient solid waste disposal capacity for a minimum of 15 years.

Applicable Plans and Policies

San Diego County General Plan – Conservation and Open Space Element

The following policies identified in the County of San Diego General Plan (August 2011) Conservation and Open Space Element are related to energy, solid waste and water conservation are applicable to the Project:

- **Policy COS-14.3 Sustainable Development.** Require design of residential subdivisions and nonresidential development through "green" and sustainable land development practices to conserve energy, water, open space, and natural design.
- **Policy COS-15.1 Design and Construction of New Buildings.** Require that new buildings be designed and constructed in accordance with "green building" programs that incorporate techniques and materials that maximize energy

efficiency, incorporate the use of sustainable resources and recycled material, and reduce emissions of GHGs and toxic air contaminants.

- **Policy COS-15.4 Title 24 Energy Standards.** Require development to minimize energy impacts from new buildings in accordance with or exceeding Title 24 energy standards.
- **Policy COS-17.1 Reduction of Solid Waste Materials.** Reduce greenhouse gas emissions and future landfill capacity needs through reduction, reuse, or recycling of all types of solid waste that is generated.
- **Policy COS-17.2 Construction and Demolition Waste.** Require recycling, reduction and reuse of construction debris.
- **Policy COS-17.6 Recycling Containers.** Require that all new land development projects include space for recycling containers.
- **Policy COS-19.1 Sustainable Development Practices.** Require land development, building design, landscaping and operational practices that minimize water consumption.

Santa Fe Valley Specific Plan

The SFVSP identifies the following objective related to utilities:

1. **Objective PF-4:** Ensure that potable and reclaimed water is available to Santa Fe Valley concurrent with need.
    a. **Policy PF-4.1:** Each individual project or subdivision shall undergo a hydraulic analysis and pay appropriate capacity fees prior to receiving a potable service availability letter from OMWD. Payment of all capacity fees is to be in accordance with District Ordinance 231, or as specifically waived by the District.
    b. **Policy PF-4.2:** Prior to issuance of grading permits or improvements plans in lieu of grading permits and prior to vesting Major Use Permits, potable water service letter commitments shall be obtained from OMWD.
    c. **Policy PF-4.3:** Prior to issuance of grading permits or improvements plans in lieu of grading permits and prior to vesting Major Use Permits, potable water service letter commitments shall be obtained from OMWD.
    d. **Policy PF-4.6:** Discretionary permit applicants shall be required to provide all fee and easement rights-of-way as required for construction of onsite and offsite facilities pursuant to the Public Facilities Plan as determined by OMWD.
2. **Objective PF-5:** Ensure that wastewater treatment and disposal facilities are provided to serve planned land uses in the SPA concurrent with need.
    a. **Policy PF-5.3:** Prior to approval of Final or Parcel Maps, issuance of grading permits or improvement plans in lieu of grading permits on the property that

will require public sewage treatment and disposal, applicants shall obtain sewer service commitment from the RSFCSD.

b. **Policy PF-4.3:** Prior to issuance of grading permits or improvements plans in lieu of grading permits and prior to vesting Major Use Permits, potable water service letter commitments shall be obtained from OMWD.

### 3.1.7.3 *Analysis of Project Effects and Determination as to Significance*

Water Supply and Facilities

Guideline for Determination of Significance

A significant impact related to water would occur if the Project would:

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed; or
- Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

*Guideline Source*

This guideline is based upon Appendix G of the CEQA Guidelines.

Analysis

*Project Demand and Regional Water Supply*

Water supply for the Project would be provided by OMWD. For institutional uses such as a church, OMWD does not have standard water use generation rates. Rather, use generation rates are calculated based upon the quantity and type of water-using fixtures (e.g., bathroom fixtures, drinking fountains, dishwasher in the kitchen facility) and the anticipated number of occupants of the site. The specific fixtures have not been determined at this time, therefore a detailed water demand for the Project cannot be provided.

OMWD's water supply is dependent on SDCWA and, in turn, MWD, as the wholesale water suppliers. Therefore, the water supply reliability assessment relies on SDCWA's 2015 UWMP. Water Code Section 10635 requires that every urban water supplier assess the reliability of its water services during normal, dry, and multiple dry water years. The water supply and demand assessment compares the total projected water use with anticipated water supply over the next 20 years in 5-year increments. The assessment contained in SDCWA's 2015 UWMP projects reliability through the next 25 years to correspond with population growth forecasted by SANDAG.

The near-term service for the proposed water demands of the Project can be accounted for in SDCWA's 2015 UWMP accelerated forecasted growth demand increment, discussed above. This additional demand increment can be used by member agencies to meet the demands of development projects not identified in general land use plans, as part of GPAs, and/or new annexations. As documented in the 2015 UWMP, SDCWA

is planning to meet future and existing demands—including the demand increment associated with accelerated forecasted growth.

As noted above, OMWD used SDCWA's projections for normal, dry year, and multiple dry years to determine future demands through 2040. The forecasted normal year water demands compared with the projected supplies for OMWD are shown in Table 3.1-33, Water Supply and Demand Comparison – Normal Year. As shown in Table 3.1-33, supply will meet demand under the normal year scenario. Therefore there would be adequate water supplies to serve the Project in a normal year.

Table 3.1-34, Water Supply and Demand Comparison – Single Dry Year, provides a comparison of a single dry year supply with projected water demands through 2040. As with the normal year projections, no shortages are anticipated within OMWD's service area in a single dry year through 2040 with existing and planned supplies and implementation of the projects discussed in SDCWA's and OMWD's master planning documents. Therefore there would be adequate water supplies to serve the Project in a single dry year.

Table 3.1-35, Water Supply and Demand Comparison – Multiple Dry Years, presents multiple dry year scenarios (one, two, and three year supplies). Table 3.1-35 shows that in the second and third year of multiple dry years in the 2030 and 2035 time frame OMWD would have a small shortage in supply.

The OMWD UWMP (page 52) noted that the SDCWA's UWMP indicates that management action will be taken to handle such shortages. OMWD is also investigating a brackish groundwater supply that would improve supply reliability. Further, during dry years, such as 2015, when the state required OMWD to reduce demand by 32 percent, OMWD implemented stage 2 of its Water Supply Shortage Ordinance. This included mandatory actions such as two-day per week watering and fines for non-compliance. This resulted in an overall reduction in excess of state orders. Finally, OMWD has prepared for periods of water supply shortage by amending in 2015 its Water Supply Shortage Ordinance (No. 427), which may be considered a water shortage contingency ordinance. The ordinance provides for progressively severe stages of water use restrictions as necessary to accomplish services area-wide water use reductions up to 40 percent. Given the contingency planning that is in place, there would be adequate water supplies to serve the Project in multiple dry years.

As demonstrated by Tables 3.1-33 through 3.1-35, OMWD can reliably meet water demands during normal and single dry year conditions. In summary, potable water demands generated by the Project would be met by water supplies that are planned for and intended to be available through 2040 under normal conditions and in both single and multiple dry years. Therefore, impacts associated with the Project's water supply demand would be **less than significant**.

*Water Supply Facilities*

Potable water to the site would be served by a water main entering the site at Grace Way. Non-potable water for irrigation would be provided by an offsite well to which the

Project has legal access. Please see Figure 1-2 in Chapter 1 for a location of the existing well.

As noted above, the Project site is located within the boundaries of OMWD, which would provide water service for fire protection and church uses. OMWD, in their Project Facility Availability Form (see Appendix P), identified that the Project site is within OMWD boundaries and is eligible to receive domestic service. OMWD's supplemental water availability letter indicates that they have or will have adequate facilities with sufficient capacity to serve the Project at a minimum of 25 psi pressure. This sufficiency assumes normal operating conditions, completion of all necessary facilities including on- and off-site water lines, facilities, and appurtenances. OMWD's commitment to water service availability is also conditioned on the following additional requirements, which would be met by the Project applicant:

- Payment of all improvement fees, as appropriate, when due in accordance with District Ordinance 301, or successor Ordinance.
- Applicant is required to have a hydraulic analysis prepared by the District's consulting engineer to ascertain the impact of the Project on the District's water system and to determine fire flow availability as required by the Fire Department. Applicant must provide fire flow requirements to the District.
- Applicant is required to provide all fee and easements as required for construction of on- and off-site facilities as required by the District.
- Applicant is required to construct all on- and off-site facilities as required by the District.
- Applicant is required to execute District Agreement for pipeline construction and furnish all necessary documents for insurance, bonding, and pay all District's charges as they are invoiced.
- In accordance with District Assessment District 96-01, lots of ½ acre or less may have a ¾-inch meter installed unless owner chooses to upgrade the meter and pay the additional fees and charges. Lots greater than ½ acre but less than three acres require one-inch meters to be installed. Lots in excess of three acres require a minimum 1½-inch meter to be installed. Larger meters may be required by the District.
- The District may require larger meters than the Assessment District 96-01 lot size criteria dictate if the individual residence requires water service greater than can be accommodated by the standard ¾-inch meter irrespective of the lot size.
- Applicant is required to comply with District Ordinance 280 for the mitigation of impacts to the District's Assessment District 96-1R. Ordinance 280 requires an executed agreement to request increased EDUs required by the Project.

Wastewater Treatment

Guideline for Determination of Significance

A significant impact related to wastewater would occur if the Project would:

- Exceed wastewater treatment requirements of the applicable RWQCB.
- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that is has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

*Guideline Source*

This guideline is based upon Appendix G of the CEQA Guidelines.

Analysis

The Project would be served by a system of public sewer mains that would connect to the existing RSFCSD sewer network at the Project boundary. The Project proposes to discharge domestic waste to a community sewer system that is permitted to operate by the RWQCB. A Project facility availability form has been received from RSFCSD that indicates the district will serve the Project. Therefore, because the Project will be discharging wastewater to a RWQCB permitted community sewer system and will be required to satisfy the conditions listed above, the Project is consistent with the wastewater treatment requirements of the RWQCB, including the Regional Basin Plan.

The former residences on the Project site used a septic system, so there was not any wastewater generation going into the RSFCSD system. The Project site is currently located within RSFCSD's adopted sphere of influence and would annex into the RSFCSD for wastewater service. LAFCO approval would be required for the annexation.

Based upon information from Ms. Paula Melendrez, District Administrator at RSFCSD, the RSFCSD Ordinance Code determines wastewater demand in terms of equivalent dwelling units (EDUs). One church unit represents 1.33 EDUs, with each church unit equaling 150 sanctuary seats. With a full buildout of 1,500 seats, the Project equals 10 church units or 13.33 EDUs. Each EDU is assumed to generate 250 gallons per day (gpd) of wastewater. Thus the Project is expected to generate up to 3,325 gpd of wastewater at full buildout of the Project.

According to the Project Facility Availability Form prepared by RSFCSD, wastewater facilities are expected to be available based on existing infrastructure and the capital facility plans of RSFCSD. The Project would not require significant alterations to existing sewage systems and infrastructure or substantially reduce the capacity of existing facilities. Thus, impacts related to wastewater treatment and conveyance would be **less than significant**.

<u>Solid Waste</u>

Guideline for Determination of Significance

A significant impact related to solid waste would occur if the Project would:

- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs;
- Not comply with federal, state, and local statutes and regulations related to solid waste.

*Guideline Source*

This guideline is based upon Appendix G of the CEQA Guidelines.

Analysis

*Landfill Capacity*

Construction and demolition debris would be generated by the Project, as there are two existing residences and associated outbuildings that would need to be demolished prior to the start of Project construction. Construction and demolition debris recycling is available through EDCO and other private franchise haulers.

The Sycamore Sanitary Landfill is owned by the City of San Diego and operated by Allied Waste Disposal and Republic Services Inc. According to CalRecycle (2015) the facility has a daily permitted capacity of 5,000 tons/day for solid waste with an anticipated closure date of 2040.

Solid waste generation rates vary by land use. For this analysis, the generation rates used in the CalEEMod software was used. This is similar to the methodology used in other church EIRs in Southern California and equates to approximately 57 tons per year of waste for every 10,000 SF of church/place of worship use. At buildout, the Project will have 89,234 SF of church use. Therefore, solid waste generated by the Project (prior to recycling) is expected to be 508 tons per year, or 2,783 lbs/day. However, assuming a 50 percent diversion rate through recycling, this amount would be reduced to 254 tons per year or 1,391 lbs/day. With consideration of the diversion rate, the Project's solid waste generation can be accommodated at the landfill based upon the available daily permitted capacity. Impacts would be **less than significant**.

*Compliance with Statutes Related to Solid Waste*

Implementation of the Project will generate solid waste. All solid waste facilities, including landfills require solid waste facility permits to operate. In San Diego County, the County Department of Environmental Health, Local Enforcement Agency issues solid waste facility permits with concurrence from the California Integrated Waste Management Board (CIWMB) under the authority of the Public Resources Code (Sections 44001-44018) and California Code of Regulations Title 27, Division 2, Subdivision 1, Chapter 4 (Section 21440et seq.). The Project will deposit all solid waste at a permitted solid waste facility and therefore, will comply with Federal, State, and local statutes and regulations related to solid waste. **No impact** is identified for this issue area.

Energy

Guideline for Determination of Significance

Appendix F of the CEQA Guidelines provided guidance for analyzing significant energy implications of a project. The introduction states that "[t]he goal of conserving energy

implies the wise and efficient use of energy." Three means of achieving this goal are listed:

1. Decreasing overall per capita energy consumption;
2. Decreasing reliance on fossil fuels such as coal, natural gas, and oil, and;
3. Increasing reliance on renewable energy sources.

Emphasis in the discussion should be on "avoiding or reducing inefficient, wasteful and unnecessary consumption of energy."

*Guideline Source*

This guideline is based upon Appendix F of the CEQA Guidelines.

Analysis

*Effect on Consumption of Energy Resources*

The Project proposes a church and fellowship areas in five buildings in two phases to total 89,234 SF. The building functions will consist of Sanctuary/ Administration (43,500 SF), Education (12,934 SF), Meeting Spaces (5,932 SF), Fellowship Hall (13,812 SF) and Learning Center (13,056 SF). The Project also includes parking areas, outdoor gathering areas, and an outdoor recreation use without nighttime lighting. The site will operate seven days a week, with operational house generally from 8 AM to 5 PM, and selected evening activities terminating at 10 PM. Primary activity will occur on Sunday with worship services held between 9 AM and 10 PM. Energy services will be provided by SDGE.

There will be two major categories of energy use - construction, and operations. Energy use by type of energy will fall into distinct categories as shown in Table 3.1-36, Project Energy Use by Energy Type and Use Categories.

Energy use during construction will include construction vehicles such as excavators, scrapers, forklifts, and rollers. Energy used to fabricate, finish, and transport materials is embodied in the material used. Electricity would be used for construction lighting, field services (trailers), and electrically driven construction equipment such as air compressors, drills, saws, and pumps, among other equipment. Primary fuel use would be associated with gasoline- and diesel-powered mobile construction equipment and commuting of workers to and from the construction site. Full details of energy use are provided in the air quality and global climate change reports associated with this DSEIR (Appendices K and L respectively).

The major energy use during operation of the Project would be for heating and cooling of buildings, followed by lighting. Energy will also be required to operate pumps that will supply water to the Project, both off-site and onsite by the pump on an existing well, which will provide non-potable water for irrigation.

Most building operations will use electricity. These include lighting and cooling operations. Heating in the Project buildings and cooking in the café will be generated from natural gas. Energy use for the operation of the facility uses data provided by the U.S. Environmental Protection Agency's ENERGY STAR® program. Data for energy

use by building type is provided at "energystar.gov/buildings/about-us/research-and-reports/portfolio-manager-data trends." For each of the buildings/uses on the site, source energy use is calculated as follows, in thousands of British Thermal Units (kBtus):

| Use Type | Area (SF) | kBtu/SF /Year | Total Energy Use (kBtus) |
|---|---|---|---|
| Building Area | 89,243 | 70.7 | 6,309.4 |
| Landscaped Area[1] | | | 10.8 |
| **Total** | | | **6,320.2** |

[1] Assumes 5 hp pump. Excludes hardscape that will not require watering. Water provided by on-site pump so embodied energy is assumed to be limited to energy use of water pump.

Total annual Project energy use is estimated to be 6,320.2 million Btus, or 1,849 kWh. Overall total annual non-residential electricity use in San Diego County in 2015 was 12,863 billion kWh (Department of Conservation, ecdms.energy.ca.gov/elecbycounty.aspx. The Project represents less than one thousandth of total County non-residential electricity use. The Project will therefore have a minimal effect on overall energy use in the County. Further, the Project proposes energy efficiency measures which are discussed later in this section.

The Project is projected to use 3,519.1 million Btus for heating annually, or 35,199.4 Therms. This is less than one thousandth of a percent of the overall non-residential use in San Diego County in 2015, which was 208.8 million Therms (Department of Conservation, ecdms.energy.ca.gov/gasbycounty.aspx). Impacts to State-wide natural gas use would therefore not be significant. Proposed conservation measures are discussed later in this section.

*Effects on Energy Supplies*

SDGE is the electricity supplier for San Diego County. For 2012, SDGE reported available and planned resources of 16,614 GWh, balanced against the same amount of energy requirements. While no data was available for energy projections between 2013 and 2015, 2016 was reporting as showing an excess of 205 GWh of electricity from existing and planned sources. The Project would require approximately 1,782 kWh of electricity, or 0.18 GWh. This is far below the projected excess of electricity in the Project's initial year of operation. Therefore the Project would not require construction of additional electrical generation capacity.

*Effect on Peak and Base Demand for Electricity*

Peak demand for electricity occurs when so much electrical equipment is in use at one time that it places a strain on the entire electric system. This generally occurs in

California during summer heat waves in the weekday afternoon, hours when air conditioners at both homes and businesses are running at full strength.

The Project would continue to operate during peak energy demand periods, and so would constitute a new source of peak demand usage. Non-residential construction falls under California Title 24 regulations. The Title 24 revision that took effect on July 1, 2017 introduced additional energy conservation requirements into building construction in California. This revision has provisions for more sustainable and energy efficient construction practices that will affect both the types of materials used and the way in which finished systems will be tested. Title 24 provisions are detailed below. The Project's overall demand will be reduced from historic levels of residential energy use due to compliance with Title 24 changes. *Transportation Energy Use*

Energy will also be expended in trips to and from the Project. The Project has been estimated to create 392 Average Daily Traffic (ADT) on weekdays and 2,775 on Sundays. This includes all uses for the Project. The Project is a joint effort by three churches in the region, all of which are operational and have their own congregations. Since the three existing churches are located in the region, traffic will be diverted from three separate locations to a single location. Net energy use in the form of gasoline will therefore not increase significantly with the new Project. Nevertheless the Project incorporates features to reduce gasoline use such as charging hook-ups for electric cars and operation of a shuttle for church members.

Title 24 regulations include electrical vehicle hookups as a part of new construction, enabling a reduction in gasoline consumption for transportation. Electric vehicle use is also projected to increase significantly statewide in the coming years, and it is reasonable to conclude that some residents would incorporate electric vehicles into their driving mix. The Project is located near existing MTS bus routes. The Project is also providing a shuttle service option for church patrons.

*Energy Conservation*

The State of California controls building standards throughout the state through Title 24. The standards underwent a significant revision in 2013 that mandated greater energy conservation in the construction and operation of all buildings. The California Energy Commission expects the new standards to reduce annual electricity consumption by 613 gigawatts (GWh) and natural gas consumption by 10 million Therms per year (CEC, Title 24, 2013). Further energy efficiency requirements were added in the 2016 Title 24 revisions. These changes affect all aspects of the building process. Several of the new features are outlined in Table 3.1-37, Title 24 2014 Selected Energy Efficiency Requirements.

