
# INITIAL STUDY – MITIGATED NEGATIVE DECLARATION

FOR ST. RITA'S CATHOLIC CHURCH

June 2019

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*City of Tulare*
Planning and Building Department
411 East Kern Avenue
Tulare, CA 93274

# Executive Summary

***Project Title: St. Rita's Catholic Church***

**Project Location**

The project site is located within Tulare County in the southeastern area of the City of Tulare, on the southwest corner of Bardsley Avenue and Morrison Street. The project area is composed of one parcel that has been issued two Assessor's Parcel Numbers (APNs 184-190-013 and 184-200-046) totaling approximately 8 acres.

The proposed project site is designated as Low Density Residential within the City of Tulare General Plan and is zoned R-1-6 (Single-family Residential, 6,000 sq. ft. minimum lot area) under the current zoning code. The current proposed project site has existing frontage improvements such as curb, gutter, sidewalk and some landscaping, but is mostly vacant.

**Project Overview**

The proposed project is a five building church complex to be constructed in up to seven (7) phases. Phase 1 will consist of the construction of a 15,667 sq. ft. main sanctuary and will encompass the nave, narthex, predella, sacristy, and restrooms and will seat approximately 1,145 parishioners. Other improvements including parking, landscaping, trash enclosures and City standard drive-approaches will also be included. There are also future plans to expand the main sanctuary that will consist of an approximately 7,165 sq. ft. expansion of the main sanctuary through the addition of transepts, for a total of approximately 22,832 sq. The expanded sanctuary will seat approximately 1,443 parishioners. An additional 100 on-site parking spaces would be provided with the expansion of the main sanctuary. A second future expansion of the main sanctuary is planned and will include the addition of an approximately 668 sq. ft. day chapel to the principal sanctuary. The day chapel would be used for daily worship and would bring the total size of the principal sanctuary to approximately 23,500 sq. ft. The day chapel would accommodate 25 to 30 parishioners during services.

The Youth Center/Parish Hall will be 7,557 sq. ft. and serve as a multi-purpose room and will have kitchen, classroom, and bathroom facilities. The Classrooms Building consists of an approximately 18,968 sq. ft. two-story classroom building. The building will contain 17 classrooms as well as restroom facilities.

The Parish Office Building consists of a 1,665 sq. ft. office building for church staff. The Rectory consists of a 1,200 sq. ft. building with on-site living facilities for ecclesiastical

leaders. The building will have a living room, two bedrooms, two bathrooms, office, kitchen and garage.

**Summary of IS/MND Findings**

The analysis in Section 3 of this Initial Study and Proposed Mitigated Negative Declaration (IS/MND) evaluates the potential environmental impacts associated with project implementation. It was found that implementation of the proposed project would not result in potentially significant impacts on the environment, as detailed in Section 3.

**Mitigation Monitoring and Reporting Program**

| Mitigation Measure | Responsible Party for Implementation | Implementation Timing | Responsible Party for Monitoring | Verification |
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| **BIO-1a:** In order to avoid impacts to nesting raptors and migratory birds, the project shall be constructed, if feasible, outside the nesting season, or between September 1st and January 31st. | Project Applicant & Construction Contractor | Prior to, and during, ground-disturbing and construction activities | City of Tulare | |
| **BIO-1b:** If project activities must occur during the nesting season (February 1-August 31), a qualified biologist shall conduct preconstruction surveys for active raptor and migratory bird nests within 14 days prior to the start of these activities. The survey shall include the proposed work area(s) and surrounding lands within 500 feet, where accessible, for all nesting raptors and migratory birds save Swainson's hawk; the Swainson's hawk survey shall extend to 0.5 mile outside of work area boundaries. If no nesting pairs are found within the survey area, no further mitigation is required. | Project Applicant & Construction Contractor | Within 14 days prior to the start of ground-disturbing and construction activities | City of Tulare | |

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| **BIO-1c:** Should any active nests be discovered near proposed work areas, the biologist shall determine appropriate construction setback distances based on applicable CDFW guidelines and/or the biology of the affected species. Construction-free buffers shall be identified on the ground with flagging, fencing, or by other easily visible means, and shall be maintained until the biologist has determined that the young have fledged. | Construction Contractor & Qualified Biologist | Prior to, and during, ground-disturbing and construction activities | City of Tulare | |
| **BIO-2a:** (Take Avoidance Survey). A take avoidance survey for burrowing owls shall be conducted by a qualified biologist knowledgeable of the species within 14 days prior to the start of construction. This take avoidance survey shall be conducted according to methods described in the Staff Report on Burrowing Owl Mitigation (CDFG 2012). The survey area shall include all suitable habitat on and within 200 meters of project impact areas, where accessible. | Project Applicant & Construction Contractor | Within 14 days prior to the start of ground-disturbing and construction activities | City of Tulare | |

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| **BIO-2b:** (Avoidance of Active Nests and Roosts). If project activities are undertaken during the breeding season (February 1-August 31) and active nest burrows are identified within or near project impact areas, a 200-meter disturbance-free buffer shall be established around these burrows, unless a qualified biologist approved by CDFW verifies through noninvasive methods either that the birds have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Owls present on site after February 1 will be assumed to be nesting unless evidence indicates otherwise. The protected exclusion zone established for the breeding season shall remain in effect until August 31 or, as determined based on monitoring evidence, until the young owl(s) is foraging independently or the nest is no longer active. | Project Applicant, Construction Contractor, & Qualified Biologist | Prior to, and during, ground-disturbing and construction activities | City of Tulare | |

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| **BIO-2c:** (Passive Relocation of Resident Owls). During the nonbreeding season (September 1-January 31), resident owls occupying burrows in project impact areas may be passively relocated to alternative habitat after consulting with the CDFW. Prior to passively relocating burrowing owls, a Burrowing Owl Exclusion Plan shall be prepared by a qualified biologist in accordance with Appendix E of the Staff Report on Burrowing Owl Mitigation (CDFW, 2012). The Burrowing Owl Exclusion Plan shall be submitted to the CDFW for review prior to implementation. Relocation of any owls during the nonbreeding season shall be performed by a qualified biologist using one-way doors, which shall be installed in all burrows in the impact area and left in place for at least two nights. The doors shall be removed and the burrows backfilled immediately before the initiation of grading or, if no grading would occur, left in place until the end of construction. To avoid the potential for owls evicted from a burrow to occupy other burrows in the project site, one-way doors shall be placed in all potentially suitable burrows within the impact area when eviction occurs. | Construction Contractor & Qualified Biologist | Prior to, and during, ground-disturbing and construction activities | City of Tulare | |