Additional efficiencies in energy use will be achieved through the use of local water for the Project. Irrigation water will be provided on-site. Irrigation consumes approximately 70 percent of the water used in San Diego County. It is estimated that it takes 13,022 kWh to import each million gallons of potable water into the region (Global Climate Change Analysis, RECON Environmental, 2017). Therefore reducing demand for

imported potable water that would be used for irrigation represents a significant conservation of energy.

Propane is a clean burning, low emissions fuel that does not leave residue that could contaminate soils. It is also produced in California, thereby minimizing pollution and saving energy associated with transport over very large distances. The Project's propane use represents an efficient use of energy.

Finally, SDGE is expanding its portfolio of renewable energy sources. Energy from these sources will be fed into the electricity grid and distributed to customers. As SDGE customers, the Project will indirectly participate in the increased use of renewable energy.

The Project will consume energy in the construction and operation of an 89,234 SF facility. Construction energy use will be governed by a construction management plan for the Project that will include measures to prevent the waste of energy such as no vehicle idling, tuning of vehicles prior to use, and efficient staging and operation of vehicles. Operational aspects of the Project represent a very small fraction of overall energy use in San Diego County, and will incorporate measures to increase energy efficiency and prevent waste through 2017 Title 24 requirements. SDGE has the capacity to serve the Project without the construction of new facilities. Transportation energy will not be wasted because destinations that can meet residents' needs for consumables and jobs already exist in the area or are in the process of being developed. Project services are being drawn from other locations in the region; therefore the Project does not significantly generate new traffic trips or represent a draw for traffic at great distances. Mass transit is available to the site and the Project will provide its own shuttle service, which will reduce vehicle trips.

The Project will conserve energy through new building standards that will lead to a reduction in per capita energy use when compared to current developments. Alternative energy use will take place in the form of solar panels on Project rooftops, a projected increase in use of electric vehicles, and reliance on SDGE's expanding portfolio of alternative energy sources. Although the Project will increase energy usage in the County, it will incorporate efficiencies in its design that will result in a per capita decrease in energy use, and will not result in inefficient, wasteful, or unnecessary consumption of energy. Impacts would be **less than significant**.

*Consistency with General Plan Conservation and Open Space Element*

The Project is consistent with Policy COS-15.1 The Project has been designed with the goal to comply with criteria established in the LEED rating system. LEED is an internationally recognized green building certification system developed by the U.S. Green Building Council. LEED promotes sustainable building and development practices through rating systems that recognize projects that implement strategies for better environmental health and performance in the following key areas: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, locations and linkages, awareness and education, innovation in design, and regional priority.

The Project is consistent with Policy COS-15.4 as it will incorporate measures to increase energy efficiency and prevent waste through 2017 Title 24 requirements.

The Project is consistent with Policies COS-17.1, COS-17.2 and COS-17.6. Waste generated from demolition of the existing structures and new construction will be recycled. Construction and demolition debris recycling is available through EDCO and other private franchise haulers that serve the Project area. Recycling containers would be placed throughout the buildings to encourage recycling and divert waste from the landfill.

The Project is consistent with Policy COS-19.1 as it will incorporate sustainable development practices. The Project applicant plans to design and construct the Project with the goal of obtaining LEED certification, which takes into consideration building design, water efficiency and operational practices to minimize water consumption.

*Consistency with Santa Fe Valley Specific Plan*

The Project is consistent with water and wastewater objectives and policies identified in the SFVSP. The Project applicant has coordinated with both OMWD and RSFCSD regarding water and wastewater service for the Project site. Project Facility Availability forms for both water and sewer are included in Appendix P and indicate that these districts can serve the Project. The Project applicant will meet the specific conditions identified by OMWD, as detailed above.

#### 3.1.7.4 *Cumulative Impact Analysis*

Water Supply and Infrastructure

Cumulative projects that are located within the OMWD service area and require potable water service would contribute to a cumulative increase in demand for OMWD water supply and infrastructure.

Cumulative projects considered in this DSEIR are identified in Table 1-2 and on Figure 1-11 in Chapter 1. Of the 20 cumulative projects identified in Table 1-2, all are located within the OMWD service area with the exception of the Black Mountain Ranch Subarea Plan, Santaluz, Black Mountain Ranch Open Space Park, and the T-Mobile Cell Tower. These four projects would be served by the City of San Diego.

Of the 15 cumulative projects that are within the OMWD service area, 10 are not of a nature that would require potable service (e.g., cell towers, administrative permits, or land use modifications that do not result in increased development). The remaining five projects that would require potable water service from OMWD includes Rancho Cielo SPA, Cielo Village MUP, Starwood Santa Fe TM, TPM 21205, and TPM 21207. In total these projects would increase demand by developing a total of 28 residential units. When the water demand from the cumulative projects is considered with the demand from the Project, cumulative impacts would be **less than significant**.

Wastewater

Cumulative projects that are located within the RSFCSD service area or adopted sphere of influence and require wastewater services would contribute to a cumulative increase

in demand for RSFCSD wastewater treatment services and infrastructure. Of the 20 cumulative projects identified in Table 1-2, eight are located within the RSFCSD service area or adopted sphere. These projects include: SPA 11-001, TM 5556, TPM 21207, MUP 11-018, MUP 08-003, Administrative Permit (AD) 10-010, Grading Permit (L)-15626 and VAC 13-001.

Of the eight cumulative projects that are within the OMWD service area, seven are not of a nature that would require wastewater service (e.g., cell towers, administrative permits, or land use modifications that do not result in increased development). The one remaining project, TM 5556 (Starwood Santa Fe Valley) would allow for up to eight residential lots. When the wastewater service demand from the Starwood Santa Fe Valley project is considered with the demand from the Project, cumulative impacts would be **less than significant**.

Solid Waste

Cumulative projects that generate solid waste would need to have that waste accommodated in regional landfills. Based upon the location of the cumulative projects, it is expected that their waste would be accommodated at the Sycamore Sanitary Landfill, similar to the Project. Given the capacity available at the landfill, cumulative impacts would be **less than significant.**

Energy

Total Project use will be 6,320.2 million Btus, or 1,849 kWh. Overall annual non-residential energy use in San Diego County in 2015 was 12,863 billion kWh.[12] The Project represents less than one thousandth percent of total County non-residential electricity use. The Project will therefore have a minimal effect on overall energy use in the County. Cumulative energy impacts would be **less than significant**.

#### 3.1.7.5 *Significance of Impacts*

Based upon the analysis presented in Sections 3.1.7.3 and 3.1.7.4, Project- and cumulative-level impacts related to water, wastewater and solid waste would be less than significant. No mitigation is required.

#### 3.1.7.6 *Conclusion*

Development of the Project would result in an incremental increase in the need for water, wastewater, and solid waste services. The Project would also increase the demand for electricity and gas.

Analysis in this chapter concluded that there would be adequate water supply and water infrastructure to serve the Project. Project design features, such as the use of low water fixture and drought tolerant species will reduce water demand. Well water will also be used to offset the use of potable water for irrigation.

[12] Department of Conservation, ecdms.energy.ca.gov/elecbycounty.aspx

The analysis also concluded that the Project could be served by RSFCSD and that there is adequate treatment capacity and infrastructure to serve the Project. Similarly, there is adequate landfill capacity and the Project would comply with federal, state and local regulations pertaining to solid waste.

Analysis in this chapter concluded that the Project would avoid or reduce inefficient, wasteful and unnecessary consumption of energy. In addition, cumulative impacts were also determined to be less than significant.

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## 3.2 Effects Found Not Significant During the Environmental Checklist Review

Six issues were found to have less than significant effects as detailed in the County 15162 Checklist for the Project (refer to Appendix A, Notice of Preparation and Responses to Notice of Preparation). Issues with effects found not to be significant are briefly discussed below, with an explanation regarding the assessed lack of significance.

### 3.2.1 Agriculture and Forest Resources

The previously certified Santa Fe Valley Specific Plan (SFVSP) EIR did not specifically analyze impacts to forestry resources. Impacts to agricultural resources were discussed in Section 4.1, Land Use.

The SFVSP EIR recognized that approximately 995 acres of the Specific Plan area were in agricultural use and that development pursuant to the approved Specific Plan would cause an irreversible environmental change by converting the area from undeveloped with scattered agricultural operations to primarily residential land use. Of this acreage, 575 acres were classified as farmland of local importance. Impacts resulting from development of the Specific Plan were determined not to be significant as impacts to 575 acres represented a loss of 0.54 percent of lands designated as farmland of local importance within the County of San Diego.

A portion of the Project site (4.2 acres) has been used as an organic farm to produce strawberries. Development as proposed in the SFVSP EIR would have removed this agricultural area. The loss of this agricultural production area would have been considered in the certified EIR and analyzed in the Land Use section, as the Project was identified as an area of future development in the certified EIR. No new environmental impacts associated with agriculture resources would occur from implementation of the Project.

Since certification of the SFVSP EIR, the State CEQA Guidelines have been revised to include thresholds related to forest resources. The Project site does not contain forest resources, is not used for forest production, and is not zoned for timberland or timberland production. Thus, no further analysis of forest resources is required.

### 3.2.2 Geology and Soils

The previously certified EIR identified potentially significant and mitigable impacts to Geological Resources. The mitigation measure in the previously certified SFVSP EIR (measure 8A) required that prior to recordation of a Final Map, issuance of grading permits and approval of improvement plans, the subdivider shall submit a geotechnical study prepared by a qualified geologist to the satisfaction of the Director of Public Works. This study shall include, but not be limited to, identification of liquefaction prone areas, landslide prone areas, and any areas of problem soils. Recommended measures shall be incorporated into the grading and/or improvement plans.

Pursuant to the above-listed mitigation measure, a Geotechnical Report would be required for the Project prior to issuance of grading permits and/or approval of improvement plans. Proposed civic structures, including churches, as proposed by the Project, will comply with California Building Code guidelines to address the potential for ground motion due to seismic activity. Therefore, impacts would be less than significant and no additional mitigation is required.

### 3.2.3 Mineral Resources

The previously certified SFVSP EIR did not specifically analyze mineral resources. The Project site and surrounding area are classified as MRZ-3 with mineral resources potentially being present. However, the Project site is small in area and is surrounded by recreational, open space, residential and commercial land uses consistent with previously approved development permits, which are not compatible with future extraction of mineral resources on the Project site. Therefore, implementation of the Project will not result in the loss of availability of a known mineral resource that would be of value since any mineral resource extraction would be unlikely due to incompatible land uses and lot sizes that are too small to make extraction of minerals economically feasible. No new environmental impacts associated with mineral resources would occur from implementation of the Project.

### 3.2.4 Paleontological Resources

The previously certified SFVSP EIR identified potentially significant and mitigable impacts to Paleontological Resources. Mitigation measures in the previously certified SFVSP EIR (measures 9A through 9C) require grading monitoring by a qualified paleontologist for those areas identified as having a moderate or moderate to high potential for paleontological sensitivity. As shown on Figure 4.10-1 of the previously certified SFVSP EIR, the southern portion of the Project site has a moderate to high rating for paleontological sensitivity. The northern portion of the site has an “unknown” rating for paleontological sensitivity. Mitigation identified in the previously certified SFVSP EIR would be applicable to the Project and implementation of the mitigation measures would be required as a condition of Project approval. No new environmental impacts associated with paleontological resources would occur from implementation of the Project.

### 3.2.5 Population and Housing

The previously certified SFVSP EIR found no significant environmental effects related to population/demographics. The Project will result in the removal of a single-family residence and a bunk house, which also serves as a residence. The loss of these homes was considered in the certified SFVSP EIR in Section 4.1, Land Use. According to the EIR, displacement of approximately five residences and up to 14 individuals would be minor and incremental and, since more intense development would be implemented in lieu of the existing limited on-site development, no significant impact was noted. No new environmental impacts associated with population and housing

would occur from implementation of the Project. No revisions to the previous SFVSP EIR resulting from significant new environmental effects or a substantial increase in the severity of previously identified significant effects are required.

### 3.2.6 Recreation

The previously certified SFVSP EIR found no significant impacts to recreation. The original Project proposed both active and passive recreational facilities including a golf course and trails which currently exist in the Specific Plan area. A portion of the San Dieguito River Park Trail (Coast to Crest Trail) goes through the Santa Fe Valley Specific Plan area, very near the current location of the Project. The Project will not result in an increase in use of recreational facilities in the immediate area because the Project will not generate any new residents that require the provision of recreational resources. Further, proposed onsite recreation facilities for church patrons include a tot lot play area and a volleyball court. No new environmental impacts associated with recreation would occur from implementation of the Project.

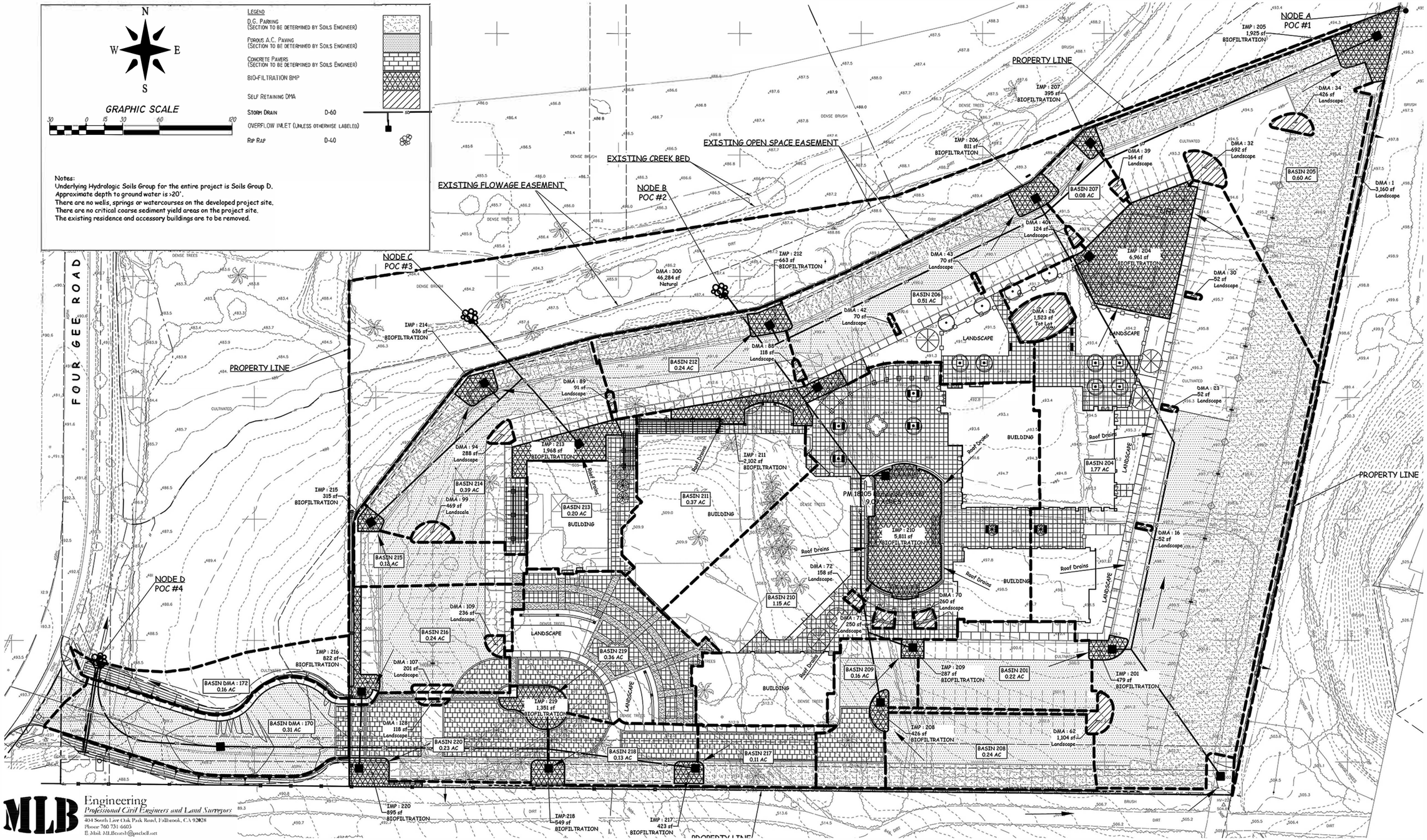
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N
W E
S

GRAPHIC SCALE
30 0 15 30 60 120

LEGEND
D.G. PARKING (SECTION TO BE DETERMINED BY SOILS ENGINEER)
POROUS A.C. PAVING (SECTION TO BE DETERMINED BY SOILS ENGINEER)
CONCRETE PAVERS (SECTION TO BE DETERMINED BY SOILS ENGINEER)
BIO-FILTRATION BMP
SELF RETAINING DMA
STORM DRAIN D-60
OVERFLOW INLET (UNLESS OTHERWISE LABELED)
RIP RAP D-40

Notes:
Underlying Hydrologic Soils Group for the entire project is Soils Group D.
Approximate depth to ground water is >20'.
There are no wells, springs or watercourses on the developed project site.
There are no critical coarse sediment yield areas on the project site.
The existing residence and accessory buildings are to be removed.




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Phone 760 731-6603
E-Mail: MLBenesh@pacbell.net

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# Hydromodification Management Exhibit - Post Development

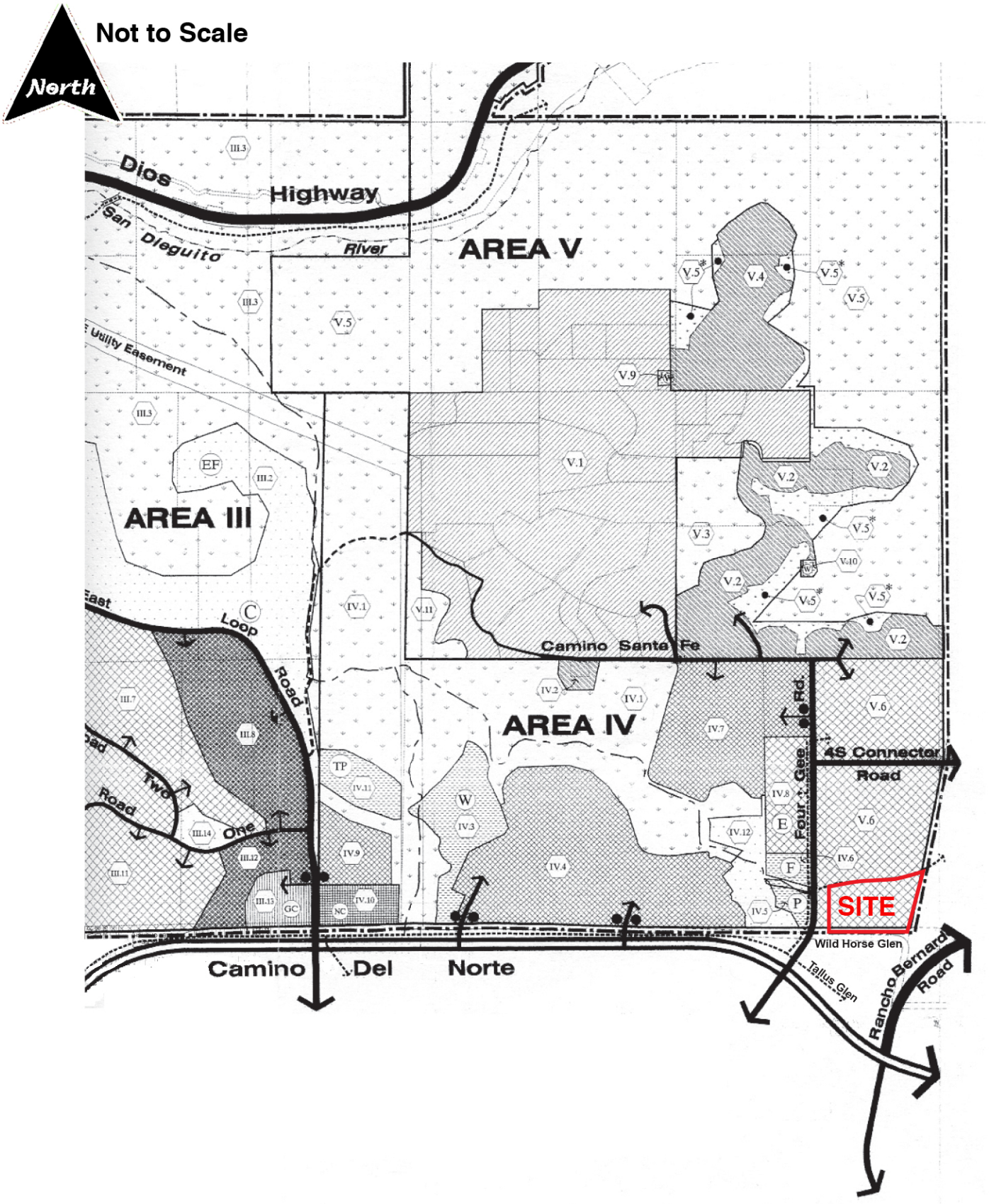
**Figure 3.1-1**

**This Attachment will be included on the Final SWMP.**

**Use this checklist to ensure the required information has been included on the plans:**

**The plans must identify:**

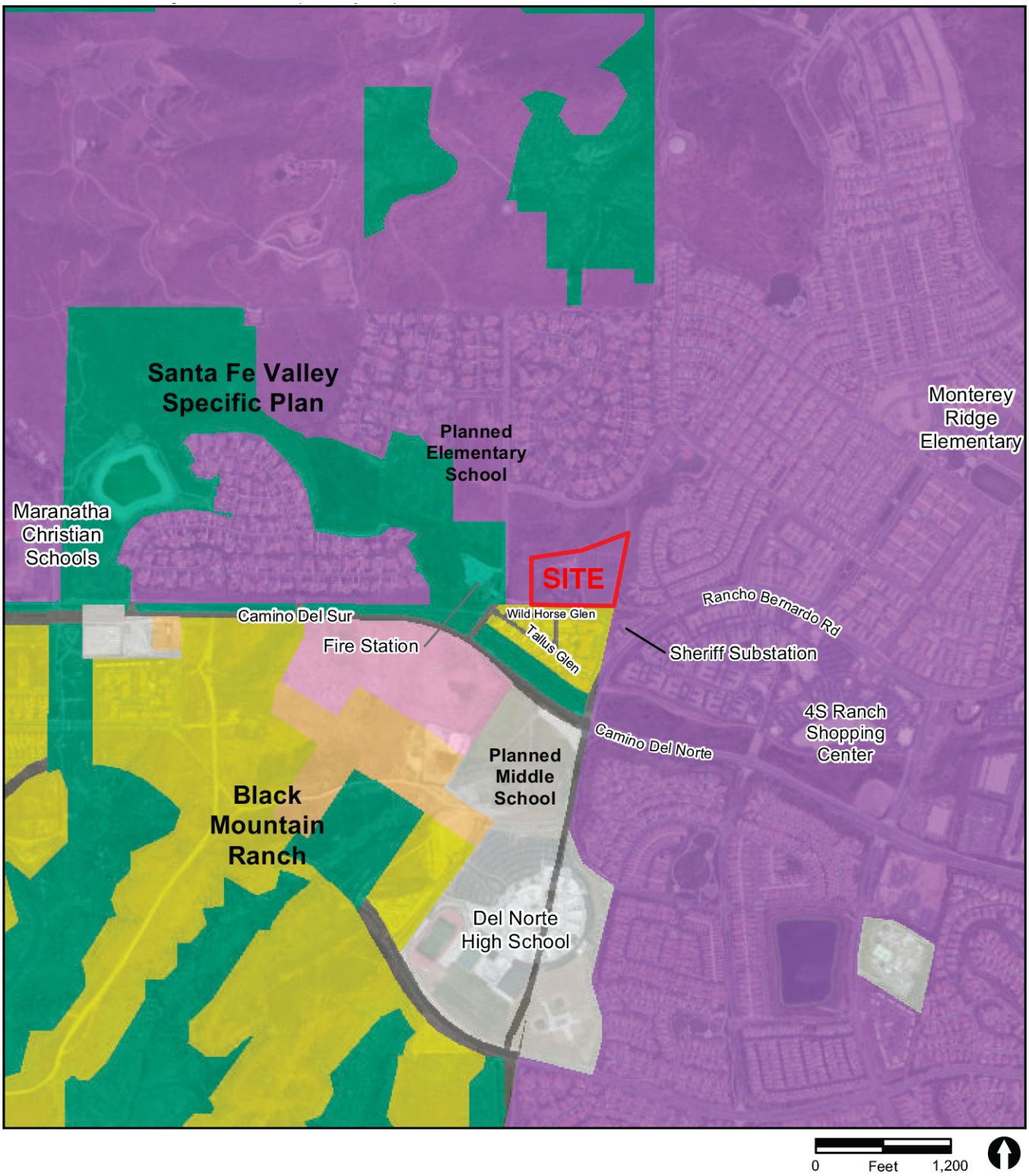
- ☐ Structural BMP(s) with ID numbers matching Step 6 Summary of PDP Structural BMPs
- ☐ The grading and drainage design shown on the plans must be consistent with the delineation of DMAs shown on the DMA exhibit
- ☐ Details and specifications for construction of structural BMP(s)
- ☐ Signage indicating the location and boundary of structural BMP(s) as required by County staff
- ☐ How to access the structural BMP(s) to inspect and perform maintenance
- ☐ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
- ☐ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
- ☐ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
- ☐ Recommended equipment to perform maintenance
- ☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management
- ☐ Include landscaping plan sheets showing vegetation requirements for vegetated structural BMP(s)
- ☐ All BMPs must be fully dimensioned on the plans
- ☐ When proprietary BMPs are used, site-specific cross section with outflow, inflow, and model number must be provided. Photocopies of general brochures are not acceptable.
- ☐ Include all source control and site design measures described in Steps 4 and 5 of the SWQMP. Can be included as a separate exhibit as necessary.




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**Santa Fe Valley Specific Plan**

**Figure 3.1-3**

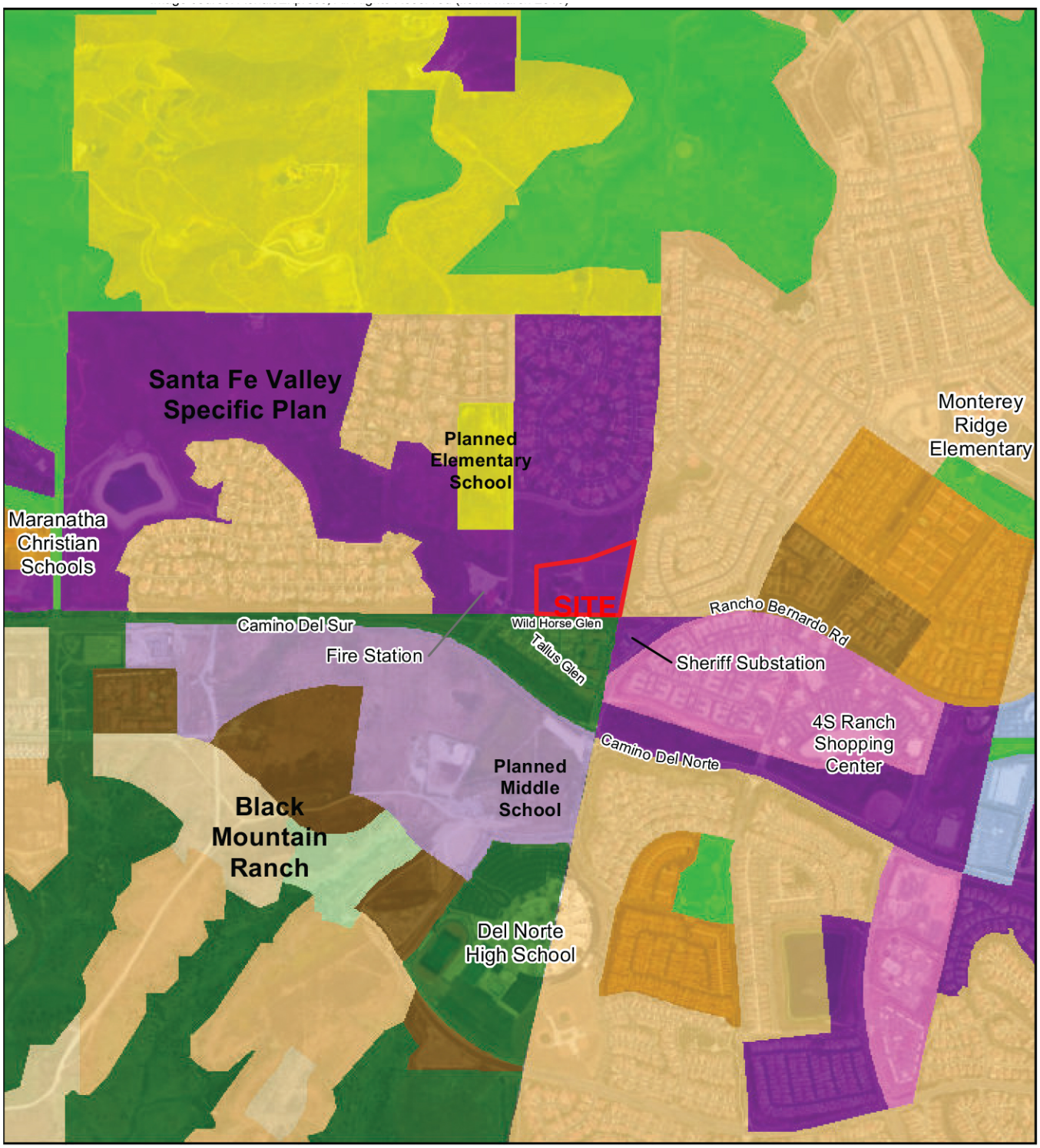



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# Land Uses within One Mile of the Project Site

**Figure 3.1-4**




Project Area

**Zoning**

**RESIDENTIAL**
- Residential-Small Lot
- Residential-Single
- Residential-Variable
- Rural Residential
- Multi-Family Residential
- Residential-Multiple Unit
- Specific Plan

**COMMERCIAL**
- Commercial and Office
- Commercial-Community
- Industrial

**PARKS AND RECREATION**
- Open Space-Residential
- Open Space

**AGRICULTURE**
- Agriculture-Residential

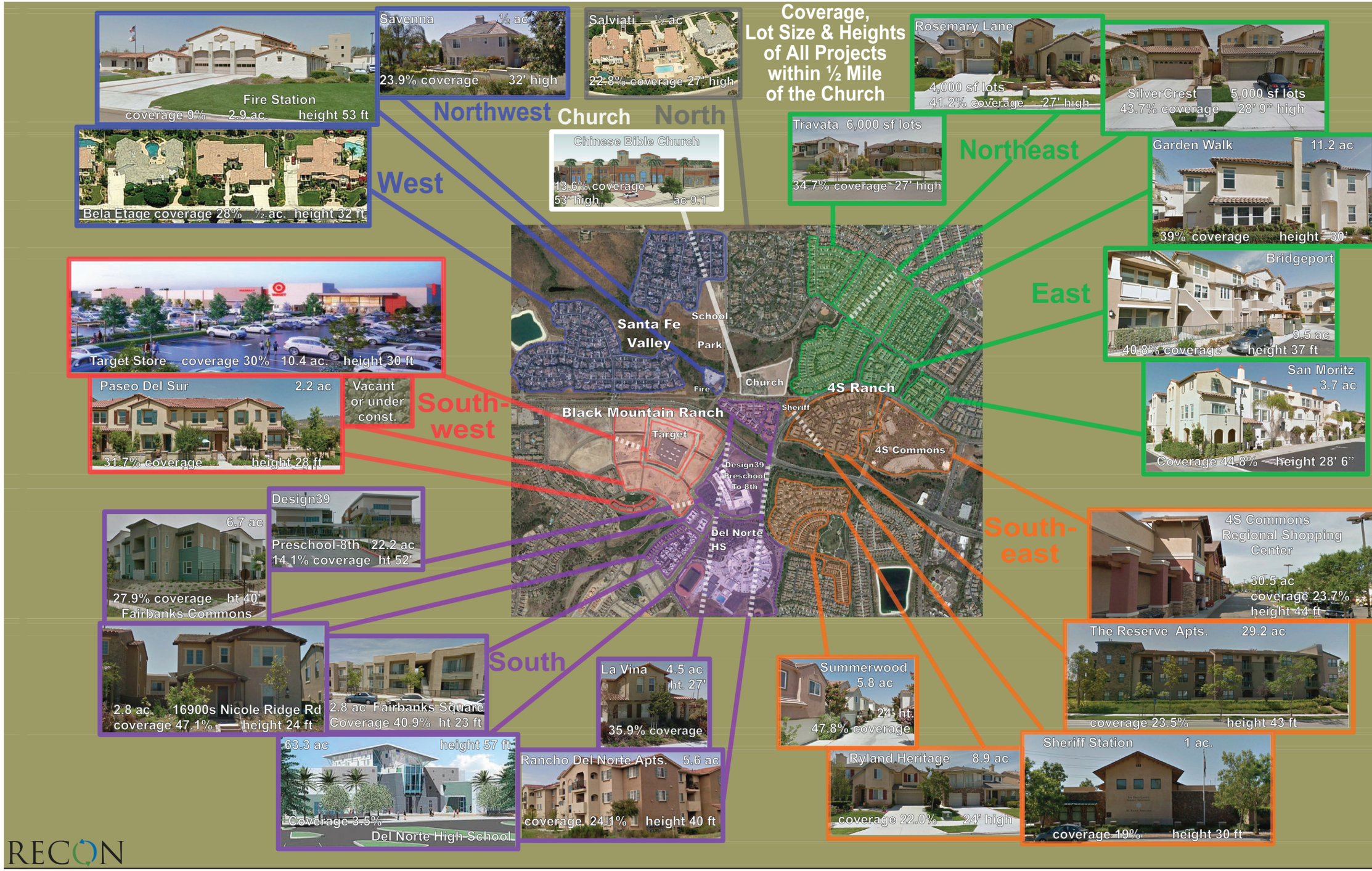
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# Zoning within One Mile of the Project Site

**Figure 3.1-5**

# Coverage, Lot Size & Heights of All Projects within ½ Mile of the Church




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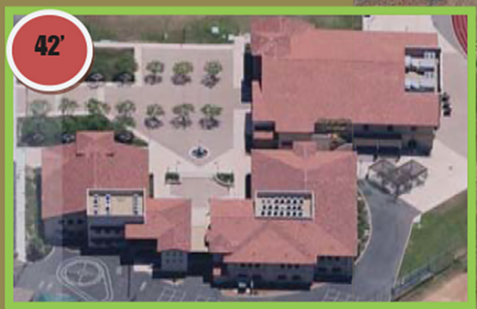
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**Surrounding Land Uses**

**Figure 3.1-6**

Tallest Buildings and Towers
1 Mile from the Church

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Maranatha Christian Schools' MUP approved 42' tower 8/10s mi. W




Fire Station tower 53'
200' W




Chinese Bible Church 53' tower




The Reserve at 4S Ranch 43'high, 31 bldgs., 500' to SE.

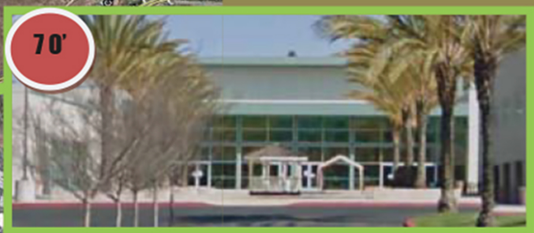
Spec. Plan approved School for 700 students




4S Commons– 44' tower 4/10s mi. E




Rancho Del Norte Apts. 40' bldgs, 300' S




Maranatha Chapel MUP approved 70' tower 1 mi. E

Santa Fe Valley

Black Mtn. Ranch

4S Ranch

BMR Urban Core plan approx. 187,000+ sf

Middle School 156,000sf planned




Del Sur Elementary tower, 48' high, 1 mi. W




Del Sur Elementary entry, 43' high, 1 mi. W




Del Norte High School 4 light towers, 70' each, ½ mi. S




Del Norte High School Admin , 57' high, ½ mi. S

Some heights are estimates. Jan 9, 2013

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**Tallest Buildings and Towers within One Mile of the Project Site**

**Figure 3.1-7**

## 40 Largest Buildings
1 Mile from the Church

## 12 Largest Projects



Maranatha Christian Schools' 140,409 sf MUP (approx. 60,000 sf completed including a 24,000 sf gym and 22,000 sf classroom bldg.) is located 8/10s of a mile to the west.



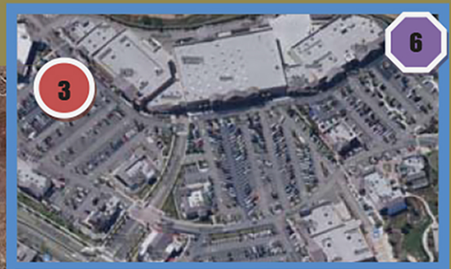
Chinese Bible Church – 89,234 sf MUP (Sanctuary Bldg. 43,500 sf. Fellowship Hall 13,812 sf.)



Bridgeport Condos approx. 437,000 sf in 13 bldgs.. (8 bldgs. approx. 40,000 sf each including garages) 1/4 mile East of church.



Gianni at 4S Ranch approx. 400,000 sf in 22 buildings. (6 bldgs. approx. 32,000 sf each including garages and common spaces.) Less than ½ mile to the East.



4S Commons - 266,000 sf (one bldg. approx. 135,000 sf) 4/10s of a mile to East.



Rancho Del Norte Apts. – approx. 138,000 sf. (4 bldgs. approx. 34,000 sf each) 300' to south.



Maranatha Chapel MUP - 200,000 sf with approx. 78,000 sf built to date. (1 building approx. 48,000 sf) 1 mi. E



Northrop approx. 108,000 sf bldg. 7/10s Mi. E.



Del Sur Elementary, one 81,000 sf bldg. 1 mi. west



16990 Goldentop approx. 63,000 sf bldg. 7/10s Mile E.



16016 Fairbanks Ridge Apts. approx. 280,000 sf 6/10s miles from church. (6 bldgs. approx. 26.000 sf. each. 7 bldgs. approx. 17,000 sf.each. Admin. approx. 3,300 sf)



Del Norte High School 210,093 sf (Admin. Bldg. approx. 66,000 sf and Gym 31,000 sf) just ½ mile south..



The Reserve at 4S Ranch over 800,000 gross sf. (includes 19 bldgs. approx. 40,000 sf each w/ garages, storage, common space, etc.) 300' to SE.



Jerome's approx. 350,000 sf bldg. 8/10s mi. E.