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| **BIO-3a:** Preconstruction surveys for the San Joaquin kit fox shall be conducted on and within 200 feet of the project site, no more than 30 days prior to the start of ground disturbance activities on the site. The primary objective is to identify kit fox habitat features (e.g., potential dens and refugia) on and adjacent to the site and evaluate their use by kit foxes. Protection provided by dens for shelter, escape, cover, and reproduction is vital to the survival of San Joaquin kit foxes. For San Joaquin kit foxes, the ecological value of potential, known, and natal/pupping dens differs; therefore, each den type requires the appropriate level of protection. The following text describes the different steps involved with implementing this mitigation measure:<br><br>Determine Den Status. When a suitable den or burrow is discovered, a qualified biologist shall determine whether the hole is occupied by a San Joaquin kit fox. Den entrances at least 4 inches in diameter (but not greater than 20 inches) qualify as suitable for San Joaquin kit fox use. Some dens can be immediately identified as recently used by kit fox; qualifying signs include kit fox tracks, scats, and a fresh soil apron extending up to 6 feet from the den entrance. Dens with proper dimensions, but no obvious | Project Applicant, Construction Contractor, & Qualified Biologist | Within 30 days of any ground-disturbing activities | City of Tulare | |

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| sign will require further investigation. A remote motion-sensing camera with tracking medium shall be deployed for at least 5 days in an attempt to document a San Joaquin kit fox using the den. If, after 5 days, no San Joaquin kit foxes are detected and the hole has remained unchanged (no new tracks or excavations are observed), and there is no historic record of an active kit fox den at that location, the den will be deemed a "potential den" and unoccupied. The den will be considered occupied if a kit fox is photographed using the den or if a recent sign is found. The biologist shall contact CDFW and the USFWS upon the confirmation of any occupied den.<br><br>Preconstruction surveys shall be repeated following any lapses in construction of 30 days or more. | | | | |

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| **BIO-3b:** Should active kit fox dens be detected during preconstruction surveys, the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW shall be notified. A disturbance-free buffer shall be established around the burrows in consultation with the USFWS and CDFW, to prevent access to the occupied den by construction equipment and personnel who are not biologists, and to be maintained until an agency-approved biologist has determined that the burrows have been abandoned. After construction activities would no longer affect the den, all fencing and flagging shall be removed to avoid attracting attention to the den by other animals or humans. All onsite flagging and buffer delineations shall be kept in good working order for the duration of activity near the den or until the den is determined to be unoccupied, whichever occurs first. The following radii are standard San Joaquin kit fox buffer distances:<br>• Known occupied den—100 feet<br>• Occupied natal/pupping den—500 feet<br>• Occupied atypical den—50 feet<br>In the exclusion zones, only essential vehicle and foot traffic shall be permitted. No activity that would destroy the den may occur, and no activity that may harm a San | Construction Contractor & Qualified Biologist | Prior to, and during, ground-disturbing activities | City of Tulare | |

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| Joaquin kit fox will proceed until the individual is out of harm's way, without harassment. No activity that may cause strong ground vibrations may occur in the exclusion zone until the den is no longer occupied. Essential vehicle traffic shall include any emergency vehicles. If San Joaquin kit foxes are not observed above ground, essential foot traffic also may be allowed. The USFWS and CDFW shall be notified of any reductions in the standard radii or allowance for additional activity in the restrictive exclusion zones based on individual circumstances to provide USFWS and CDFW an opportunity to offer technical guidance. If a known or occupied den cannot be avoided, consultation with the USFWS and CDFW shall be required. | | | | |

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| **BIO-3c:** Construction activities shall be carried out in a manner that minimizes disturbance to kit foxes in accordance with the USFWS Standardized Recommendations. The applicant shall implement all minimization measures presented in the Construction and On-going Operational Requirements section of the Standardized Recommendations, including, but not limited to:<br>• Project-related vehicles shall observe a daytime speed limit of 15-mph throughout the site in all project areas, except on county roads and State and Federal highways; this is particularly important at night when kit foxes are most active. Night-time construction should be minimized to the extent possible. However if it does occur, then the speed limit shall be reduced to 10-mph. Off-road traffic outside of designated project areas shall be prohibited.<br><br>• To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than 2-feet deep shall be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be | Applicant & Construction Contractor | During all ground-disturbing and construction activities | City of Tulare | |

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| installed. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the USFWS and CDFW shall be contacted.<br><br>• Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe shall not be moved until USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.<br><br>• All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from a construction or project site.<br><br>• No firearms shall be allowed on the project site. | | | | |

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| • No pets, such as dogs or cats, shall be permitted on the project site, to prevent harassment, mortality of kit foxes, or destruction of dens.<br><br>• Use of rodenticides and herbicides in project areas shall be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional project-related restrictions deemed necessary by USFWS. If rodent control must be conducted, zinc phosphide shall be used because of a proven lower risk to kit fox.<br><br>• An employee education program shall be conducted for the project. The program shall consist of a brief presentation by persons knowledgeable in kit fox biology and protection to explain endangered species concerns to contractors, their employees, and agency personnel involved in the project. This training will include a description of the kit fox and its habitat needs; a report of the occurrence of kit fox in the project vicinity; an explanation of the status of the species and its | | | | |

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| protection under the Endangered Species Act; and a list of the measures being taken to reduce impacts to the species during project construction and implementation. The training will include a handout with all of the training information included in it. The applicant will use this handout to train any construction personnel that were not in attendance at the first meeting, prior to those personnel starting work on the site.<br><br>• A representative shall be appointed by the Applicant who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped kit fox. The representative shall be identified during the employee education program and their name and telephone number shall be provided to USFWS.<br><br>• Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. shall be re-contoured if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the project, but after project completion will not be | | | | |

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| subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas shall be determined on a site-specific basis in consultation with USFWS, CDFW, or revegetation experts.<br><br>• Any contractor, employee, or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified in writing within three working days in case of the accidental death or injury of a San Joaquin kit fox during project-related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal, and any other pertinent information. The CDFW contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or Mr. Paul Hoffman, the wildlife biologist, at (530) 934-9309.<br><br>• New sightings of kit fox shall be reported to the CNDDB. A copy of the reporting form and a topographic map clearly marked with the location of | | | | |

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| where the kit fox was observed shall also be provided to USFWS. | | | | |
| **CUL-1:** If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any potential significant impacts. | Construction Contractor | During ground-disturbing activities | City of Tulare | |

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| **CUL-2:** The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. | Construction Contractor | During ground-disturbing activities | City of Tulare | |

***City of Tulare***
Planning and Building Department
411 East Kern Avenue
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# Introduction

***Project Title: St. Rita's Catholic Church***

This Initial Study/Mitigated Negative Declaration has been prepared for the City of Tulare to address the environmental effects of the construction of a five building church complex on approximately 8 acres within the City of Tulare, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA) Guidelines. The City of Tulare is the CEQA lead agency for this project.

The project site is located within Tulare County in the southeastern area of the City of Tulare, on the southwest corner of Bardsley Avenue and Morrison Street

This Initial Study document for **St. Rita's Catholic Church**, is organized as follows:

**Section 1: Environmental Review Process**
The Environmental Review Process covers the procedures, under the California Environmental Quality Act (CEQA), for evaluating the environmental effects of the proposed project including the CEQA guidelines, Initial Study, Environmental Checklist, Notice of Intent to adopt a Mitigated Negative Declaration, Mitigated Negative Declaration, and the Notice of Determination.

**Section 2: Project Description**
The Project Description identifies the project location, provides a background to the project, and describes the project.

**Section 3: Evaluation of Environmental Impacts**
Evaluation of Environmental Impacts contains the CEQA Environmental Checklist, Environmental Factors Potentially Affected, Evaluation of Environmental Impacts, Draft Notice of Intent to Adopt Initial Study/Mitigated Negative Declaration, Draft Mitigated Negative Declaration, Notice of Completion and Environmental Document Transmittal form, Draft Notice of Determination, and a Schedule of Compliance with CEQA for a Mitigated Negative Declaration.

**Section 4: References**
References provides a list of reference material used during the preparation of the Initial Study.

**Section 5: List of Report Preparers**

The List of Report Preparers provides a list of key personnel involved in the preparation of the Environmental Assessment/Initial Study.

**Appendices**

The Appendices consist of Appendix A and Appendix B. Appendix A includes the modeling output sheets from the California Emissions Estimator Model (CalEEMod) run for estimating construction and operational emissions summarized in the air quality and greenhouse gas sections of this Initial Study/Mitigated Negative Declaration. Appendix B is the Trip Generation Assessment for the Project.

***City of Tulare***
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Tulare, CA 93274

# SECTON 1
# CEQA Environmental Review Process

***Project Title: St. Rita's Catholic Church***

## 1.1 California Environmental Quality Act Guidelines

Section 15063 of the California Environmental Quality Act (CEQA) Guidelines requires that the Lead Agency prepare an Initial Study to determine whether a discretionary project will have a significant effect on the environment. All phases of the project planning, implementation, and operation must be considered in the Initial Study. The purposes of an Initial Study, as listed under Section 15063(c) of the CEQA Guidelines, include:

*(1) Provide the lead agency with information to use as the basis for deciding whether to prepare an EIR or negative declaration;*

*(2) Enable an applicant or lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a mitigated negative declaration;*

*(3) Assist the preparation of an EIR, if one is required, by:*

*(A) Focusing the EIR on the effects determined to be significant,*

*(B) Identifying the effects determined not to be significant,*

*(C) Explaining the reasons for determining that potentially significant effects would not be significant, and*

*(D) Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.*

*(4) Facilitate environmental assessment early in the design of a project;*

*(5) Provide documentation of the factual basis for the finding in a mitigated negative declaration that a project will not have a significant effect on the environment;*

*(6) Eliminate unnecessary EIRs;*

*(7) Determine whether a previously prepared EIR could be used with the project.*

### 1.2 Initial Study

The Initial Study provided herein covers the potential environmental effects of the construction of a five building church complex on approximately 8 acres within the City of Tulare, California.

The City of Tulare will act as the Lead Agency for processing the Initial Study/Mitigated Negative Declaration pursuant to the CEQA and the CEQA Guidelines.

### 1.3 Environmental Checklist

The Lead Agency may use the CEQA Environmental Checklist Form [CEQA Guidelines, Section 15063(d)(3) and (f)] in preparation of an Initial Study to provide information for determination if there are significant effects of the project on the environment. A copy of the completed Environmental Checklist is set forth in Section Three.

### 1.4 Notice of Intent to Adopt a Mitigated Negative Declaration

The Lead Agency shall provide a Notice of Intent to Adopt a Mitigated Negative Declaration (CEQA Guidelines, Section 15072) to the public, responsible agencies, trustee agencies and the County Clerk within which the project is located, sufficiently prior to adoption by the Lead Agency of the Negative Declaration to allow the public and agencies the review period. The public review period (CEQA Guidelines, Section 15105) shall not be less than 20 days. When the Initial Study/Mitigated Negative Declaration is submitted to the State Clearinghouse for review by state agencies, the public review period shall not be less than 30 days, unless a shorter period, not less than 20 days, is approved by the State Clearinghouse.

Prior to approving the project, the Lead Agency shall consider the proposed Mitigated Negative Declaration together with any comments received during the public review process, and shall adopt the proposed Mitigated Negative Declaration only if it finds on the basis of the whole record before it, that there is no substantial evidence that the project will have a significant effect on the environment and that the Mitigated Negative Declaration reflects the Lead Agency's independent judgment and analysis.

The written and oral comments received during the public review period will be considered by the City of Tulare prior to adopting the Mitigated Negative Declaration.

Regardless of the type of CEQA document that must be prepared, the overall purpose of the CEQA process is to:

1) Assure that the environment and public health and safety are protected in the face of discretionary projects initiated by public agencies or private concerns;

2) Provide for full disclosure of the project's environmental effects to the public, the agency decision-makers who will approve or deny the project, and the responsible trustee agencies charged with managing resources (e.g. wildlife, air quality) that may be affected by the project; and

3) Provide a forum for public participation in the decision-making process pertaining to potential environmental effects.

According to Section 15070(a) a public agency shall prepare or have prepared a proposed mitigated negative declaration for a project subject to CEQA when:

***The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. Less than significant impacts have been identified, with implementation of mitigation measures.***

The Environmental Checklist Discussion contained in Section Three of this document has determined that the environmental impacts of the project are less than significant with mitigation measures and that a Mitigated Negative Declaration is adequate for adoption by the Lead Agency.