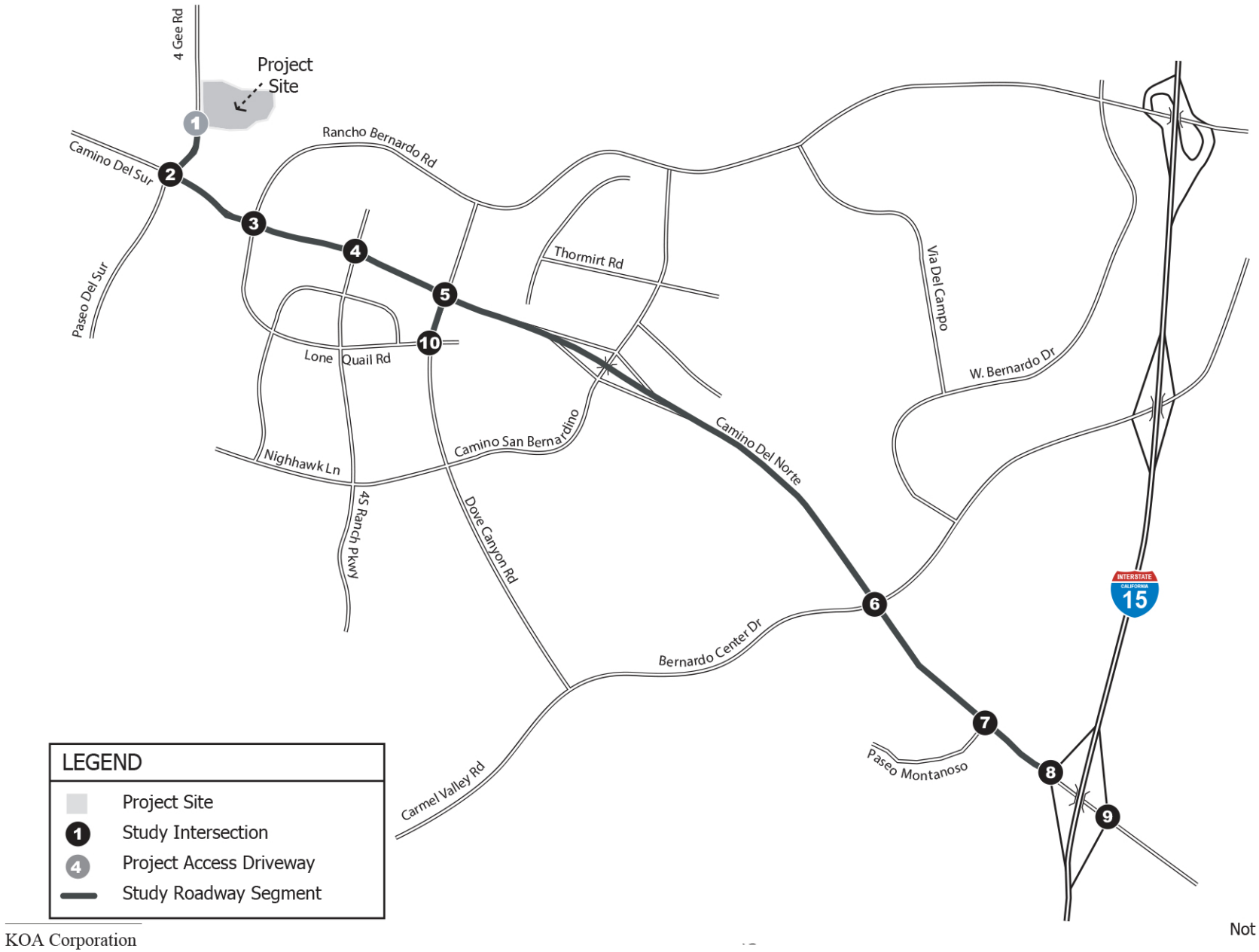
Gen. Atomic approx. 137,000 sf bldg. 1 Mile E.

Jan 4, 2013

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**Largest Buildings and Projects within One Mile of the Project Site**

**Figure 3.1-8**

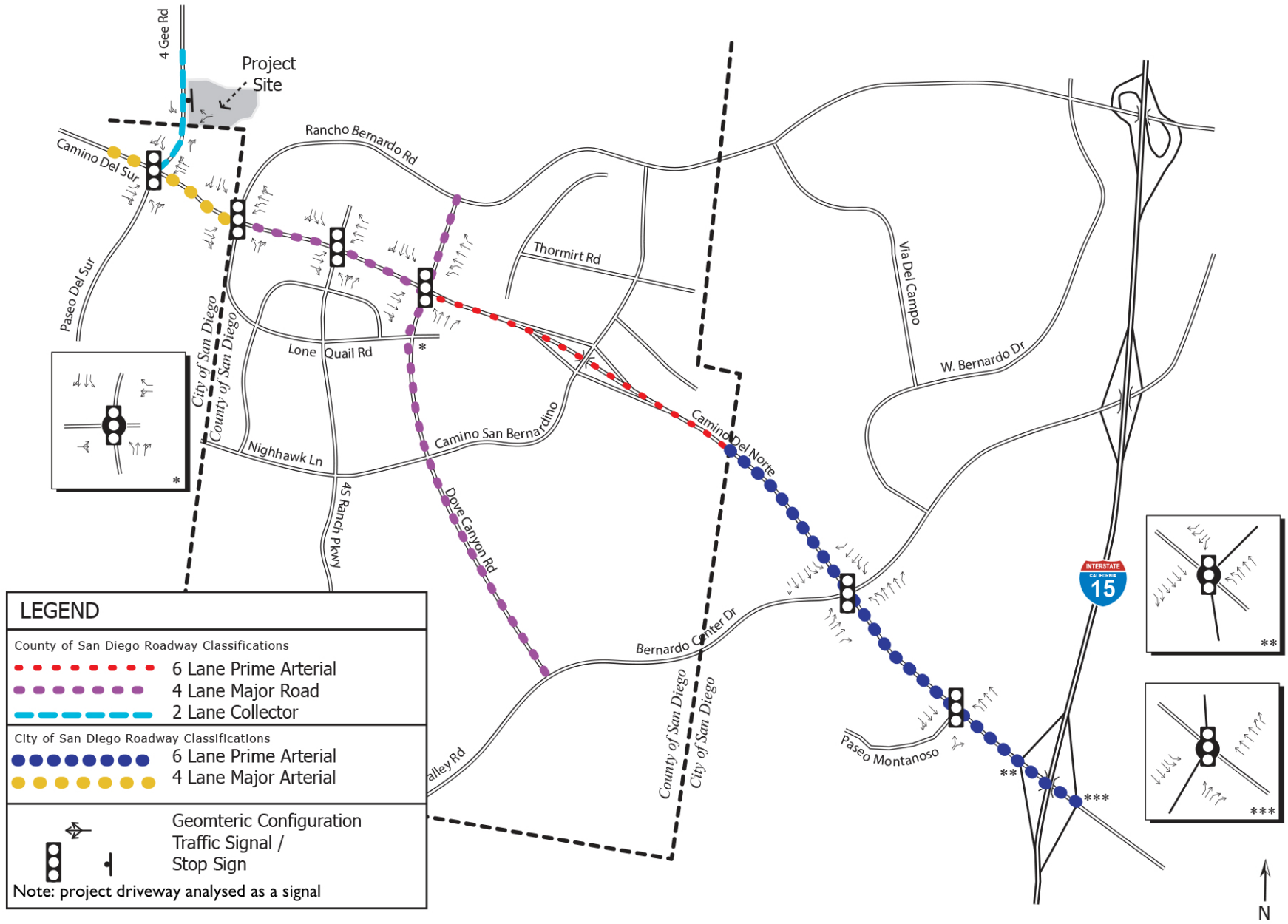



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# Project Traffic Study Area

**Figure 3.1-9**



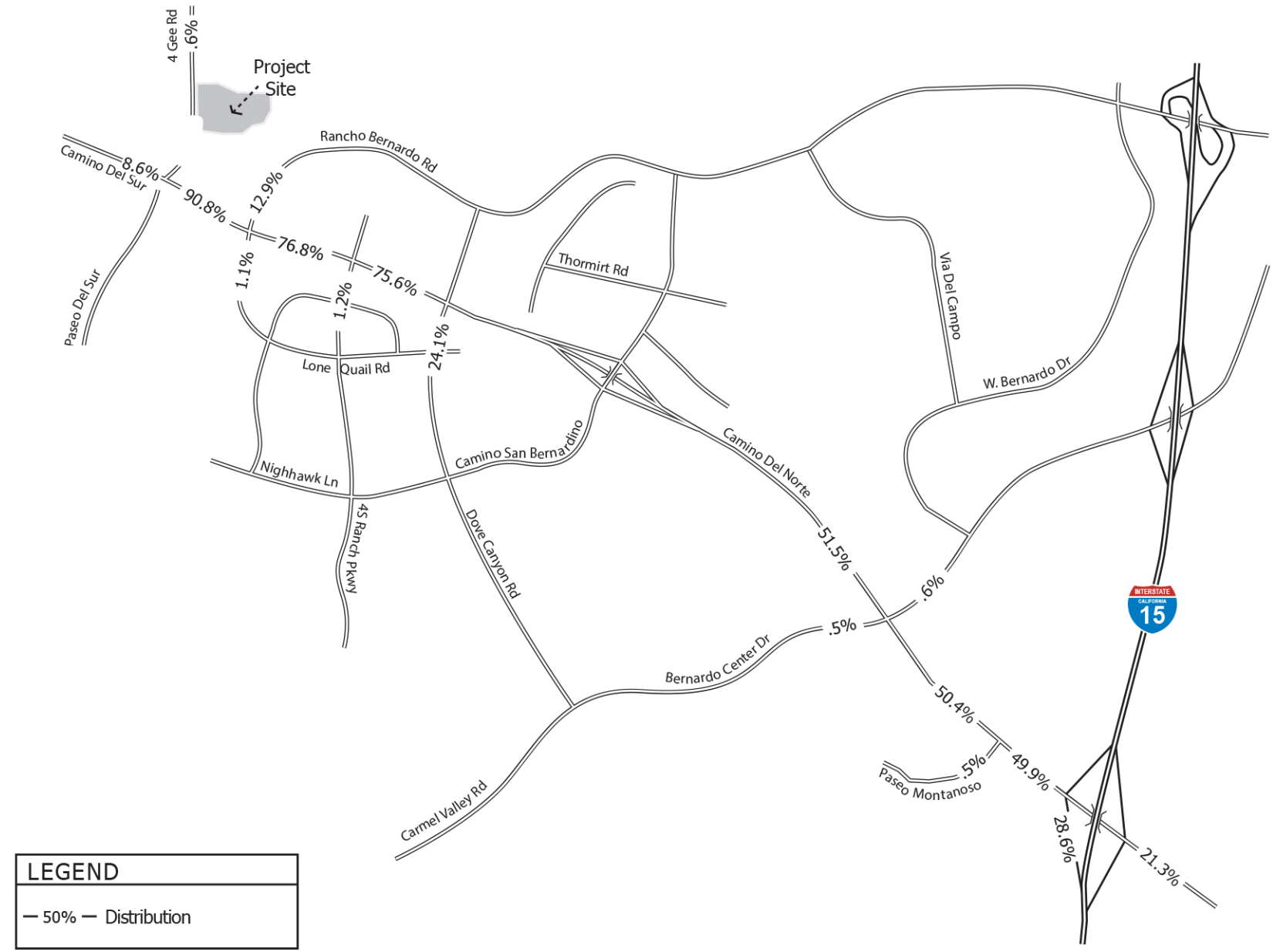

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Not To Scale

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# Existing Circulation Network

**Figure 3.1-10**




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# Project Trip Distribution

**Figure 3.1-11**

| Pollutant | Average Time | California Standards | | National Standards | | |
|---|---|---|---|---|---|---|
| | | *Concentration* | Measurement Method | Primary | Secondary | Measurement Method |
| Ozone ($O_3$) | 1 hour | 0.09 ppm (180 µg/m³) | Ultraviolet Photometry | -- | -- | Ethylene Chemiluminescence |
| | 8 hour | 0.070 ppm (137 µg/m³) | | 0.075 ppm (147 µg/m³) | 0.075 ppm (147 µg/m³) | |
| Carbon Monoxide (CO) | 8 hours | 9.0 ppm (10 mg/m³) | Non-Dispersive Infrared Spectroscopy (NDIR) | 9 ppm (10 mg/m³) | None | Non-Dispersive Infrared Spectroscopy (NDIR) |
| | 1 hour | 20 ppm (23 mg/m³) | | 35 ppm (40 mg/m³) | | |
| Nitrogen Dioxide ($NO_2$) | Annual Average | 0.030 ppm (56 µg/m³) | Gas Phase Chemiluminescence | 0.053 ppm (100 µg/m³) | 0.053 ppm (100 µg/m³) | Gas Phase Chemiluminescence |
| | 1 hour | 0.18 ppm (338 µg/m³) | | 0.100 ppm (188 µg/m³) | -- | |
| Sulfur Dioxide ($SO_2$) | Annual Arithmetic Mean | -- | Ultraviolet Fluorescence | 0.030 ppm for certain areas | -- | Pararosaniline |
| | 24 hours | 0.04 ppm (105 µg/m³) | | -- | -- | |
| | 3 hours | -- | | -- | 0.5 ppm (1300 µg/m³) | |
| | 1 hour | 0.25 ppm (655 µg/m³) | | 0.075 ppm (196 µg/m³) | -- | |
| Respirable Particulate Matter ($PM_{10}$) | 24 hours | 50 µg/m³ | Gravimetric or Beta Attenuation | 150 µg/m³ | 150 µg/m³ | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 20 µg/m³ | | -- | -- | |
| Fine Particulate Matter ($PM_{2.5}$) | Annual Arithmetic Mean | 12 µg/m³ | Gravimetric or Beta Attenuation | 15 µg/m³ | 15 µg/m³ | Inertial Separation and Gravimetric Analysis |
| | 24 hours | -- | | 35 µg/m³ | 35 µg/m³ | |
| Sulfates | 24 hours | 25 µg/m³ | Ion Chromatography | -- | -- | -- |
| Lead (Pb) | 30-day Average | 1.5 µg/m³ | Atomic Absorption | -- | -- | Atomic Absorption |
| | Calendar Quarter | -- | | 1.5 µg/m³ | 1.5 µg/m³ | |
| | 3-month Rolling Average | -- | | 0.15 µg/m³ | 0.15 µg/m³ | |
| Hydrogen Sulfide ($H_2S$) | 1 hour | 0.03 ppm (42 µg/m³) | Ultraviolet Fluorescence | -- | -- | -- |
| Vinyl Chloride | 24 hours | 0.010 ppm (26 µg/m³) | Gas Chromatography | -- | -- | -- |

ppm= parts per million

µg/m³ = micrograms per cubic meter

mg/m³= milligrams per cubic meter

Source: California Air Resources Board 2015, www.arb.ca.gov

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# Ambient Air Quality Standards

**Table 3.1-1**

| Pollutant | Averaging Time | 2012 | 2013 | 2014 | Most Stringent Ambient Air Quality Standard | Monitoring Station |
|---|---|---|---|---|---|---|
| Ozone | 8 hour | 0.073 | 0.074 | 0.079 | 0.070 | Escondido |
| | 1 hour | 0.084 | 0.084 | 0.099 | 0.09 | Escondido |
| $PM_{10}$ | Annual | 18.0 µg/m³ | 23.2 µg/m³ | 21.5 µg/m³ | 20 µg/m³ | Escondido |
| | 24 hour | 33.0 µg/m³ | 82.0 µg/m³ | 44.0 µg/m³ | 50 µg/m³ | Escondido |
| $PM_{2.5}$ | Annual | 10.5 µg/m³ | 10.5 µg/m³ | 9.6 µg/m³ | 12 µg/m³ | Escondido |
| | 24 hour | 70.7 µg/m³ | 56.3 µg/m³ | 77.5 µg/m³ | 35 µg/m³ | Escondido |
| $NO_2$ | Annual | 0.013 | 0.013 | 0.011 | 0.030 | Escondido |
| | 1 hour | 0.062 | 0.061 | 0.063 | 0.100 | Escondido |
| CO | 8 hour | 3.70 | NA | NA | 9.0 | Escondido |
| | 1 hour | 4.4 | NA | NA | 20.0 | Escondido |

Source: www.arb.ca.gov/aqd/aqd.htm (Measurements of all pollutants at Escondido station)

| Pollutant | Total Emissions | | |
|---|---|---|---|
| **Construction Emissions** | | | |
| | Pounds per Day (lbs/day) | | |
| Respirable Particulate Matter ($PM_{10}$) | 100 | | |
| Fine Particulate Matter ($PM_{2.5}$) | 55 | | |
| Oxides of Nitrogen (NOx) | 250 | | |
| Oxides of Sulfur (SOx) | 250 | | |
| Carbon Monoxide (CO) | 550 | | |
| Volatile Organic Compounds (VOCs) | 75 | | |
| **Operational Emissions** | | | |
| | lbs/hour | lbs/day | Tons per Year |
| Respirable Particulate Matter ($PM_{10}$) | --- | 100 | 15 |
| Fine Particulate Matter ($PM_{2.5}$) | --- | 55 | 10 |
| Oxides of Nitrogen (NOx) | 25 | 250 | 40 |
| Oxides of Sulfur (SOx) | 25 | 250 | 40 |
| Carbon Monoxide (CO) | 100 | 550 | 100 |
| Lead and Lead Compounds | --- | 3.2 | 0.6 |
| Volatile Organic Compounds (VOC) | --- | 75 | 13.7 |
| **Toxic Air Contaminant Emissions** | | | |
| Excess Cancer Risk | 1 in 1 million without T-BACT<br>(Toxics Best Available Control Technology)<br>10 in 1 million with T-BACT | | |
| Non-Cancer Hazard | 1.0 | | |

| Construction Phase | Duration | Equipment/Crew | Number |
|---|---|---|---|
| Mass Grading | 55 days | Grader | 1 |
| | | Rubber-Tired Dozers | 1 |
| | | Tractor/Backhoe/Loaders | 1 |
| | | Water Trucks | 1 |
| Fine Grading | 25 days | Grader | 1 |
| | | Rubber-Tired Dozers | 1 |
| | | Tractor/Backhoe/Loaders | 1 |
| | | Water Trucks | 1 |
| Trenching | 10 days | Excavator | 2 |
| | | Other General Industrial Equipment | 1 |
| | | Tractor/Loader/Backhoe | 1 |
| Paving | 10 days | Paving Equipment | 2 |
| | | Pavers | 1 |
| | | Roller | 1 |
| | | Cement and Mortar mixer | 4 |
| | | Tractor/Loader/Backhoe | 1 |
| Building Construction | 140 days | Cranes | 1 |
| | | Forklifts | 2 |
| | | Generators | 1 |
| | | Tractor/Loader/Backhoe | 1 |
| | | Welders | 3 |

| Emission Source | VOCs | NOx | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| ***Demolition*** | | | | | | |
| Fugitive Dust | - | - | - | - | 0.11 | 0.02 |
| Off Road Diesel | 3.94 | 40.64 | 29.80 | 0.04 | 2.31 | 2.15 |
| Hauling | 0.03 | 0.42 | 0.28 | 0.001 | 0.03 | 0.02 |
| Worker Trips | 0.03 | 0.04 | 0.40 | 0.001 | 0.07 | 0.02 |
| **TOTAL** | **4.00** | **41.10** | **30.48** | **0.04** | **2.52** | **2.21** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Mass Grading*** | | | | | | |
| Fugitive Dust | - | - | - | - | 1.84 | 0.98 |
| Off Road Diesel | 5.05 | 55.13 | 32.88 | 0.04 | 2.76 | 2.54 |
| Worker Trips | 0.04 | 0.05 | 0.49 | 0.001 | 0.08 | 0.02 |
| **TOTAL** | **5.09** | **55.18** | **33.37** | **0.04** | **4.68** | **3.54** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Fine Grading*** | | | | | | |
| Fugitive Dust | - | - | - | - | 1.93 | 0.97 |
| Off Road Diesel | 5.05 | 55.13 | 32.88 | 0.04 | 2.76 | 2.54 |
| Worker Trips | 0.04 | 0.05 | 0.49 | 0.001 | 0.08 | 0.02 |
| **TOTAL** | **5.09** | **55.18** | **33.37** | **0.04** | **4.77** | **3.53** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Trenching*** | | | | | | |
| Off Road Diesel | 2.29 | 25.37 | 17.45 | 0.03 | 1.40 | 1.29 |
| Worker Trips | 0.04 | 0.05 | 0.49 | 0.001 | 0.08 | 0.02 |
| **TOTAL** | **3.33** | **25.42** | **17.94** | **0.03** | **1.48** | **1.31** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Paving*** | | | | | | |
| Asphalt Offgassing | 0.00 | - | - | - | - | - |
| Off Road Diesel | 2.37 | 21.41 | 13.76 | 0.02 | 1.60 | 1.48 |
| On Road Diesel | 0.05 | 0.44 | 0.49 | 0.001 | 0.03 | 0.01 |

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# Maximum Daily Estimated Construction Emissions

**Table 3.1-5a**

| Emission Source | VOCs | NOx | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Worker Trips | 0.09 | 0.10 | 1.14 | 0.002 | 0.19 | 0.05 |
| **TOTAL** | **2.51** | **21.95** | **15.39** | **0.02** | **1.82** | **1.54** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Building Construction*** | | | | | | |
| Off Road Diesel | 4.18 | 28.04 | 18.97 | 0.03 | 1.83 | 1.75 |
| Vendor Trips | 0.18 | 1.20 | 1.34 | 0.003 | 0.09 | 0.04 |
| Worker Trips | 0.10 | 0.12 | 1.33 | 0.003 | 0.22 | 0.06 |
| **TOTAL** | **4.46** | **29.36** | **21.64** | **0.04** | **2.14** | **1.85** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Architectural Coatings*** | | | | | | |
| Architectural Coatings Emissions | 20.42 | - | - | - | - | - |
| Off Road Diesel | 0.37 | 2.37 | 1.88 | 0.003 | 0.20 | 0.20 |
| Worker Trips | 0.02 | 0.02 | 0.22 | 0.001 | 0.04 | 0.01 |
| **TOTAL** | **20.81** | **2.39** | **2.10** | **0.00** | **0.24** | **0.21** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| **Maximum Simultaneous Emissions – Phase 1[1]** | **20.81** | **96.27** | **63.84** | **0.08** | **10.22** | **7.28** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |

[1]Maximum emissions occur during demolition and mass grading, except for VOCs, which occur during simultaneous architectural coatings application and building construction.

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**Maximum Daily Estimated Construction Emissions**

**Table 3.1-5a**

| Emission Source | VOCs | NOx | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| ***Fine Grading*** | | | | | | |
| Fugitive Dust | - | - | - | - | 1.97 | 0.97 |
| Off Road Diesel | 4.57 | 48.56 | 30.70 | 0.04 | 2.42 | 2.22 |
| Worker Trips | 0.03 | 0.04 | 0.44 | 0.001 | 0.08 | 0.02 |
| **TOTAL** | **4.60** | **48.60** | **31.14** | **0.04** | **4.47** | **3.21** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Trenching*** | | | | | | |
| Off Road Diesel | 2.01 | 21.29 | 17.28 | 0.03 | 1.17 | 1.08 |
| Worker Trips | 0.03 | 0.04 | 0.44 | 0.001 | 0.08 | 0.02 |
| **TOTAL** | **2.04** | **21.33** | **17.72** | **0.03** | **1.25** | **1.10** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Paving*** | | | | | | |
| Asphalt Offgassing | 0.00 | - | - | - | - | - |
| Off Road Diesel | 2.10 | 18.93 | 13.53 | 0.02 | 1.38 | 1.27 |
| On Road Diesel | 0.04 | 0.34 | 0.42 | 0.001 | 0.03 | 0.01 |
| Worker Trips | 0.07 | 0.09 | 0.93 | 0.002 | 0.19 | 0.05 |
| **TOTAL** | **2.21** | **19.36** | **14.88** | **0.02** | **1.60** | **1.33** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Building Construction*** | | | | | | |
| Off Road Diesel | 3.48 | 24.78 | 18.23 | 0.03 | 1.53 | 1.46 |
| Vendor Trips | 0.11 | 0.93 | 1.15 | 0.003 | 0.09 | 0.03 |
| Worker Trips | 0.09 | 0.10 | 1.09 | 0.003 | 0.22 | 0.06 |
| **TOTAL** | **3.68** | **25.81** | **20.47** | **0.04** | **1.84** | **1.55** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |

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**Maximum Daily Estimated Construction Emissions Phase 2 Lbs-Day**

**Table 3.1-5b**

| Emission Source | VOCs | NOx | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| ***Fine Grading*** | | | | | | |
| Fugitive Dust | - | - | - | - | 1.97 | 0.97 |
| Off Road Diesel | 4.57 | 48.56 | 30.70 | 0.04 | 2.42 | 2.22 |
| Worker Trips | 0.03 | 0.04 | 0.44 | 0.001 | 0.08 | 0.02 |
| **TOTAL** | **4.60** | **48.60** | **31.14** | **0.04** | **4.47** | **3.21** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Trenching*** | | | | | | |
| Off Road Diesel | 2.01 | 21.29 | 17.28 | 0.03 | 1.17 | 1.08 |
| Worker Trips | 0.03 | 0.04 | 0.44 | 0.001 | 0.08 | 0.02 |
| **TOTAL** | **2.04** | **21.33** | **17.72** | **0.03** | **1.25** | **1.10** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Paving*** | | | | | | |
| Asphalt Offgassing | 0.00 | - | - | - | - | - |
| Off Road Diesel | 2.10 | 18.93 | 13.53 | 0.02 | 1.38 | 1.27 |
| On Road Diesel | 0.04 | 0.34 | 0.42 | 0.001 | 0.03 | 0.01 |
| Worker Trips | 0.07 | 0.09 | 0.93 | 0.002 | 0.19 | 0.05 |
| **TOTAL** | **2.21** | **19.36** | **14.88** | **0.02** | **1.60** | **1.33** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| ***Building Construction*** | | | | | | |
| Off Road Diesel | 3.48 | 24.78 | 18.23 | 0.03 | 1.53 | 1.46 |

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**Maximum Daily Estimated Construction Emissions, Phase 2 (lbs/day)**

**Table 3.1-5b**

| | VOCs | NOx | CO | Sox | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Summer, Lbs/day | | | | | | |
| Area Sources | 2.39 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| Energy Use | 0.03 | 0.26 | 0.21 | 0.002 | 0.02 | 0.02 |
| Vehicular Emissions | 8.14 | 14.67 | 70.49 | 0.17 | 11.18 | 3.11 |
| **TOTAL** | **10.53** | **14.92** | **70.71** | **0.17** | **11.20** | **3.13** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| Winter, Lbs/day | | | | | | |
| Area Sources | 2.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| Energy Use | 0.03 | 0.26 | 0.21 | 0.002 | 0.02 | 0.02 |
| Vehicular Emissions | 8.73 | 15.56 | 76.95 | 0.16 | 11.18 | 3.12 |
| **TOTAL** | **10.75** | **15.81** | **77.17** | **0.16** | **11.20** | **3.14** |
| Screening-Level Thresholds | 75 | 250 | 550 | 250 | 100 | 55 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |
| Tons/year | | | | | | |
| Area Sources | 0.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Use | 0.005 | 0.05 | 0.04 | 0.00 | 0.004 | 0.004 |
| Vehicular Emissions | 0.77 | 1.47 | 7.03 | 0.02 | 1.04 | 0.29 |
| **TOTAL** | **1.22** | **1.47** | **7.07** | **0.02** | **1.04** | **0.29** |
| Screening-Level Thresholds | 13.7 | 40 | 100 | 40 | 15 | 10 |
| *Above Screening-Level Thresholds?* | *No* | *No* | *No* | *No* | *No* | *No* |

| Gas | Atmospheric Lifetime (years) | 100-year GWP | 20-year GWP |
|---|---|---|---|
| Carbon dioxide ($CO_2$) | 50–200 | 1 | 1 |
| Methane ($CH_4$)* | 12.4 | 28 | 84 |
| Nitrous oxide ($N_2O$) | 121 | 265 | 264 |
| HFC-23 | 222 | 12,400 | 10,800 |
| HFC-32 | 5.2 | 677 | 2,430 |
| HFC-125 | 28.2 | 3,170 | 6,090 |
| HFC-134a | 13.4 | 1,300 | 3,710 |
| HFC-143a | 47.1 | 4,800 | 6,940 |
| HFC-152a | 1.5 | 138 | 506 |
| HFC-227ea | 38.9 | 3,350 | 5,360 |
| HFC-236fa | 242 | 8,060 | 6,940 |
| HFC-43-10mee | 16.1 | 1,650 | 4,310 |
| $CF_4$ | 50,000 | 6,630 | 4,880 |
| $C_2F_6$ | 10,000 | 11,100 | 8,210 |
| $C_3F_8$ | 2,600 | 8,900 | 6,640 |
| $C_4F_{10}$ | 2,600 | 9,200 | 6,870 |
| c-$C_4F_8$ | 3,200 | 9,540 | 7,110 |
| $C_5F_{12}$ | 4,100 | 8,550 | 6,350 |
| $C_6F_{14}$ | 3,100 | 7,910 | 5,890 |
| $SF_6$ | 3,200 | 23,500 | 17,500 |

SOURCE: Intergovernmental Panel on Climate Change (IPCC) 2014.

GWP = Global warming potential

| Source | Methodology |
|---|---|
| Construction | Construction emissions amortized over 30 years and added to operational emissions. |
| Vehicles | Vehicle emissions account for Pavley I, LEV III, and LCFS. Additionally, vehicle emissions account for reduced trip lengths (-17.8 %) resulting from the more central location of the project site as compared to the existing church location. |
| Energy | Energy emissions include, increased energy efficiency (25.7 percent over 2008 Title 24, Part 6 standards for electricity and 21.0 percent for natural gas.) Electricity-related emissions to account for the difference between the SDG&E renewable mix in 2009 and the final requirement of RPS in 2020 of 33 percent. |
| Area | The Proposed Project would not include fireplace or woodstove and all landscaping equipment would be electric. |
| Water | Water use emissions were based on standard water consumption rates and energy intensity factors and account for a 20 percent reduction in indoor water use from CALGreen and a 25 percent reduction in outdoor water use from xeriscaping. |
| Solid Waste | Emissions were calculated using standard generation rates and emission factors, which are based on CalRecycle waste generation rates. Emissions take into account a 25 percent reduction in standard waste generation rates to account for the remaining reduction requirements of AB 341. |
| SOURCE: SDG&E 2011.<br><br>lbs = pounds; MWh = megawatt hour | |

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# GHG Emissions Calculations Methodology Summary

**Table 3.1-8**

| Construction Phase | Total Emissions | Amortization Period | Amortized Emissions |
|---|---|---|---|
| Phase 1 | 366 | 30 years | 12 |
| Phase 2 | 261 | | 9 |
| Total | 626 | | 21 |

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# Summary of Construction Emissions ($MT CO_2E$)

**Table 3.1-9**

| Emission Source | Phase 1 | Phase 2(1) | Project Buildout |
|---|---|---|---|
| Vehicles | 300 | 150 | 450 |
| Energy Use | 175 | 45 | 220 |
| Area Sources | >1 | >1 | >1 |
| Water Use | 127 | 46 | 174 |
| Solid Waste Disposal | 16 | 3 | 19 |
| **Operations** | **618** | **244** | **862** |
| Construction | 12 | 9 | 21 |
| **Total** | **630** | **253** | **883** |

Note: (1) Operations emissions associated with Phase 2 of the Proposed Project were calculated by subtracting Phase 1 emissions from project buildout emissions.

| Policy | Policy Description | Project Consistency |
|---|---|---|
| COS-14.1 | Land Use Development Form.<br>Require that development be located and designed to reduce vehicular trips (and associated air pollution) by utilizing compact regional and community-level development patterns while maintaining community character. | The Proposed Project has been located more centrally for existing and future congregation members to reduce commute times compared to current congregation experiences. |
| COS-14.2 | Villages and Rural Villages.<br>Incorporate a mixture of uses within Villages and Rural Villages that encourage people to walk, bicycle, or use public transit to reduce air pollution and GHG emissions. | The Proposed Project would not conflict with implementation of the policy. |
| COS-14.3 | Sustainable Development.<br>Require design of residential subdivisions and nonresidential development through "green" and sustainable land development practices to conserve energy, water, open space, and natural resources. | The Proposed Project would not conflict with implementation of the policy. |
| COS-14.4 | Sustainable Technology and Projects.<br>Require technologies and projects that contribute to the conservation of resources in a sustainable manner, that are compatible with community character, and that increase the self-sufficiency of individual communities, residents, and businesses. | The Proposed Project would not conflict with implementation of the policy. |

| Policy | Policy Description | Project Consistency |
|---|---|---|
| COS-14.5 | Building Siting and Orientation in Subdivisions.<br>Require that buildings be located and oriented in new subdivisions and multi-structure non-residential projects to maximize passive solar heating during cool seasons, minimize heat gains during hot periods, enhance natural ventilation, and promote the effective use of daylight. | The Proposed Project would incorporate cool roof technologies on all buildings which utilize light-colored, reflective roofing materials to significantly reduce heat absorption. |
| COS-14.6 | Solar Access for Infill Development.<br>Require that property setbacks and building massing of new construction located within existing developed areas maintain an envelope that maximizes solar access to the extent feasible. | The Proposed Project would incorporate solar PV panels to offset a portion of its energy use. |
| COS-14.7 | Alternative Energy Sources for Development Projects.<br>Encourage development projects that use energy recovery, photovoltaic, and wind energy. | |
| COS-14.8 | Minimize Air Pollution.<br>Minimize land use conflicts that expose people to significant amounts of air pollutants. | The Proposed Project would not conflict with implementation of the policy. |
| COS-14.9 | Significant Producers of Air Pollutants.<br>Require projects that generate potentially significant levels of air pollutants and/or GHGs such as quarries, landfill operations, or large land development projects to incorporate renewable energy, and the best available control technologies and practices into the project design. | The Proposed Project would not conflict with implementation of the policy. |
| COS-14.10 | Low-Emission Construction Vehicles and Equipment.<br>Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions. | Project construction equipment is regulated by the U.S. EPA non-road diesel engine standards. Although primarily intended to reduce criteria pollutant emissions, use of more fuel-efficient and cleaner-burning equipment may result in modest GHG emissions reductions. |
| COS-14.11 | Native Vegetation.<br>Require development to minimize the vegetation management of native vegetation while ensuring sufficient clearing is provided for fire control. | The Proposed Project is infill development and would include limited vegetation management. |

| Policy | Policy Description | Project Consistency |
|---|---|---|
| COS-14.12 | Heat Island Effect.<br>Require that development be located and designed to minimize the "heat island" effect as appropriate to the location and density of development, incorporating such elements as cool roofs, cool pavements, and strategically placed shade trees. | The Proposed Project would incorporate cool roof technologies on all buildings, lighter colored pavers in large areas of the parking lot, lighter decomposed granite in large areas of the parking lot, and large canopy trees in the parking lot, the entry street, open space, and around buildings. |
| COS-14.13 | Incentives for Sustainable and Low GHG Development.<br>Provide incentives such as expedited project review and entitlement processing for developers that maximize use of sustainable and low GHG land development practices in exceedance of State and local standards. | The Proposed Project would not conflict with implementation of the policy. |
| COS-15.1 | Design and Construction of New Buildings.<br>Require that new buildings be designed and constructed in accordance with "green building" programs that incorporate techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of GHGs and toxic air contaminants. | The Proposed Project would be designed and with the goal of obtaining LEED certification. |
| COS-15.2 | Upgrade of Existing Buildings.<br>Promote and, as appropriate, develop standards for the retrofit of existing buildings to incorporate design elements, heating and cooling, water, energy, and other elements that improve their environmental sustainability and reduce GHG. | The Proposed Project would not conflict with implementation of the policy. |
| COS-15.3 | Green Building Programs.<br>Require all new County facilities and the renovation and expansion of existing County buildings to meet identified "green building" programs that demonstrate energy efficiency, energy conservation, and renewable technologies. | The Proposed Project would not conflict with implementation of the policy. |
| COS-15.4 | Title 24 Energy Standards.<br>Require development to minimize energy impacts from new buildings in accordance with or exceeding Title 24 energy standards. | The Proposed Project would comply with Title 24 Energy Standards. |
| COS-15.5 | Energy Efficiency Audits.<br>Encourage energy conservation and efficiency in existing development through energy efficiency audits and adoption of energy saving measures resulting from the audits. | The Proposed Project would not conflict with implementation of the policy. |

| Policy | Policy Description | Project Consistency |
|---|---|---|
| COS-15.6 | Design and Construction Methods. Require development design and construction methods to minimize impacts to air quality. | The Proposed Project would not conflict with implementation of the policy. |
| COS-16.1 | Alternative Transportation Modes. Work with SANDAG and local transportation agencies to expand opportunities for transit use. Support the development of alternative transportation modes, as provided by Mobility Element policies. | The Proposed Project would not conflict with implementation of the policy. |
| COS-16.2 | Single-Occupancy Vehicles. Support transportation management programs that reduce the use of single-occupancy vehicles. | The Proposed Project will implement a voluntary commute trip reduction program with parishioners to discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. |
| COS-16.3 | Low-Emissions Vehicles and Equipment. Require County operations and encourage private development to provide incentives (such as priority parking) for the use of low- and zero-emission vehicles and equipment to improve air quality and reduce GHG emissions. | The Proposed Project would not conflict with implementation of the policy. |
| COS-16.4 | Alternative Fuel Sources. Explore the potential of developing alternative fuel stations at maintenance yards and other County facilities for the municipal fleet and general public. | The Proposed Project would not conflict with implementation of the policy. |
| COS-16.5 | Transit-Center Development. Encourage compact development patterns along major transit routes. | The Proposed Project would not conflict with implementation of the policy. |
| COS-17.1 | Reduction of Solid Waste Materials. Reduce greenhouse gas emissions and future landfill capacity needs through reduction, reuse, or recycling of all types of solid waste that is generated. Divert solid waste from landfills in compliance with State law. | The Proposed Project would comply with Construction and Demolition Debris Ordinance, which requires that 90 percent of inerts and 70 percent of all other construction materials from a project be recycled. |
| COS-17.2 | Construction and Demolition Waste. Require recycling, reduction and reuse of construction and demolition debris. | |
| COS-17.3 | Landfill Waste Management. Require landfills to use waste management and disposal techniques and practices to meet all applicable environmental standards. | The Proposed Project would not conflict with implementation of the policy. |

| Policy | Policy Description | Project Consistency |
|---|---|---|
| COS-17.4 | Composting.<br>Encourage composting throughout the County and minimize the amount of organic materials disposed at landfills. | The Proposed Project would not conflict with implementation of the policy. |
| COS-17.5 | Methane Recapture.<br>Promote efficient methods for methane recapture in landfills and the use of composting facilities and anaerobic digesters and other sustainable strategies to reduce the release of GHG emissions from waste disposal or management sites and to generate additional energy such as electricity. | The Proposed Project would not conflict with implementation of the policy. |
| COS-17.6 | Recycling Containers.<br>Require that all new land development projects include space for recycling containers. | The Proposed Project would incorporate space for recycling containers. |
| COS-17.7 | Material Recovery Program.<br>Improve the County's rate of recycling by expanding solid waste recycling programs for residential and non-residential uses. | The Proposed Project would not conflict with implementation of the policy. |
| COS-17.8 | Education.<br>Continue programs to educate industry and the public regarding the need and methods for waste reduction, recycling, and reuse. | The Proposed Project would not conflict with implementation of the policy. |
| COS-18.1 | Alternate Energy Systems Design.<br>Work with San Diego Gas and Electric and non-utility developers to facilitate the development of alternative energy systems that are located and designed to maintain the character of their setting. | The Proposed Project would not conflict with implementation of the policy. |
| COS-18.2 | Energy Generation from Waste.<br>Encourage use of methane sequestration and other sustainable strategies to produce energy and/or reduce GHG emissions from waste disposal or management sites. | The Proposed Project would not conflict with implementation of the policy. |
| COS-18.3 | Alternate Energy Systems Impacts.<br>Require alternative energy system operators to properly design and maintain these systems to minimize adverse impacts to the environment. | The Proposed Project would not conflict with implementation of the policy. |
| COS-19.1 | Sustainable Development Practices.<br>Require land development, building design, landscaping, and operational practices that minimize water consumption. | The Proposed Project includes several outdoor water reduction measures including xeriscape planting and installing weather- or soil moisture-based automatic irrigation system controllers and provision of outdoor water from an existing on-site well. All landscaping equipment would be electric. |
| COS-19.2 | Recycled Water in New Development.<br>Require the use of recycled water in development wherever feasible. Restrict the use of recycled water when it increases salt loading in reservoirs. | The Proposed Project would not conflict with implementation of the policy. |

| Pollutant | Anticipated from Project Site | Receiving Water Pollutants of Concern |
|---|---|---|
| Sediment | X | X |
| Nutrients | X | X |
| Heavy Metals | X | |
| Trash & Debris | X | |
| Oxygen Demanding Substances | X | |
| Oil & Grease | X | |
| Bacteria & Viruses | | X |
| Pesticides | X | X |

X= Anticipated (expected)

| Node | Pre - Construction Area (Acre) | Pre - Construction Runoff, Q100 (CFS) | Pre - Construction Runoff Velocity[2], V100 (FPS) | Post - Construction Area (Acre) | Post - Construction Runoff[1], Q100 (CFS) | Post - Construction Runoff Velocity, V100 (FPS) | Net Change |
|---|---|---|---|---|---|---|---|
| A | 4.3 | 7.6 | 2+/- | 4.3 | 7.6 | 2+/- | 0% |
| B | 6.6 | 12.3 | 2+/- | 6.2 | 13.1 | 4.2[3] | +6.5% |
| C | 0.7 | 1.5 | 2+/- | 0.8 | 1.6 | 2.0[4] | +6.7% |
| D | 4.4 | 9.4 | 2+/- | 4.6 | 10.6 | 2.0 | +12.8% |

[1] Does not take into account effect of bio-retention areas on peak flow.