### 1.5 Negative Declaration or Mitigated Negative Declaration

The Lead Agency shall prepare or have prepared a proposed Negative Declaration or Mitigated Negative Declaration (CEQA Guidelines Section 15070) for a project subject to CEQA when the Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment.

The proposed Negative Declaration or Mitigated Negative Declaration circulated for public review shall include the following:

(a) A brief description of the project, including a commonly used name for the project.

(b) The location of the project, preferably shown on a map.

(c) A proposed finding that the project will not have a significant effect on the environment.

(d) An attached copy of the Initial Study documenting reasons to support the finding.

(e) Mitigation measures, if any.

### 1.6 Intended Uses of Initial Study/Mitigated Negative Declaration Documents

The Initial Study/Mitigated Negative Declaration document is an informational document that is intended to inform decision-makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed project. The environmental review process has been established to enable the public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency must balance any potential environmental effects against other public objectives, including economic and social goals.

The City of Tulare, as Lead Agency, will make a determination, based on the environmental review for the Initial Study and comments from the general public, if there are less than significant impacts from the proposed project and the requirements of CEQA can be met by adoption of a Mitigated Negative Declaration.

### 1.7 Notice of Determination (NOD)

The Lead Agency shall file a Notice of Determination within five working days after deciding to approve the project. The Notice of Determination (CEQA Guidelines, Section 15075) shall include the following:

> *(1) An identification of the project including the project title as identified on the proposed negative declaration, its location, and the State Clearinghouse identification number for the proposed negative declaration if the notice of determination is filed with the State Clearinghouse.*
>
> *(2) A brief description of the project.*
>
> *(3) The agency's name and the date on which the agency approved the project.*
>
> *(4) The determination of the agency that the project will not have a significant effect on the environment.*
>
> *(5) A statement that a negative declaration or a mitigated negative declaration was adopted pursuant to the provisions of CEQA.*
>
> *(6) A statement indicating whether mitigation measures were made a condition of the approval of the project, and whether a mitigation monitoring plan/program was adopted.*
>
> *(7) The address where a copy of the negative declaration or mitigated negative declaration may be examined.*

*(8) The Notice of Determination filed with the County Clerk shall be available for public inspection and shall be posted by the County Clerk within 24 hours of receipt for a period of at least 30 days. Thereafter, the clerk shall return the Notice to the Lead Agency with a notation of the period posted.*

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# SECTON 2
# Project Description

***Project Title: St. Rita's Catholic Church***

## 2.1 Project Location

The project site is located within Tulare County in the southeastern area of the City of Tulare, on the southwest corner of Bardsley Avenue and Morrison Street. The project area is composed of one parcel that has been issued two Assessor's Parcel Numbers (APNs 184-190-013 and 184-200-046) totaling approximately 8 acres.

The proposed project site is designated as Low Density Residential within the City of Tulare General Plan and is zoned R-1-6 (Single-family Residential, 6,000 sq. ft. minimum lot area) under the current zoning code. The current proposed project site has existing frontage improvements such as curb, gutter, sidewalk and some landscaping, but is mostly vacant. The project area is bound by single family residences to the west and south, Bardsley Avenue and single-family residences to the north, and Morrison Street, a health clinic, single-family residences, and a 65 unit multi-family apartment complex currently under construction to the east.

## 2.2 Project Description

The proposed project is a five building church complex for the Roman Catholic Saint Rita's church. Construction for the project is proposed to occur in approximately seven (7) phases. The first phase would consist of the construction of a 15,667 sq. ft. main sanctuary and will encompass the nave, narthex, predella, sacristy, and restrooms and will seat approximately 1,145 parishioners. Other improvements including the installation of 286 parking spaces, landscaping, trash enclosures, lighting and City standard drive-approaches will also be included in the first phase.

### Project Construction

Construction of the Project would proceed in phases. Phase 1 construction is expected to begin in the spring of 2020 and is expected to be completed by the winter of 2020. The timeline for the construction of future phases is unknown and will be based upon need and the availability of funding. Due to the unknown nature of the timeline for construction of future phases, the Initial Study / Mitigated Negative Declaration analyzed the impacts of full build-out of the project, following the following construction sequence:

1. Site Preparation. Mobilization of equipment, materials, and staffing resources, and involves clearing vegetation and stones prior to grading.

2. Grading. Project site area would be prepared and leveled as needed for the construction foundation.

3. Building Construction. Involves the construction of structures and buildings.

4. Paving. Involves the laying of concrete or asphalt such as in parking lots, walkways, or roads.

5. Architectural Coating & Landscaping. Involves the application of coatings to both the interior and exterior of buildings and includes parking lot striping. Landscaping would also be planted prior to opening of the buildings for use.

**Operations**

The operating hours for the church development are proposed to be from 7:00 a.m. to 8:00 p.m. seven days per week. Two masses will be offered on Saturdays and 4 masses offered on Sundays. There will also be daily mass on Tuesday evenings and on Wednesday, Thursday and Friday mornings. There will be two (2) to eight (8) employees on site during operating hours. The scope of project and description of buildings and improvements that are proposed are as follows and are visually represented on the Site Plan (Figure 2-2).

Sanctuary and Day Chapel Building

Will consist of the construction of a 15,667 sq. ft. main sanctuary and will encompass the nave, narthex, predella, sacristy, and restrooms and will seat approximately 1,145 parishioners. Other improvements including the installation of 286 parking spaces, landscaping, trash enclosures, lighting and City standard drive-approaches will also be included.

There are also future plans to expand the main sanctuary that will consist of an approximately 7,165 sq. ft. expansion of the main sanctuary through the addition of transepts, for a total of approximately 22,832 sq. The expanded sanctuary will seat approximately 1,443 parishioners. An additional 100 on-site parking spaces would be provided with the expansion of the main sanctuary.

A second future expansion of the main sanctuary is planned and will include the addition of an approximately 668 sq. ft. day chapel to the principal sanctuary. The day chapel would be used for daily worship and would bring the total size of the principal sanctuary to 23,500 sq. ft. The day chapel would accommodate 25 to 30 parishioners during services.