[2] Pre-Construction runoff from site is through natural overland drainage channels. Two feet per second is assumed based on the calculations for the channel along Four Gee Road.

[3] Based on a 24-inch storm drain flowing full.

[4] Based on a 12-inch storm flowing full.

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**Comparison of Pre-Construction and Post-Construction Runoff and Velocity** **Table 3.1-13**

| Site Design Requirement | Project Approach |
|---|---|
| Maintain natural drainage pathways and hydrologic features | Existing flowage and open space easement will protect existing creek/wash. |
| Conserve natural areas, soil, and vegetation | Areas within the open space and flowage easement will remain untouched. The remainder of the site has been extensively used for agriculture. |
| Minimize impervious area | Permeable pavement, pavers, decomposed granite, and gravel will be used in the parking areas to reduce impervious areas. |
| Minimize soil compaction | Areas within the open space and flowage easement will remain untouched. |
| Impervious area dispersion | Roof drains and runoff from other impervious surfaces will be directed to bio-filtration planters. |
| Runoff collection | Permeable pavement is being utilized. |
| Landscaping with native or drought tolerant species | |
| Harvesting and using precipitation | Bio-filtration with cisterns is being implemented on the project site. |

| Source Control Requirement | Applicable to Proposed Project |
|---|---|
| Food service | Not applicable. The project does not include food service. |
| Refuse areas | Yes. |
| Industrial processes | Not applicable. The project does not include industrial processes. |
| Outdoor storage of equipment or materials | Not applicable. The project does not include outdoor storage. |
| Vehicle and equipment cleaning | Not applicable. The project does not include vehicle cleaning. |
| Vehicle/equipment repair and maintenance | Not applicable. The project does not include vehicle repair. |
| Fuel dispensing areas | Not applicable. The project does not include fuel dispensing. |
| Loading docks | Not applicable. The project does not include loading docks. |
| Fire sprinkler test water | Yes. |
| Miscellaneous drain or wash water | Not applicable. The project does not include miscellaneous wash water. |
| Plazas, sidewalks, and parking lots | Yes. |

| Source Control Requirement | Applicable to Proposed Project |
|---|---|
| Prevention of illicit discharges into the MS4 | Yes. |
| Storm drain stenciling or signage | Yes. |
| Protect outdoor materials storage areas from rainfall, run-on, runoff, and wind dispersal | Not applicable. There are no planned outdoor materials storage areas. |
| Protect materials stored in outdoor work areas from rainfall, run-on, runoff, and wind dispersal | Not applicable. There are no planned outdoor materials storage areas. |
| Protect trash storage areas from rainfall, run-on, runoff, and wind dispersal | Yes. |
| On-site storm drain inlets | Yes. |
| Interior floor drains and elevator shaft sump pumps | Yes. |
| Interior parking garages | Not applicable. The project does not include interior parking garages. |
| Need for future indoor and structural pest control | Yes. |
| Landscape/outdoor pesticide use | Yes. |
| Pools, spas, ponds, fountains, and other water features | Not applicable. The project does not include water features. |

| | Property Name | Acreage (acres unless otherwise noted) | Coverage (percent) | Maximum Height (feet) |
|---|---|---|---|---|
| **Project Site** | **Chinese Bible Church** | **9.1** | **13.6** | **53** |
| South | La Viña | 4.5 | 35.9 | 27 |
| | Rancho del Norte Apartments | 5.6 | 24.1 | 40 |
| | Del Norte High School | 63.3 | 3.5 | 57 |
| | Fairbanks Square | 2.8 | 40.9 | 23 |
| | Northridge Road | 2.8 | 47.1 | 24 |
| | Fairbanks Commons | 6.7 | 27.9 | 40 |
| | Design39 | 22.2 | 14.1 | 52 |
| Southwest | Pasco del Sur | 2.2 | 31.7 | 28 |
| | Target Store | 10.4 | 30 | 30 |
| Southeast | Summerwood | 5.8 | 47.8 | 24 |
| | Ryland Heritage | 8.9 | 22 | 24 |
| | 4S Commons | 30.5 | 23.7 | 44 |
| | The Reserve Apartments | 29.2 | 23.5 | 43 |
| | Sheriff Station | 1.0 | 19.0 | 30 |
| West | Bela Etage | 0.5 | 28.0 | 32 |
| | Fire Station | 2.9 | 9.0 | 53 |
| Northwest | Savenna | 0.5 | 23.9 | 32 |
| North | Salviati | 0.5 | 22.8 | 27 |
| East | Bridgeport | 9.5 | 40.8 | 37 |
| | San Moritz | 3.7 | 44.8 | 29 |
| Northeast | Travata | 6,000 square foot | 34.7 | 27 |
| | Rosemary Lane | 4,000 square foot | 41.2 | 27 |
| | Silvercrest | 5,000 square foot | 43.7 | 29 |
| | Garden Walk | 11.2 | 39.0 | 30 |

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**Summary of Surrounding Land Uses**

**Table 3.1-16**

| Principle | Project Consistency |
|---|---|
| Support a reasonable share of projected regional population growth. | As noted in the County's General Plan "The County of San Diego will continue to provide a diversity of choices for the type and character of community in which we live. These choices will include villages that contain a mix of housing types that are located near retail businesses, employment, schools, parklands, churches, and public institutions." (GP p.2-4). The church is a civic uses that will support the community and the projected regional population by providing jobs and services in close proximity to the County's planned "Village." The Proposed Project is consistent with this guiding principle. |
| Promote health and sustainability by locating new growth near existing and planned infrastructure, services, and jobs in a compact pattern of development | The project proposes a civic use that will support the existing surrounding community. Since it is located within close proximity to the central area or core of the "Village," a reduced commute and/or increased use of alternative transportation to and from the site is encouraged; therefore, promoting a development pattern that is accommodating and close. The Proposed Project is consistent with this guiding principle. |
| Reinforce the vitality, local economy, and individual character of existing communities when planning new housing, employment, and recreational opportunities. | The proposed church is consistent with the design, form and architectural characteristics of the structures surrounding the property. The proposed civic use will provide support to the existing community that is intended to strengthen the livelihood of its residents. The Proposed Project is consistent with this guiding principle. |
| Promote environmental stewardship that protects the range of natural resources and habitats that uniquely define the County's character and ecological importance. | Previously dedicated open space is located on and adjacent to the site. The existing open space preserve will remain. The project proposes to replace the existing development and row crops, with new structures, and associate parking and landscaping. The proposed structures are designed away from the existing open space and provide an adequate wetland buffer. The access road will impact non-native grassland habitat that will be mitigated off-site. In addition, the Landscape Plan stipulates that exotic plant species that are listed on the California Invasive Plant list would not be included. The Proposed Project is consistent with this guiding principle. |
| Ensure that development accounts for physical constraints and the natural hazards of the land. | The proposed project will be graded similarly to existing development in the neighborhood. In addition, a defensible space will be provided through site design because the proposed parking and driveways will be located around all buildings. The Proposed Project is consistent with this guiding principle. |

| Principle | Project Consistency |
|---|---|
| Provide and support a multi-modal transportation network that enhances connectivity and supports community development patterns and, when appropriate, plan for development which supports public transportation. | The project's use for religious assembly would be consistent with the County's General Plan by placing civic uses near the neighboring villages. By placing the support services or civic uses nearby, the transportation network is more closely connected, thus encouraging alternative forms of transportation (walking, bussing, and biking). The Proposed Project is consistent with this guiding principle. |
| Maintain environmentally sustainable communities and reduce greenhouse gas emissions that contribute to climate change. | As stated previously, the project proposes a civic use that will support the existing surrounding community. Since it is located adjacent to 4S Ranch village and within close proximity to the central area or core of the "Village," a reduced automobile commute and/or increased use of public transit, walking, and bicycling to and from the site is encouraged. This will result in less consumption of gasoline, air pollution, and greenhouse gas emissions. The Proposed Project is consistent with this guiding principle. |
| Preserve agriculture as an integral component of the region's economy, character, and open space network. | The project proposes a civic use on a large parcel adjacent to village uses and would serve as an appropriate transitional use between dense urban development and commercial uses within 4S Ranch and the surrounding area. Therefore, the project would not retain agriculture, but is nevertheless an appropriate land use at this location. The Proposed Project is consistent with this guiding principle. |
| Minimize public costs of infrastructure and services and correlate their timing with new development. | The project proposes to provide civic services to the surrounding residences. Since the project is within close proximity to surrounding existing development, the project would have minimal new infrastructure demands. Public infrastructure costs (new traffic lights) will be incurred by the developer. No new public roads are proposed. The Proposed Project is consistent with this guiding principle. |
| Recognize community and stakeholder interests while striving for consensus. In summary, the Guiding Principles provide for the development of land uses, investment in infrastructure and public services, and conservation of natural resources that enable the County's residents and businesses to enjoy a more sustainable environment, economy, and well-being and health. | The project representatives continue to follow the processes outlined and recommended by County staff. Project process involves notifying and meeting with various stakeholders including various community groups and design review boards, and communicating directly with individuals to address any questions and concerns. The project has made many changes in order to accommodate the issues expressed. The Proposed Project is consistent with this guiding principle. |

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**Project Consistency with the Guiding Principles of the General Plan**

**Table 3.1-17**

| Policy Number | Policy | Consistency Analysis |
|---|---|---|
| LU-2.8 | **Mitigation of Development Impacts**. Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, vibrations, dust, odor, aesthetic impairment and/or are detrimental to human health and safety. | The proposed structures are outside of the 60 CNEL contour, outdoor use areas will be exposed to noise levels below 65 CNEL, and interior noise levels should not exceed 45 CNEL for any buildings in the development. No mitigation is deemed necessary to maintain compliant interior noise levels.<br><br>Temporary construction noise must be mitigated using a noise barrier with a height of at least 7.5 feet and a width of at least 200 feet to be placed between the construction activity and the residential property line.<br><br>The overall use of the site, including the school and off-peak activities, would be greater than what currently exists, but would generally be compatible with the other existing (and proposed) local schools, shopping center, urban core, and multi-family residential developments. |
| LU-3.1 | **Diversity of Residential Designations and Building Types.** Maintain a mixture of residential land use designations and development regulations that accommodate various building types and styles. | The proposed project is not a residential land use, but is proposed on land that is designated for residential development. As a church, the proposed project is an acceptable use in this area with a MUP. The proposed project would serve to provide a mixture of land uses that would accommodate various building types and styles adding to the diversity of the community and providing needed services ancillary to residential uses. |
| LU-5.1 | **Reduction of Vehicle Trips within Communities.** Incorporate a mixture of uses within Villages and Rural Villages and plan residential densities at a level that support multi-modal transportation, including walking, bicycling, and the use of public transit, when appropriate. | The project site is adjacent to both residential and civic land uses and is nearby to two commercial centers, thus contributing to a mixture of land uses in the community that would serve to reduce vehicle trips and encourage walking and bicycling for church functions. The closest public transit routes (MTS bus routes 20, 235, 237, 290, and 945 with service to the Rancho Bernardo Transit Station) are located along the I-15 corridor, so the project site is not convenient to public transit. |

| Policy Number | Policy | Consistency Analysis |
|---|---|---|
| LU-5.2 | **Sustainable Planning and Design**. Incorporate into new development sustainable planning and design. | The project proposes a civic use that will support the existing surrounding community. Since it is located within close proximity to the central area or core of the "Village," a reduced commute and/or increased use of alternative transportation to and from the site is encouraged; therefore, promoting a development pattern that is accommodating and close.<br><br>The project would place civic uses on a approximately 9 acre parcel adjacent to village uses. Additionally, the project would serve as an appropriate transitional use between dense urban development and commercial uses within 4S Ranch and the surrounding area. Therefore, the project is an appropriate land use at this location. |
| LU-5.4 | **Planning Support.** Undertake planning efforts that promote infill and redevelopment of uses that accommodate walking and biking within communities. | The proposed project consists of the infill of a vacant parcel on the edge of a rapidly developing community. Connection to existing bicycle lanes and sidewalks will be provided as will facilities for the parking of bicycles on the project site, thus encouraging walking and biking to the project site from the surrounding community. |
| LU-6.5 | **Sustainable Stormwater Management**. Ensure that development minimizes the use of impervious surfaces and incorporates other Low Impact Development techniques as well as a combination of site design, source control, and stormwater best management practices, where applicable and consistent with the County's LID Handbook. | A Stormwater Management Plan has been prepared for this project to comply with this policy and meets current standards. |

| Policy Number | Policy | Consistency Analysis |
|---|---|---|
| LU-5.2 | **Sustainable Planning and Design**. Incorporate into new development sustainable planning and design. | The project proposes a civic use that will support the existing surrounding community. Since it is located within close proximity to the central area or core of the "Village," a reduced commute and/or increased use of alternative transportation to and from the site is encouraged; therefore, promoting a development pattern that is accommodating and close.<br><br>The project would place civic uses on a approximately 9 acre parcel adjacent to village uses. Additionally, the project would serve as an appropriate transitional use between dense urban development and commercial uses within 4S Ranch and the surrounding area. Therefore, the project is an appropriate land use at this location. |
| LU-5.4 | **Planning Support.** Undertake planning efforts that promote infill and redevelopment of uses that accommodate walking and biking within communities. | The proposed project consists of the infill of a vacant parcel on the edge of a rapidly developing community. Connection to existing bicycle lanes and sidewalks will be provided as will facilities for the parking of bicycles on the project site, thus encouraging walking and biking to the project site from the surrounding community. |
| LU-6.5 | **Sustainable Stormwater Management**. Ensure that development minimizes the use of impervious surfaces and incorporates other Low Impact Development techniques as well as a combination of site design, source control, and stormwater best management practices, where applicable and consistent with the County's LID Handbook. | A Stormwater Management Plan has been prepared for this project to comply with this policy and meets current standards. |

| Policy Number | Policy | Consistency Analysis |
|---|---|---|
| LU-6.6 | **Integration of Natural Features into Project Design**. Require incorporation of natural features (including mature oaks, indigenous trees, and rock formations) into proposed development and require avoidance of sensitive environmental resources. | The project site design protects and preserves the natural features of the previously dedicated open space to the north and to the west of the project, except for the driveway easement. It will also maintain the existing vistas on-site.<br>The existing trees located outside of the previously dedicated open space on-site are ornamental and in association with the existing residence, therefore no indigenous trees would be removed on-site. |
| LU-6.7 | **Open Space Network**. Require projects with open space to design contiguous open space areas that protect wildlife habitat and corridors; preserve scenic vistas and areas; and connect with existing or planned recreational opportunities. | The project does not propose any new open space.<br>The existing open space was intended to preserve the wetland and surrounding habitat in association with the northern drainage. This area is part of the Santa Fe Valley Specific Plan open space network.<br>A wetland buffer will separate the proposed development from the existing open space. In addition, a masonry retaining wall and vinyl coated chain link fence will help prevent human and animal encroachment into the open space. |

| Policy Number | Policy | Consistency Analysis |
|---|---|---|
| LU-6.8 | **Oversight of Open Space**. Require that open space associated with future development that is intended to be preserved in perpetuity either be: (1) retained in private ownership of the property owner or a third party with a restrictive easement that limits use of the land as appropriate; or (2) transferred into public ownership of an agency that manages preserved open space. The owner of the open space will be responsible for the maintenance and any necessary management unless those responsibilities are delegated through an adopted plan or agreement. Restrictive easements shall be dedicated to the County or a public agency (approved by the County) with responsibilities that correspond with the purpose of the open space. When transferred to a third party or public agency, a funding mechanism to support the future maintenance and management of the property should be established to the satisfaction of the County. | The existing open space was previously dedicated to the County through the Golem Tentative Subdivision Map (Parcel Map 18105, TM #5123;PM #5387). The project does not propose any open space.<br><br>A wetland buffer will separate the proposed development from the existing open space. In addition, a masonry retaining wall and vinyl coated chain link fence will help prevent human and animal encroachment into the open space. |
| LU-6.9 | **Development Conformance with Topography**. Require development to conform to the natural topography to limit grading; incorporate and not significantly alter the dominant physical characteristics of a site; and to utilize natural drainage and topography in conveying stormwater to the maximum extent practicable. | The majority of the site has been previously disturbed. Proposed grading will be limited to areas outside of the existing open space and with current County standards in order to conform to the natural topography, while still allowing development. The project engineer has completed a slope analysis to determine grading conformance and has confirmed that all grading is in conformance with the County's Grading Ordinance and Resource Protection Ordinance. |

| Policy Number | Policy | Consistency Analysis |
|---|---|---|
| LU-13.1 | **Adequacy of Water Supply**. Coordinate water infrastructure planning with land use planning to maintain an acceptable availability of a high quality sustainable water supply. Ensure that new development includes both indoor and outdoor water conservation measures to reduce demand. | The project will use the existing well for landscape irrigation. In addition, specific water conservation measures are mandated for new ground-up construction per the Global Climate Change Analysis (RECON 2015). Such conservation measures are: 20 percent mandatory reduction in indoor water use relative to specified baseline levels, 50 percent construction/demolition waste diverted from landfills, mandatory inspections of energy systems to ensure optimal working efficiency, and requirements for low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards.<br><br>Municipal water service would be provided by the Olivenhain Municipal Water District (OMWD). OMWD has provided a Project Facility Availability statement dated January 15, 2016 confirming the ability of the District to provide sewer service to the project site. |
| LU-14.2 | **Wastewater Disposal**. Require that development provide for the adequate disposal of wastewater concurrent with the development and that the infrastructure is designed and sized appropriately to meet reasonably expected demands. | Project is within Rancho Santa Fe Community Services District and is eligible to apply to LAFCO to connect to the existing sewer in the street. The Rancho Santa Fe Community Services District has provided a Project Facility Availability statement dated November 23, 2015 confirming the ability of the District to provide sewer service to the project site. |
| LU-18.1 | **Compatibility of Civic Uses with Community Character**. Locate and design Civic uses and services to assure compatibility with the character of the community and adjoining uses, which pose limited adverse effects. Such uses may include libraries, meeting centers, and small swap meets, farmers markets, or other community gatherings. | The project would be compatible with surrounding land uses by providing services to the nearby residential developments.<br><br>The project also proposes to offer meeting and community gatherings regardless of religious affiliation. |
| LU-18.2 | **Co-Location of Civic Uses**. Encourage the co-location of civic uses such as County library facilities, community centers, parks, and schools. To encourage access by all segments of the population, civic uses should be accessible by transit whenever possible. | The project would co-locate civic uses with the variety of services on-site: church and cafe. |

| Development | Building Size (Total s.f.) | Building Footprint (s.f.) | Lot Size (Approximate s.f.) | Site Coverage |
|---|---|---|---|---|
| **1. Chinese Bible Church** | **89,234** | **54,020** | **396,000** | **13.6%** |
| 2. Jerome's Warehouse | 364,560 | 364,560 | 775,500 | 47.0% |
| 3. 4S Commons | 135,744 | 135,744 | 575,140 | 23.6% |
| 4. Del Norte High School | 210,093 | 97,000 | 2,755,897 | 3.5% |
| 5. Del Sur Elementary | 129,602 | 64,801 | 664,850 | 9.7% |
| 6. Rancho del Norte Apartments | 138,000 | 46,000 | 105,000 | 43.8% |
| 7. The Reserve at 4S Ranch Apartments | 893,000 | 298,718 | 1,269,829 | 23.5% |
| 8. Bridgeport Condos | 437,000 | 168,684 | 413,000 | 40.8% |
| 9. Gianni at 4S Ranch | 400,000 | 200,000 | 540,000 | 37% |
| 10. Northrop | 108,000 | 54,000 | 274,000 | 19.7% |
| 11. 16990 Goldentop | 63,000 | 35,000 | 205,500 | 17% |
| 12. General Atomic | 137,000 | 68,500 | 490,000 | 14% |
| 13. 16016 Fairbanks Ridge Apartments | 280,000 | 95,000 | 426,000 | 22% |
| 14. Maranatha Christian Schools | 140,409 | 71,000 | 823,000 | 8.6% |
| 15. Maranatha Chapel | 200,000 | 78,000 | 470,000 | 16.6% |

s.f. = square feet.

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# Site Coverage Comparison

**Table 3.1-19**

| Operational Details for Chinese Bible Church of San Diego | | |
|---|---|---|
| Day of the Week | Time | Activity |
| Monday through Friday | 8 AM to 6 PM | Pastoral offices, Administration |
| | 10 AM to 3 PM<br>6 PM to 10 PM | Recreation, Fellowship, Church-related activities |
| | 8 AM to 10 PM | Church café and Bible bookstore |
| Saturday and Sunday | 9 AM to 10 PM | Church café and Bible bookstore |
| | | Recreation, Fellowship, Church-related activities |
| | 6 PM to 10 PM | Worship, Prayer, Bible study, Church-related activities |
| Sunday | 9 AM to 10 PM | Main worship services |

Note 1: Activities will be ended in enough time to allow for gates to be locked at 10 PM.
Note 2: Deliveries will be restricted to administration hours (8 AM to 6 PM) and will not be allowed on the eastern side of the facility.
Note 3: The overflow parking lot will be closed at 6 PM unless a special event is in progress. Parishioners will be alerted to the closing at least a half an hour before closing.

| Chinese Bible Church Special Events Schedule (Revised) | | | | |
|---|---|---|---|---|
| **Holidays** | **Duration (days)** | **Number of Events per Year** | **Start Time** | **End Time** |
| Worship Celebration | 4 | 1 | 10:00 AM | 9:00 PM |
| Ministry Appreciation Day | 1 | 1 | 3:30 PM | 9:00 PM |
| I can Anniversary Celebration | 1 | 1 | 10:00 AM | 7:30 PM |
| Ministry Conference (Spring and Fall) | 3 | 2 | 10:00 AM | 9:00 PM |
| Community Days | 2 | 1 | 10:00 AM | 7:30 PM |
| School's Out Celebration | 1 | 1 | 10:00 AM | 7:30 PM |
| Family Celebration | 2 | 1 | 10:00 AM | 9:00 PM |
| **Outdoor Events** | | | | |
| Spring Festival | 1 | 1 | 10:00 AM | 7:00 PM |
| Youth Expo | 5 | 1 | 10:00 AM | 7:00 PM |
| Harvest Fair | 1 | 1 | 10:00 AM | 7:00 PM |
| **Total** | **24** | **11** | | |

| Measures of Significant Project Impacts to Congestion Allowable Increases on Congested Roads and Intersections | | | | | |
|---|---|---|---|---|---|
| | Road Segments | | | Intersections | |
| Operations | 2-Lane Road | 4-Lane Road | 6-Lane Road | Signalized | Unsignalized |
| LOS E | 200 ADT | 400 ADT | 600 ADT | Delay of 2 seconds | 20 peak hour trips on a critical movement |
| LOS F | 100 ADT | 200 ADT | 300 ADT | Delay of 1 second, or 5 peak hour trips on a critical movement | 5 peak hour trips on a critical movement |

Source: County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements, Transportation and Traffic (August 2011)

Notes:

1. A Critical movement is one that is experiencing excessive queues.
2. By adding proposed project trips to all other trips from a list of projects, these same tables are used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.
3. The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.

| Level of Service With Project | Allowable Increase Due to Project Impacts[1] | | | | |
|---|---|---|---|---|---|
| | Freeways | Roadway Segments | | Intersections | Ramp Metering |
| | V/C | V/C | Speed (mph) | Delay (sec.) | Delay (min.) |
| E[2] | 0.010 | 0.02 | 1.0 | 2.0 | 2.0[3] |
| F[2] | 0.005 | 0.01 | 0.5 | 1.0 | 1.0[3] |

Source: City of San Diego, Significance Determination Threshold (January 2011)
Notes:
Delay measured in seconds. V/C = Volume to Capacity Ratio (capacity at LOS E should be used).
Speed = Arterial speed measured in miles per hour for Congestion Management Program (CMP) arterials.

1. If a proposed project's traffic impacts exceed the values shown in the table, then the impacts are deemed "significant." The project applicant shall identify feasible mitigations to achieve LOS D or better.
2. The acceptable LOS standard for roadways and intersections in San Diego is LOS D. However, for undeveloped locations, the goal is to achieve LOS C.
3. The impact is only considered significant if the total delay exceeds 15 minutes.

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**City of San Diego Significant Traffic Impact Thresholds**

**Table 3.1-21**

| Roadway Segment | Lanes/ Class | LOS E Capacity | Without Project | | |
|---|---|---|---|---|---|
| | | | ADT | LOS | V/C |
| **Weekday** | | | | | |
| 4 Gee Rd | | | | | |
| From Camino Del Sur to Project Driveway[1] | 2-lane Collector | 16,200 | 3,088 | B | 0.191 |
| Camino Del Sur | | | | | |
| From 4 Gee Rd to Rancho Bernardo Rd[2] | 4-lane Major Arterial | 40,000 | 25,523 | C | 0.638 |
| Camino Del Norte | | | | | |
| From Rancho Bernardo Rd to 4S Ranch Pkwy[1] | 4-lane Major | 37,000 | 20,071 | B | 0.542 |
| From 4S Ranch Rd to Dove Canyon Rd[1] | 4-lane Major | 37,000 | 20,839 | B | 0.563 |
| From Dove Canyon Rd to Bernardo Center Dr [1] | 6-lane Prime Arterial | 57,000 | 26,816 | B | 0.470 |
| From Bernardo Center Dr to Paseo Montanoso [2] | 6-lane Prime Arterial | 60,000 | 49,587 | C | 0.826 |
| From Paseo Montanoso to I-15 Ramps[2] | 6-lane Prime Arterial | 60,000 | 51,471 | D | 0.858 |
| Dove Canyon Rd | | | | | |
| From Camino Del Norte to Lone Quail Rd[1] | 4-lane Major | 37,000 | 13,355 | A | 0.361 |
| **Weekend** | | | | | |
| 4 Gee Rd | | | | | |
| From Camino Del Surr to Project Driveway[1] | 2-lane Collector | 16,200 | 2,306 | B | 0.142 |
| Camino Del Sur | | | | | |
| From 4 Gee Rd to Rancho Bernardo Rd[2] | 4-lane Major Arterial | 40,000 | 14,661 | A | 0.367 |
| Camino Del Norte | | | | | |
| From Rancho Bernardo Rd to 4S Ranch Pkwy[1] | 4-lane Major | 37,000 | 12,740 | A | 0.344 |
| From 4S Ranch Rd to Dove Canyon Rd[1] | 4-lane Major | 37,000 | 13,402 | A | 0.362 |
| From Dove Canyon Rd to Bernardo Center Dr [1] | 6-lane Prime Arterial | 57,000 | 19,134 | A | 0.336 |
| From Bernardo Center Dr to Paseo Montanoso [2] | 6-lane Prime Arterial | 60,000 | 29,855 | B | 0.498 |
| From Paseo Montanoso to I-15 Ramps[2] | 6-lane Prime Arterial | 60,000 | 32,566 | B | 0.543 |
| Dove Canyon Rd | | | | | |
| From Camino Del Norte to Lone Quail Rd[1] | 4-lane Major | 37,000 | 8,978 | A | 0.243 |

Note: [1] County of San Diego Jurisdiction, [2] City of San Diego Jurisdiction

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# Existing Segments ADT Volumes and Levels of Service

Table 3.1-22

| Traffix | Report | Intersection | Weekday AM Peak Hour | | Weekday PM Peak Hour | | Weekend Sunday Peak Hour | |
|---|---|---|---|---|---|---|---|---|
| | | | Delay | LOS | Delay | LOS | Delay | LOS |
| 601 | 1 | Project Driveway at 4 Gee Rd [1,2] | 1.8 | A | 0.8 | A | 2.4 | A |
| 602 | 2 | Camino Del Sur at 4 Gee Rd [3] | 23.2 | C | 20.9 | C | 23.4 | C |
| 603 | 3 | Camino Del Norte at Rancho Bernardo Rd [2] | 38.2 | D | 35.7 | D | 28.2 | C |
| 604 | 4 | Camino Del Norte at 4S Ranch Pkwy [2] | 22.4 | C | 26.5 | C | 25.4 | C |
| 605 | 5 | Camino Del Norte at Dove Canyon Rd [3] | 28.7 | C | 29.9 | C | 29.5 | C |
| 606 | 6 | Camino Del Norte at Bernardo Center Dr [3] | 44.9 | D | 42.3 | D | 28.4 | C |
| 607 | 7 | Camino Del Norte at Paseo Montanoso [3] | 15.1 | B | 15.9 | B | 14.4 | B |
| 608 | 8 | Camino Del Norte at I-15 SB Ramps [3] | 46.4 | D | 25.6 | C | 22.6 | C |
| 609 | 9 | Camino Del Norte at I-15 NB Ramps [3] | 52.2 | D | 35.8 | D | 21.2 | C |
| 610 | 10 | Lone Quail Rd at Dove Canyon Rd [2] | 26.2 | C | 26.8 | C | 26.8 | C |

Source: KOA Corporation (2017)
Note: [1] Unsignalized Intersection

[2] County of San Diego Jurisdiction

[3] City of San Diego Jurisdiction

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# Existing Intersections Levels of Service

**Table 3.1-23**

| Land Use | Intensity | Units | Rate/Trips | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Total | In | Out | Total | In | Out |
| **Weekday Trip Generation** | | | | | | | | | | |
| Church (House of Worship) | 43.5 | ksf | Rate | 9 | 5% | 60% | 40% | 8% | 50% | 50% |
| | | | Trips | 392 | 20 | 12 | 8 | 31 | 16 | 16 |
| | | | **TOTAL** | 392 | 20 | 12 | 8 | 31 | 16 | 16 |

Source: KOA Corporation (2017)
Generation Rate Source: SANDAG Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (April 2002).

Note: Numbers may not total due to rounding.

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# Weekday Project Trip Generation

**Table 3.1-24**

| Land Use | Intensity | Units | Rate/Trips | Daily | Sunday Peak Hour | | |
|---|---|---|---|---|---|---|---|
| | | | | | Total | In | Out |
| **Sunday Trip Generation** | | | | | | | |
| Church (House of Worship) | 1,500 | Seats | Rate | 1.85 | 33% | 50% | 50% |
| | | | Trips | 2,775 | 925 | 463 | 463 |
| | | | **TOTAL** | 2,775 | 925 | 463 | 463 |

Source: KOA Corporation (2017)
Trip Generation Source: ITE Trip Generation 8th Edition.

Note: Numbers may not total due to rounding.

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# Weekend Project Trip Generation

**Table 3.1-25**

| Roadway Segment Name | Lanes/Class | Capacity | Without Project | | | Project Traffic | With Project | | | Δ | Sig? |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ADT | LOS | V/C | | ADT | LOS | V/C | V/C | |
| **Weekday** | | | | | | | | | | | |
| 4 Gee Road | | | | | | | | | | | |
| From Camino Del Norte to Project Driveway[1] | 2-lane Collector | 16,200 | 3,088 | B | 0.191 | 390 | 3,478 | B | 0.215 | 0.02 | No |
| Camino Del Sur | | | | | | | | | | | |
| From 4 Gee Rd to Rancho Bernardo Rd[2] | 4-lane Major Arterial | 40,000 | 25,523 | C | 0.638 | 356 | 25,879 | C | 0.647 | 0.01 | No |
| Camino Del Norte | | | | | | | | | | | |
| From Rancho Bernardo Rd to 4S Ranch Pkwy[1] | 4-lane Major | 37,000 | 20,071 | B | 0.542 | 301 | 20,372 | B | 0.551 | 0.01 | No |
| From 4S Ranch Rd to Dove Canyon Rd[1] | 4-lane Major | 37,000 | 20,839 | B | 0.563 | 296 | 21,135 | B | 0.571 | 0.01 | No |
| From Dove Canyon Rd to Bernardo Center Dr [1] | 6-lane Prime Arterial | 57,000 | 26,816 | B | 0.470 | 202 | 27,018 | B | 0.474 | 0.00 | No |
| From Bernardo Center Dr to Paseo Montanoso [2] | 6-lane Prime Arterial | 60,000 | 49,587 | C | 0.826 | 198 | 49,785 | C | 0.830 | 0.00 | No |
| From Paseo Montanoso to I-15 Ramps[2] | 6-lane Prime Arterial | 60,000 | 51,471 | D | 0.858 | 196 | 51,667 | D | 0.861 | 0.00 | No |
| Dove Canyon Rd | | | | | | | | | | | |
| From Camino Del Norte to Lone Quail Rd[1] | 4-lane Major | 37,000 | 13,355 | A | 0.361 | 94 | 13,449 | A | 0.363 | 0.00 | No |
| **Weekend** | | | | | | | | | | | |
| 4 Gee Road | | | | | | | | | | | |
| From Camino Del Norte to Project Driveway[1] | 2-lane Collector | 16,200 | 2,306 | B | 0.142 | 2,758 | 5,064 | C | 0.313 | 0.17 | No |
| Camino Del Sur | | | | | | | | | | | |
| From 4 Gee Rd to Rancho Bernardo Rd[2] | 4-lane Major Arterial | 40,000 | 14,661 | A | 0.367 | 2,520 | 17,181 | B | 0.430 | 0.06 | No |
| Camino Del Norte | | | | | | | | | | | |
| From Rancho Bernardo Rd to 4S Ranch Pkwy[1] | 4-lane Major | 37,000 | 12,740 | A | 0.344 | 2,131 | 14,871 | B | 0.402 | 0.06 | No |
| From 4S Ranch Rd to Dove Canyon Rd[1] | 4-lane Major | 37,000 | 13,402 | A | 0.362 | 2,098 | 15,500 | B | 0.419 | 0.06 | No |
| From Dove Canyon Rd to Bernardo Center Dr [1] | 6-lane Prime Arterial | 57,000 | 19,134 | A | 0.336 | 1,429 | 20,563 | A | 0.361 | 0.03 | No |
| From Bernardo Center Dr to Paseo Montanoso [2] | 6-lane Prime Arterial | 60,000 | 29,855 | B | 0.498 | 1,399 | 31,254 | B | 0.521 | 0.02 | No |
| From Paseo Montanoso to I-15 Ramps[2] | 6-lane Prime Arterial | 60,000 | 32,566 | B | 0.543 | 1,385 | 33,951 | B | 0.566 | 0.02 | No |
| Dove Canyon Rd | | | | | | | | | | | |
| From Camino Del Norte to Lone Quail Rd[1] | 4-lane Major | 37,000 | 8,978 | A | 0.243 | 669 | 9,647 | A | 0.261 | 0.02 | No |

Source: KOA Corporation (2017)
Notes: [1] County of San Diego Jurisdiction, [2] City of San Diego Jurisdiction

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# Existing + Project Segments - ADT Volumes and Levels of Service