Youth Center/Parish Hall

This building consists of a 7,557 sq. ft. Youth Center/Parish Hall that will serve as a multi-purpose room and will have kitchen, classroom, and bathroom facilities. Within the open

hall area, the parish will have the capabilities to have seven (7) classrooms using portable partitions.

Classrooms Building

It is anticipated that this building will consist of an approximately 18,968 sq. ft. two-story classroom building. The building will contain 17 classrooms as well as restroom facilities.

Parish Office Building

Construction of this building will include a 1,665 sq. ft. parish office building for church staff. It is anticipated that there will be two (2) to eight (8) employees will be on-site during operating hours.

Rectory

This building will consist of the construction of a 1,200 sq. ft. rectory with on-site living facilities for ecclesiastical leaders. The building will have a living room, two bedrooms, two bathrooms, office, kitchen and garage.

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**Figure 2-1 Regional Location**

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**Figure 2-2 Project Site Plan**

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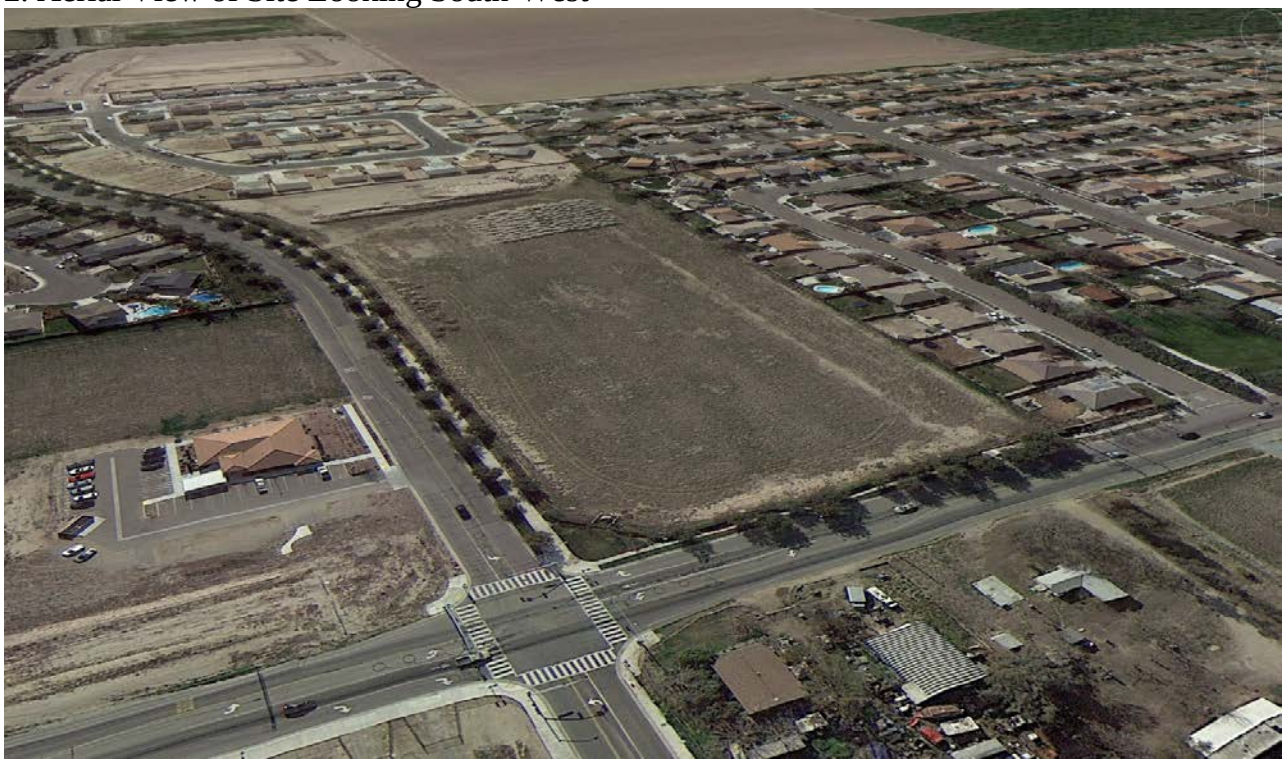
**Photos of Site**

1. Aerial View of Site Looking North-East

2. Aerial View of Site Looking South-West



3. Looking North-West from Morrison Street

4. Looking South-West from the Southwest Corner of Bardsley Avenue and Morrison Street

*City of Tulare*
Planning and Building Department
411 East Kern Avenue
Tulare, CA 93274

# SECTON 3
# Evaluation of Environmental Impacts

***Project Title: St. Rita's Catholic Church***

This document is the Initial Study/Mitigated Negative Declaration for a proposed five building church complex for the Roman Catholic Saint Rita's church to be constructed in on approximately 8-acres. The City of Tulare will act as the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

## 3.1 PROJECT PURPOSE

The purpose of this environmental document is to implement the California Environmental Quality Act (CEQA). Section 15002(a) of the CEQA Guidelines describes the basic purposes of CEQA as follows.

(1) Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
(2) Identify the ways that environmental damage can be avoided or significantly reduced.
(3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
(4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

This Initial Study of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.).

According to Section 15070(b), a Mitigated Negative Declaration is appropriate if it is determined that: (1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment.

**INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION**

1. **Project Title:** St. Rita's Catholic Church

2. **Lead Agency:** City of Tulare
411 E. Kern Avenue
Tulare, Ca 93274
(559) 684-4217 FAX 685-2339

3. **Applicant:** The Roman Catholic Bishop of Fresno
1550 North Fresno Street
Fresno, CA 93703

4. **Contact Person:** Steven Sopp, Associate Planner
City of Tulare
411 E. Kern Avenue
Tulare, CA 93274
(559) 684-4216

5. **Project Location:**
The project site is located within Tulare County in the southeastern area of the City of Tulare, on the southwest corner of Bardsley Avenue and Morrison Street. The project area is composed of one parcel that has been issued two Assessor's Parcel Numbers (APNs 184-190-013 and 184-200-046) totaling approximately 8 acres.

6. **General Plan Designation:**
Tulare General Plan designates the site as Low Density Residential.

7. **Zoning Designation:**
Tulare Zoning Map designates the site as R-1-5 (Single-family Residential, 5,000 sq. ft. minimum lot area).

8. **Surrounding Land Use Designations and Existing Land Use:**

| | | |
|---|---|---|
| North | LDR | single family residential / vacant |
| South | LDR | single family residential |
| East | NC/MDR/LDR | SFR / Multi-family / Office Commercial |
| West | LDR | single family residential |

9. **Project Description:** The proposed project is a five building church complex to be constructed in up to seven (7) phases. Phase 1 will consist of the construction of a 15,667 sq. ft. main sanctuary and will encompass the nave, narthex, predella, sacristy, and restrooms and will seat approximately 1,145 parishioners. Other improvements including parking, landscaping, trash enclosures and City standard drive-approaches will also be included. There are also future plans to expand the main sanctuary that will consist of an

approximately 7,165 sq. ft. expansion of the main sanctuary through the addition of transepts, for a total of approximately 22,832 sq. The expanded sanctuary will seat approximately 1,443 parishioners. An additional 100 on-site parking spaces would be provided with the expansion of the main sanctuary. A second future expansion of the main sanctuary is planned and will include the addition of an approximately 668 sq. ft. day chapel to the principal sanctuary. The day chapel would be used for daily worship and would bring the total size of the principal sanctuary to approximately 23,500 sq. ft. The day chapel would accommodate 25 to 30 parishioners during services.

The Youth Center/Parish Hall will be 7,557 sq. ft. and serve as a multi-purpose room and will have kitchen, classroom, and bathroom facilities. The Classrooms Building consists of an approximately 18,968 sq. ft. two-story classroom building. The building will contain 17 classrooms as well as restroom facilities.

The Parish Office Building consists of a 1,665 sq. ft. office building for church staff. The Rectory consists of a 1,200 sq. ft. building with on-site living facilities for ecclesiastical leaders. The building will have a living room, two bedrooms, two bathrooms, office, kitchen and garage.

10. **Parking and access:** Access to and from the project site would be through four gates. Three gates will be located on Morrison Street and one gate will be located on Bardsley Avenue.

    At full build out of the project a total of 386 parking stalls would be provided. These parking stalls would consist of 365 standard vehicle parking stalls and 21 stalls for handicap accessible vehicle parking.

11. **Landscaping and Design**: All landscaping and design components will comply with the City of Tulare Code of Ordinances §10.32.070 for Single Family Residential Districts. The landscape and design plans will be required at time the project submits for a building permit on the project and will be subject to water efficient landscape ordinance (WELO) per City of Tulare Code of Ordinances §10.196.061.

12. **Utilities and Electrical Services:** The proposed project would be connected into the City's water supply, wastewater, and storm water infrastructure systems and would be served by the City for solid waste disposal. In addition, electrical service would be provided by the local energy utility company, Southern California Edison, and gas would be provided by the Southern California Gas Company.

13. **Project Components:** The discretionary approvals required from the City of Tulare for the proposed project include:

    - Conditional Use Permit, subject to all required conditions of approval, including providing proof of resolution for the landlocked parcel.

# Acronyms

| | |
|---|---|
| AFY | Acre-feet Per Year |
| APN | Assessor's Parcel Number |
| ARB | Air Resources Board |
| BMP | Best Management Practices |
| CAA | Clean Air Act |
| CARB | California Air Resources Board |
| CCR | California Code of Regulation |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CESA | California Endangered Species Act |
| CNDDB | California Natural Diversity Database |
| CO | Carbon Monoxide |
| CWA | California Water Act |
| DHS | Department of Health Services |
| DWR | Department of Water Resources |
| EIR | Environmental Impact Report |
| EPA | Environmental Protection Agency |
| EV | Electric Vehicles |
| FEMA | Federal Emergency Management Agency |
| FESA | Federal Endangered Species Act |
| FMBTA | Federal Migratory Bird Treaty Act |
| FMMP | Farmland Mapping and Monitoring Program |
| FPPA | Farmland Protection Policy Act |
| GHG | Greenhouse Gas |
| GSA | Groundwater Sustainability Agency |
| GSP | Groundwater Sustainability Plan |
| IS/MND | Initial Study Mitigated Negative Declaration |
| ISR | Indirect Source Review |
| IT | Information Technology |
| LDR | Low Density Residential |
| LOS | Level of Service |
| MCL | Maximum Contaminant Level |
| MGD | Million Gallons a Day |
| MKJPA | Mid-Kaweah Joint Powers Authority |
| MLD | Most Likely Descendant |
| MND | Mitigated Negative Declaration |
| MT | Metric Tons |
| NAC | Noise Abatement Criteria |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Commission |

| | |
|---|---|
| NDIR | Non-Dispersive Infrared Photometry |
| NOD | Notice of Determination |
| $NO_x$ | Nitrogen Oxides |
| NPDES | National Pollutant Discharge Elimination System |
| NPS | National Park Service |
| PM | Particulate Matter |
| RCRA | Resource Conservation and Recovery Act of 1976 |
| ROG | Reactive Organic Gases |
| RWQCB | Regional Water Quality Control Board |
| SCH | State Clearinghouse |
| SGMA | Sustainable Groundwater Management Act |
| SHPO | State Historic Preservation Office |
| SJVAB | San Joaquin Valley Air Basin |
| SJVAPCD | San Joaquin Valley Air Pollution Control District |
| SO2 | Sulfur Dioxide |
| $SO_x$ | Sulfur Oxides |
| SPAL | Small Project Analysis Level |
| SWPPP | Storm Water Pollution Prevention Plan |
| TID | Tulare Irrigation District |
| UBSC | Uniform Building and Safety Code (UBSC) |
| USC | United States Code |
| USFWS | United States Fish & Wildlife Service |
| USGS | United States Geological Survey |
| UST | Underground Storage Tank |
| UWMP | Urban Water Management Plan |
| VOC | Volatile Organic Compound |
| WDR | Waste Discharge Requirements |
| WELO | Water Efficient Landscape Ordinance |
| WWTP | Wastewater Treatment Facility |
| WWTT | Wastewater Treatment Train |

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**Figure 3-1: Project Site Vicinity Map**

**Figure 3-2: Site Plan**

## 3.2 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "no Impact" answers that are adequately supported by the information sources a lead agency cites, in the parentheses following each question. A "No Impact" answer is adequately supported if the reference information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR if required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequate analyzed in an earlier EIR or negative declaration. Section 15063(c) (3)(D). In this case, a brief discussion should identify the following.

    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated." Describe and mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

## 3.3 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

**DETERMINATION:** (To be completed by the Lead Agency) Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION WILL BE PREPARED.