**Table 3.1-26**

| Intersection | Without Project | | With Project | | Δ Delay | Significant? |
|---|---|---|---|---|---|---|
| | Delay | LOS | Delay | LOS | | |
| **Weekday AM Peak Hour** | | | | | | |
| Project Driveway at 4 Gee Rd [1,2] | 1.8 | A | 2.8 | A | 1.0 | No |
| Camino Del Sur at 4 Gee Rd [3] | 23.2 | C | 23.3 | C | 0.1 | No |
| Camino Del Norte at Rancho Bernardo Rd [2] | 38.2 | D | 38.4 | D | 0.2 | No |
| Camino Del Norte at 4S Ranch Pkwy [2] | 22.4 | C | 22.4 | C | 0.0 | No |
| Camino Del Norte at Dove Canyon Rd [3] | 28.7 | C | 28.7 | C | 0.0 | No |
| Camino Del Norte at Bernardo Center Dr 3 | 44.9 | D | 45.0 | D | 0.1 | No |
| Camino Del Norte at Paseo Montanoso [3] | 15.1 | B | 15.1 | B | 0.0 | No |
| Camino Del Norte at I-15 SB Ramps [3] | 46.4 | D | 46.6 | D | 0.2 | No |
| Camino Del Norte at I-15 NB Ramps [3] | 52.2 | D | 52.5 | D | 0.3 | No |
| Lone Quail Rd at Dove Canyon Rd [2] | 26.2 | C | 26.2 | C | 0.0 | No |
| **Weekday PM Peak Hour** | | | | | | |
| Project Driveway at 4 Gee Rd [1,2] | 0.8 | A | 4.7 | A | 3.9 | No |
| Camino Del Sur at 4 Gee Rd [3] | 20.9 | C | 21.1 | C | 0.2 | No |
| Camino Del Norte at Rancho Bernardo Rd [2] | 35.7 | D | 36.1 | D | 0.4 | No |
| Camino Del Norte at 4S Ranch Pkwy [2] | 26.5 | C | 26.4 | C | -0.1 | No |
| Camino Del Norte at Dove Canyon Rd [3] | 29.9 | C | 29.9 | C | 0.0 | No |
| Camino Del Norte at Bernardo Center Dr [3] | 42.3 | D | 42.5 | D | 0.2 | No |
| Camino Del Norte at Paseo Montanoso [3] | 15.9 | B | 15.9 | B | 0.0 | No |
| Camino Del Norte at I-15 SB Ramps [3] | 25.6 | C | 25.7 | C | 0.1 | No |
| Camino Del Norte at I-15 NB Ramps [3] | 35.8 | D | 36.1 | D | 0.3 | No |
| Lone Quail Rd at Dove Canyon Rd [2] | 26.8 | C | 26.7 | C | -0.1 | No |
| **Weekend Sunday Peak Hour** | | | | | | |
| Project Driveway at 4 Gee Rd [1,2] | 2.4 | A | 28.4 | C | 26.0 | No |
| Camino Del Sur at 4 Gee Rd [3] | 23.4 | C | 41.3 | D | 17.9 | No |
| Camino Del Norte at Rancho Bernardo Rd [2] | 28.2 | C | 29.8 | C | 1.6 | No |
| Camino Del Norte at 4S Ranch Pkwy [2] | 25.4 | C | 22.0 | C | -3.4 | No |
| Camino Del Norte at Dove Canyon Rd [3] | 29.5 | C | 28.7 | C | -0.8 | No |
| Camino Del Norte at Bernardo Center Dr [3] | 28.4 | C | 27.1 | C | -1.3 | No |
| Camino Del Norte at Paseo Montanoso [3] | 14.4 | B | 13.6 | B | -0.8 | No |
| Camino Del Norte at I-15 SB Ramps [3] | 22.6 | C | 21.6 | C | -1.0 | No |
| Camino Del Norte at I-15 NB Ramps [3] | 21.2 | C | 23.0 | C | 1.8 | No |
| Lone Quail Rd at Dove Canyon Rd [2] | 26.8 | C | 25.9 | C | -0.9 | No |

Source: KOA Corporation (2017)

*Notes: [1]Unsignalized Intersection Without Project / Signalized Intersection With Project (Project Feature)*

*[2]County of San Diego Jurisdiction*

*[3] City of San Diego Jurisdiction*

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# Existing + Project Intersections - Levels of Service

**Table 3.1-27**

| Intersection | Lane Group | Existing + Ambient + Cumulative + Project | | | |
|---|---|---|---|---|---|
| | | Storage Capacity (ft) | Weekday AM Peak Hour Queue Length (ft) | Weekday PM Peak Hour Queue Length (ft) | Weekend Sunday Peak Hour Queue Length (ft) |
| **Project Driveway at 4 Gee Rd** | | | | | |
| Northbound | Right | 400 | 38 | 72 | 678 |
| | Thru | | | | |
| Southbound | Thru | 900 | 83 | 30 | 63 |
| | Left | | | | |
| Westbound | Right | 280 | 0 | 31 | 9 |
| | Left | 280 | 21 | 31 | 636 |
| **4 Gee Rd at Camino Del Sur** | | | | | |
| Southbound | Thru | 400 | 301 | 245 | 96 |
| | Left | 150 | 120 | 76 | 742 |
| Eastbound | Right | 250 | 691 | 634 | 611 |
| | Thru | 1500 | 691 | 634 | 611 |
| | Left | 250 | 107 | 172 | 304 |
| Westbound | Thru | 1000 | 512 | 411 | 750 |
| | Left | 250 | 242 | 291 | 338 |
| Northbound | Right | 250 | 238 | 245 | 130 |
| | Thru | 1500 | 227 | 245 | 130 |
| | Left | 250 | 227 | 76 | 35 |

Source: KOA Corporation (2017)

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# Future Queue Analysis

**Table 3.1-28**

| Project Name | Type | Size | Daily Trips | Status |
|---|---|---|---|---|
| Lot 11 | Office | 290 ksf | 3,800 | Planned |
| Lots A & B | Office | 390 ksf | 6,176 | Planned |
| The Vista | Office | 270 ksf | 4,545 | Planned |
| BMR North Village | Multiple Uses | - | - | Planned |

Source: KOA Corporation (2017)

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**Cumulative Project Traffic Generation**

**Table 3.1-29**

| Roadway Segment Name | Lanes/ Class | Capacity | Without Project | | | Project Traffic | With Project | | | Δ | Sig? |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ADT | LOS | V/C | | ADT | LOS | V/C | V/C | |
| **Weekday** | | | | | | | | | | | |
| 4 Gee Road | | | | | | | | | | | |
| From Camino Del Sur to Project Driveway[1] | 2-lane Collector | 16,200 | 3,212 | B | 0.198 | 390 | 3,601 | B | 0.222 | 0.02 | No |
| Camino Del Sur | | | | | | | | | | | |
| From 4 Gee Rd to Rancho Bernardo Rd[2] | 4-lane Major Arterial | 40,000 | 26,544 | C | 0.664 | 356 | 26,900 | C | 0.672 | 0.01 | No |
| Camino Del Norte | | | | | | | | | | | |
| From Rancho Bernardo Rd to 4S Ranch Pkwy[1] | 4-lane Major | 37,000 | 20,874 | B | 0.564 | 301 | 21,175 | B | 0.572 | 0.01 | No |
| From 4S Ranch Rd to Dove Canyon Rd[1] | 4-lane Major | 37,000 | 21,673 | B | 0.586 | 296 | 21,969 | B | 0.594 | 0.01 | No |
| From Dove Canyon Rd to Bernardo Center Dr [1] | 6-lane Prime Arterial | 57,000 | 27,889 | B | 0.489 | 202 | 28,091 | B | 0.493 | 0.00 | No |
| From Bernardo Center Dr to Paseo Montanoso [2] | 6-lane Prime Arterial | 60,000 | 54,098 | D | 0.902 | 198 | 54,296 | D | 0.905 | 0.00 | No |
| From Paseo Montanoso to I-15 Ramps[2] | 6-lane Prime Arterial | 60,000 | 55,289 | E | 0.921 | 196 | 55,484 | E | 0.925 | 0.00 | No |
| Dove Canyon Rd | | | | | | | | | | | |
| From Camino Del Norte to Lone Quail Rd[1] | 4-lane Major | 37,000 | 14,079 | A | 0.381 | 94 | 14,174 | A | 0.383 | 0.00 | No |
| **Weekend** | | | | | | | | | | | |
| 4 Gee Road | | | | | | | | | | | |
| From Camino Del Sur to Project Driveway[1] | 2-lane Collector | 16,200 | 2,467 | B | 0.152 | 2,758 | 5,226 | C | 0.323 | 0.17 | No |
| Camino Del Sur | | | | | | | | | | | |
| From 4 Gee Rd to Rancho Bernardo Rd[2] | 4-lane Major Arterial | 40,000 | 15,687 | B | 0.392 | 2,520 | 18,207 | B | 0.455 | 0.06 | No |
| Camino Del Norte | | | | | | | | | | | |
| From Rancho Bernardo Rd to 4S Ranch Pkwy[1] | 4-lane Major | 37,000 | 13,632 | A | 0.368 | 2,131 | 15,763 | B | 0.426 | 0.06 | No |
| From 4S Ranch Rd to Dove Canyon Rd[1] | 4-lane Major | 37,000 | 14,340 | A | 0.388 | 2,098 | 16,438 | B | 0.444 | 0.06 | No |
| From Dove Canyon Rd to Bernardo Center Dr [1] | 6-lane Prime Arterial | 57,000 | 20,473 | A | 0.359 | 1,429 | 21,903 | A | 0.384 | 0.03 | No |
| From Bernardo Center Dr to Paseo Montanoso [2] | 6-lane Prime Arterial | 60,000 | 31,945 | B | 0.532 | 1,399 | 33,343 | B | 0.556 | 0.02 | No |
| From Paseo Montanoso to I-15 Ramps[2] | 6-lane Prime Arterial | 60,000 | 34,846 | B | 0.581 | 1,385 | 36,230 | C | 0.604 | 0.02 | No |
| Dove Canyon Rd | | | | | | | | | | | |
| From Camino Del Norte to Lone Quail Rd[1] | 4-lane Major | 37,000 | 9,606 | A | 0.260 | 669 | 10,275 | A | 0.278 | 0.02 | No |

Source: KOA Corporation (2017)

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# Existing + Ambient + Cumulative + Project Segments - ADT Volumes and Levels of Service

**Table 3.1-30**

| Intersection | Without Project | | With Project | | Change in Delay | Significant? |
|---|---|---|---|---|---|---|
| | Delay | LOS | Delay | LOS | | |
| **Weekday AM Peak Hour** | | | | | | |
| Project Driveway at 4 Gee Rd [1,2] | 1.8 | A | 2.7 | A | 0.9 | No |
| Camino Del Sur at 4 Gee Rd [3] | 23.8 | C | 23.9 | C | 0.1 | No |
| Camino Del Norte at Rancho Bernardo Rd [2] | 40.3 | D | 40.6 | D | 0.3 | No |
| Camino Del Norte at 4S Ranch Pkwy [2] | 22.6 | C | 22.6 | C | 0.0 | No |
| Camino Del Norte at Dove Canyon Rd [3] | 29.8 | C | 29.8 | C | 0.0 | No |
| Camino Del Norte at Bernardo Center Dr [3] | 65.8 | E | 65.8 | E | 0.0 | No |
| Camino Del Norte at Paseo Montanoso [3] | 17.0 | B | 17.0 | B | 0.0 | No |
| Camino Del Norte at I-15 SB Ramps [3] | 64.3 | E | 64.6 | E | 0.3 | No |
| Camino Del Norte at I-15 NB Ramps [3] | 78.2 | E | 78.7 | E | 0.5 | No |
| Lone Quail Rd at Dove Canyon Rd [2] | 26.3 | C | 26.3 | C | 0.0 | No |
| **Weekday PM P ak Hou** | | | | | | |
| Project Driveway at 4 Gee Rd [1,2] | 0.8 | A | 4.6 | A | 3.8 | No |
| Camino Del Sur at 4 Gee Rd [3] | 21.3 | C | 21.4 | C | 0.1 | No |
| Camino Del Norte at Rancho Bernardo Rd [2] | 37.8 | D | 38.2 | D | 0.4 | No |
| Camino Del Norte at 4S Ranch Pkwy [2] | 26.8 | C | 26.7 | C | -0.1 | No |
| Camino Del Norte at Dove Canyon Rd [3] | 30.6 | C | 30.7 | C | 0.1 | No |
| Camino Del Norte at Bernardo Center Dr [3] | 64.3 | E | 64.7 | E | 0.4 | No |
| Camino Del Norte at Paseo Montanoso [3] | 18.8 | B | 18.8 | B | 0.0 | No |
| Camino Del Norte at I-15 SB Ramps [3] | 34.1 | C | 34.3 | C | 0.2 | No |
| Camino Del Norte at I-15 NB Ramps [3] | 49.7 | D | 50.1 | D | 0.4 | No |
| Lone Quail Rd at Dove Canyon Rd [2] | 27.6 | C | 27.6 | C | 0.0 | No |
| **Week nd Su ay Peak Hour** | | | | | | |
| Project Driveway at 4 Gee Rd [1,2] | 2.4 | A | 28.5 | C | 26.1 | No |
| Camino Del Sur at 4 Gee Rd [3] | 23.5 | C | 42.5 | D | 19.0 | No |
| Camino Del Norte at Rancho Bernardo Rd [2] | 28.4 | C | 30.4 | C | 2.0 | No |
| Camino Del Norte at 4S Ranch Pkwy [2] | 25.5 | C | 22.4 | C | -3.1 | No |
| Camino Del Norte at Dove Canyon Rd [3] | 29.6 | C | 29.0 | C | -0.6 | No |
| Camino Del Norte at Bernardo Center Dr 3 | 32.7 | C | 31.1 | C | -1.6 | No |
| Camino Del Norte at Paseo Montanoso [3] | 14.6 | B | 13.8 | B | -0.8 | No |
| Camino Del Norte at I-15 SB Ramps [3] | 26.8 | C | 24.9 | C | -1.9 | No |
| Camino Del Norte at I-15 NB Ramps [3] | 27.9 | C | 30.3 | C | 2.4 | No |
| Lone Quail Rd at Dove Canyon Rd [2] | 26.9 | C | 26.0 | C | -0.9 | No |

Source: KOA Corporation (2017)

*Note: [1]Unsignalized Intersection Without Project / Signalized Intersection With Project (Project Feature)*

*[2]County of San Diego Jurisdiction*

*[3] City of San Diego Jurisdiction*

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# Existing + Ambient + Cumulative + Project Intersections - Levels of Service

**Table 3.1-31**

| Roadway Segment Name | Lanes/ Class | Capacity | Without Project | | | Project Traffic | With Project | | | Δ | Sig? |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ADT | LOS | V/C | | ADT | LOS | V/C | V/C | |
| **Weekday** | | | | | | | | | | | |
| 4 Gee Road | | | | | | | | | | | |
| From Camino Del Sur to Project Driveway[1] | 2-lane Collector | 16,200 | 3,922 | B | 0.242 | 390 | 4,311 | C | 0.266 | 0.02 | No |
| Camino Del Sur | | | | | | | | | | | |
| From 4 Gee Rd to Rancho Bernardo Rd[2] | 4-lane Major Arterial | 40,000 | 32,414 | D | 0.810 | 356 | 32,770 | D | 0.819 | 0.01 | No |
| Camino Del Norte | | | | | | | | | | | |
| From Rancho Bernardo Rd to 4S Ranch Pkwy[1] | 4-lane Major | 37,000 | 25,490 | C | 0.689 | 301 | 25,791 | C | 0.697 | 0.01 | No |
| From 4S Ranch Rd to Dove Canyon Rd[1] | 4-lane Major | 37,000 | 26,466 | C | 0.715 | 296 | 26,762 | C | 0.723 | 0.01 | No |
| From Dove Canyon Rd to Bernardo Center Dr[1] | 6-lane Prime Arterial | 57,000 | 34,056 | B | 0.597 | 202 | 34,258 | B | 0.601 | 0.00 | No |
| From Bernardo Center Dr to Paseo Montanoso[2] | 6-lane Prime Arterial | 60,000 | 62,975 | F | 1.050 | 198 | 63,173 | F | 1.053 | 0.00 | No |
| From Paseo Montanoso to I-15 Ramps[2] | 6-lane Prime Arterial | 60,000 | 65,368 | F | 1.089 | 196 | 65,564 | F | 1.093 | 0.00 | No |
| Dove Canyon Rd | | | | | | | | | | | |
| From Camino Del Norte to Lone Quail Rd[1] | 4-lane Major | 37,000 | 16,961 | B | 0.458 | 94 | 17,055 | B | 0.461 | 0.00 | No |
| **Weekend** | | | | | | | | | | | |
| 4 Gee Road | | | | | | | | | | | |
| From Camino Del Sur to Project Driveway[1] | 2-lane Collector | 16,200 | 2,929 | B | 0.181 | 2,758 | 5,687 | C | 0.351 | 0.17 | No |
| Camino Del Sur | | | | | | | | | | | |
| From 4 Gee Rd to Rancho Bernardo Rd[2] | 4-lane Major Arterial | 40,000 | 18,619 | B | 0.465 | 2,520 | 21,139 | B | 0.528 | 0.06 | No |
| Camino Del Norte | | | | | | | | | | | |
| From Rancho Bernardo Rd to 4S Ranch Pkwy[1] | 4-lane Major | 37,000 | 16,180 | B | 0.437 | 2,131 | 18,311 | B | 0.495 | 0.06 | No |
| From 4S Ranch Rd to Dove Canyon Rd[1] | 4-lane Major | 37,000 | 17,021 | B | 0.460 | 2,098 | 19,118 | B | 0.517 | 0.06 | No |
| From Dove Canyon Rd to Bernardo Center Dr[1] | 6-lane Prime Arterial | 57,000 | 24,300 | B | 0.426 | 1,429 | 25,729 | B | 0.451 | 0.03 | No |
| From Bernardo Center Dr to Paseo Montanoso[2] | 6-lane Prime Arterial | 60,000 | 37,916 | C | 0.632 | 1,399 | 39,314 | C | 0.655 | 0.02 | No |
| From Paseo Montanoso to I-15 Ramps[2] | 6-lane Prime Arterial | 60,000 | 41,359 | C | 0.689 | 1,385 | 42,744 | C | 0.712 | 0.02 | No |
| Dove Canyon Rd | | | | | | | | | | | |
| From Camino Del Norte to Lone Quail Rd[1] | 4-lane Major | 37,000 | 11,402 | A | 0.308 | 669 | 12,071 | A | 0.326 | 0.02 | No |

Source: KOA Corporation (2017)
Note: [1] County of San Diego Jurisdiction

Note: [2] City of San Diego Jurisdiction

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# General Plan Segments - ADT Volumes and Levels of Service

**Table 3.1-32**

| | 2020 | 2025 | 2030 | 2035 | 2035 |
|---|---|---|---|---|---|
| Supply Totals | 22,843 | 23,163 | 23,283 | 23,813 | 23,639 |
| Demand Totals | 22,843 | 23,163 | 23,283 | 23,813 | 23,639 |
| Difference | 0 | 0 | 0 | 0 | 0 |

Source: OMWD 2015, Table 7-2

| | 2020 | 2025 | 2030 | 2035 | 2035 |
|---|---|---|---|---|---|
| Supply Totals | 24,289 | 24,639 | 24,789 | 25,345 | 25,558 |
| Demand Totals | 24,289 | 24,639 | 24,789 | 25,345 | 25,558 |
| Difference | 0 | 0 | 0 | 0 | 0 |

Source: OMWD 2015, Table 7-3

| | | 2020 | 2025 | 2030 | 2035 |
|---|---|---|---|---|---|
| First Year | Supply totals | 21,836 | 22,225 | 22,449 | 22,371 |
| | Demand totals | 26,998 | 28,811 | 30,886 | 32,128 |
| | Deficit | 0 | 0 | 0 | 0 |
| Second Year | Supply totals | 21,766 | 23,323 | 22,657 | 22,810 |
| | Demand totals | 21,766 | 23,323 | 22,657 | 23,036 |
| | Deficit | 0 | 0 | 0 | 226 |
| Third Year | Supply totals | 21,702 | 22,423 | 22,539 | 21,960 |
| | Demand totals | 21,702 | 22,423 | 22,867 | 23,070 |
| | Deficit | 0 | 0 | 328 | 1,110 |

Source: OMWD 2015, Table 7-4
Note: Data not available for 2040.

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**Water Supply and Demand Comparison Multiple Dry Years**

**Table 3.1-35**

| Use Type | Electricity | Non-transport Gasses | Transportation Fuels(2) |
|---|---|---|---|
| Construction | | | |
| Vehicles | | | X |
| Materials(3) | X | X | X |
| Machinery | X | X | |
| Transportation | | | X |
| Operation | | | |
| MUP operation | X | X(1) | |
| Irrigation | X | | |
| Transportation | | | X |

(1) Primarily propane for home operation.
(2) Primarily gasoline and diesel fuel
(3) Embodied energy, or energy needed to manufacture and transport materials.

| |
|---|
| Improved heating and cooling controls |
| Air leakage control on all fenestrations and exterior doors |
| All joints with a potential for leakage shall be sealed |
| Automatic timing switches on all lighting to include dimmers, daylight controls, occupant sensing controls, part-night sensing controls |
| Solar zones on roofs for all residences |
| New building simulation tools allow builders to make tradeoffs between energy saving devices |
| Greater insulation requirements |
| Higher standards for window performance in terms of energy conservation |