☑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPAT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A Negative Declaration is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is requested.

SIGNATURE

June 6, 2019

DATE

Mario A. Anaya, Principal Planner

PRINTED NAME

City of Tulare

Agency

## 3.4 ENVIRONMENTAL ANALYSIS

The following section provides an evaluation of the impact categories and questions contained in the checklist and identify mitigation measures, if applicable.

## I. AESTHETICS

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | ☑ |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within state scenic highway? | ☐ | ☐ | ☐ | ☑ |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publically accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☐ | ☑ |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☑ | ☐ |

**DISCUSSION:**

a) **No Impact:** A scenic vista is defined as a viewpoint that provides expansive views of highly valued landscape for the benefit of the general public. In the project vicinity the Sierra Nevada Mountains in the background as well as the flat rural agricultural landscape with Valley Oak trees rising from the valley floor are the two primary scenic vistas. Due to the distance between the project site and the Sierra Nevada Mountains, in conjunction with the poor air quality of the valley, the Sierra Nevada Mountains can rarely be seen from this location. In addition, there are no Valley Oak trees located on the project property. The project site is zoned for low density residential land uses and is surrounded by residential land uses. The proposed development would be compatible with the City's General Plan and Zoning Ordinance for development on the corner of two major streets, and the project would not have an adverse effect on a scenic vista due to the proposed development at the project site. For these reasons, this project would have *no impact* on scenic vistas.

b) **No Impact:** The site does not contain any rock outcropping or historic buildings. After review of the state route "scenic highways" in Tulare County, it was determined that

there are no highways designated by State or local agencies as “Scenic highways” near the project site. Therefore, the proposed project would have *no impact* to any scenic resources.

c) **No Impact:** The proposed project site is surrounded by residential subdivisions, therefore the City does not anticipate that the development of the proposed project will create a visually degraded character or quality to the project site or to the properties near and around the project site. Additionally, all of the development will be required to comply with the site plan review and design limitations required by the General Plan and the City’s adopted design guidelines and zoning regulations which require setbacks, landscaping and designs to limit impact to neighboring properties. Therefore, the proposed project would have *no impact* on the visual character of the area.

d) **Less Than Significant Impact:** The proposed project would not create a new source of light or glare so substantial that it would affect day or nighttime views in the area. Any proposed overhead or perimeter lighting would be designed using best practices to avoid spillover light to adjacent or nearby residential properties. The design and orientation of the proposed project lighting for this project would prevent substantial increases in light or glare in the vicinity of the project site. Therefore, the proposed project would have a *less than significant impact* with regard to existing day or nighttime views in the area of the project site.

## II. AGRICULTURE AND FOREST RESOURCES:

| In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California air Resources Board. - - Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☑ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract? | ☐ | ☐ | ☐ | ☑ |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned timberland Production (as defined by Government Code section 51104(g)? | ☐ | ☐ | ☐ | ☑ |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☑ |
| e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☑ |

**DISCUSSION:**

a) **No Impact:** The proposed project site is designated as Low Density Residential by the City and is labeled Vacant or Disturbed Land by the 2016 Map of State Farmland Mapping and Monitoring Program (FMMP). The proposed project would not result in the conversion of any land labeled Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, or of any land under Williamson Act contracts. Therefore, the project has *no impacts*.

b) **No Impact:** The project site is located within Tulare city limits and is zoned for residential land uses, with a church allowed as a conditional use. The project site is not under Williamson Act contract and therefore would create *no impacts.*

c) **No Impact:** The project site is not zoned for forest land or timberland and there is no forest land or timberland zone change proposed for the site, therefore *no impacts* would occur.

d) **No Impact:** No conversion of forestland, as defined under Public Resource Code or General Code, will occur as a result of the project and would create *no impacts*.

e) **No Impact:** The project site is located on a parcel zoned for residential land uses, at the southeastern boundary of the City limits and the project site is surrounded by residential uses to the north, south, east, and west. The proposed project is not proposing to convert any agriculturally zoned land to another use and would not require or result in conversion of farmland to non-agricultural use or forestland to non-forest use. For these reasons, the project has *no impacts*.

## III. AIR QUALITY

| Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☑ | ☐ |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | ☐ | ☐ | ☑ | ☐ |
| c) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☑ | ☐ |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☐ | ☑ | ☐ |

**CURRENT POLICIES AND REGULATIONS**

**Federal Clean Air Act -** The 1977 Federal Clean Air Act (CAA) authorized the establishment of the National Ambient Air Quality Standards (NAAQS) and set deadlines for their attainment. The Clean Air Act identifies specific emission reduction goals, requires both a demonstration of reasonable further progress and an attainment demonstration, and incorporates more stringent sanctions for failure to meet interim milestones. The U.S. EPA is the federal agency charged with administering the Act and other air quality-related legislation. EPA's principal function includes setting NAAQS; establishing minimum national emission limits for major sources of pollution; and promulgating regulations.

**California Clean Air Act -** California Air Resources Board coordinates and oversees both state and federal air pollution control programs in California. As part of this responsibility, California Air Resources Board monitors existing air quality, establishes California Ambient Air Quality Standards, and limits allowable emissions from vehicular sources. Regulatory authority within established air basins is provided by air pollution control and management districts, which control stationary-source and most categories of area-source emissions and develop regional air quality plans. The project is located within the jurisdiction of the San Joaquin Valley Air Pollution Control District.

The state and federal standards for the criteria pollutants are presented in Table 1. These standards are designed to protect public health and welfare. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soils, water, visibility, materials, vegetation and other aspects of general welfare. The U.S. EPA revoked the

national 1-hour ozone standard on June 15, 2005, and the annual $PM_{10}$ standard on September 21, 2006, when a new $PM_{2.5}$ 24-hour standard was established.

Air quality is described in terms of emissions rate and concentration of emissions. An emissions rate is the amount of pollutant released into the atmosphere by a given source over a specified time period. Emissions rates are generally expressed in units such as pounds per hour (1lbs/hr) or tons per year. Concentrations of emissions, on the other hand, represent the amount of pollutant in a given space at any time. Concentration is usually expressed in units such as micrograms per cubic meter, kilograms per metric ton, or parts per million. There are 4 primary sources of air pollution within the SJVAB: motor vehicles, stationary sources, agricultural activities, and construction activities.

Criteria air pollutants are classified in each air basin, county, or, in some cases, within a specific urbanized area. The classification is determined by comparing actual monitoring data with state and federal standards. If a pollutant concentration is lower than the standard, the pollutant is classified as "attainment" in that area. If an area exceeds the standard, the pollutant is classified as "non-attainment." If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified."

Air quality in the vicinity of the proposed project is regulated by several jurisdictions including the State and Federal Environmental Protection Agency (EPA), California Air Resources Board (CARB), and the San Joaquin Valley Air Pollution Control District (SJVAPCD). Each jurisdiction develops rules, regulations, policies, and/or goals to attain the directives imposed upon them through Federal and State legislation.

The Clean Air Act (CAA) of 1990 requires emission controls on factories, businesses, and automobiles by:

- Lowering the limits on hydrochloric acid and nitrogen oxides ($NO_X$) emissions, requiring the increased use of alternative-fuel cars, on-board canisters to capture vapors during refueling, and extending emission-control warranties.

- Reducing airborne toxins by requiring factories to install "maximum achievable control technology" and installing urban pollution control programs.

- Reducing Acid rain production by cutting sulfur dioxide emissions for coal-burning power plants.

**Table 1**
**Ambient Air Quality Standards**

| Pollutant | Averaging Time | California Standards[1] | | National Standards[2] | | |
|---|---|---|---|---|---|---|
| | | Concentration[3] | Method[4] | Primary[3,5] | Secondary[3,6] | Method[7] |
| Ozone ($0_3$) | 1 Hour | 0.09 ppm (180 µg/$m^3$) | Ultraviolet Photometry | - | Same as Primary Standard | Ultraviolet 8 Hour Photometry |
| | 8 Hour | 0.070 ppm (137 µg/$m^3$) | | 0.075 ppm (147 µg/$m^3$ | | |
| Respirable Particulate Matter ($PM_{10}$) | 24 Hour | 50 µg/$m^3$ | Gravimetric or Beta Attenuation | 150 µg/$m^3$ | Same as Primary Standard | Inertial Separation and Gravimetric Annual Analysis |
| | Annual Arithmetic Mean | 20 µg/$m^3$ | | - | | |
| Fine Particulate Matter ($PM_{2.5}$) | 24 Hour | - | Gravimetric or Beta Attenuation | 35 µg/$m^3$ | Same as Primary Standard | Inertial Separation and Gravimetric Annual Analysis |
| | Annual Arithmetic Mean | 12 µg/$m^3$ | | 12 µg/$m^3$ | | |
| Carbon Monoxide (CO) | 1 Hour | 20 ppm (23 mg/$m^3$) | Non-Dispersive Infrared Photometry (NDIR) | 35 ppm (40 mg/$m^3$) | None | Non-Dispersive Infrared Photometry (NDIR) |
| | 8 Hour | 9 ppm (10 mg/$m^3$) | | 9 ppm (10 mg/$m^3$) | | |
| | 8 Hour (Lake Tahoe) | 6 ppm (7 mg/$m^3$) | | - | | |
| Nitrogen Dioxide ($NO_2$)[8] | 1 Hour | 0.18 ppm (339 µg/$m^3$) | Gas Phase Chemiluminescence | 100 ppb (188 µg/$m^3$) | - | Gas Phase Chemiluminescence |
| | | 0.030 ppm | | 53 ppb | | |

| Pollutant | Averaging Time | California Standards[1] | | National Standards[2] | | |
|---|---|---|---|---|---|---|
| | | Concentration[3] | Method[4] | Primary[3,5] | Secondary[3,6] | Method[7] |
| | Arithmetic Mean | (57 µg/m$^3$) | | (100 µg/m$^3$) | Same as Primary Standard | |
| Sulfur Dioxide | 1 Hour | 0.25 ppm (655 µg/m$^3$) | Ultraviolet Fluorescence | 75 ppb (196 µg/m$^3$) | - | Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) |
| | 3 Hour | - | | - | 0.5 ppm (1300 µg/m$^3$) | |
| | 24 Hour | 0.04 ppm (105 µg/m$^3$ | | 0.14 ppm (for certain areas)[9] | - | |
| | Annual Arithmetic Mean | - | | 0.030 ppm (for certain areas)[9] | - | |
| Lead[10,11] | 30 Day Average | 1.5 µg/m$^3$ | Atomic Absorption | - | - | High Volume Sampler and Atomic Absorption |
| | Calendar Quarter | - | | 1.5 µg/m$^3$ (for certain areas)[11] | Same as Primary Standard | |
| | Rolling 3-month Average | - | | 0.15 µg/m$^3$ | | |
| Visibility Reducing Particles[12] | 8 Hour | See footnote 12 | Beta Attenuation and Transmittance through Filter Tape | No National Standard | | |

| Pollutant | Averaging Time | California Standards[1] | | National Standards[2] | | |
|---|---|---|---|---|---|---|
| | | Concentration[3] | Method[4] | Primary[3,5] | Secondary[3,6] | Method[7] |
| Sulfates | 24 Hour | 25 µg/m$^3$ | Ion Chromatography | | | |
| Hydrogen Sulfide | 1 Hour | 0.03 ppm (42 µg/m$^3$) | Ultraviolet Flourescence | | | |
| Vinyl Chloride[10] | 24 Hour | 0.01 ppm (26 µg/m$^3$ | Gas Chromatography | | | |

**Notes:**

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.
8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.
9. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per

| Pollutant | Averaging Time | California Standards[1] | | National Standards[2] | | |
|---|---|---|---|---|---|---|
| | | Concentration[3] | Method[4] | Primary[3,5] | Secondary[3,6] | Method[7] |
| billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.<br>10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.<br>11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.<br>12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively. | | | | | | |

In July of 1997, the EPA adopted a PM2.5 standard in recognition of increased concern over particulate matter 2.5 microns in diameter (PM2.5). Ending several years of litigation, EPA's PM2.5 regulations were upheld by the U.S. Supreme Court on February 27, 2001. According to information provided by the EPA, designations for the new PM2.5 standards began in the year 2002 with attainment plans submitted by 2005 for regions that violate the standard. In October 2006, EPA revised the PM2.5 standard to 35 µg/m3. The most recent revision to the PM2.5 standard was in 2012 when the EPA revised the annual PM2.5 standard to 12 µg/m3. The San Joaquin Valley was classified as a moderate nonattainment area for the 2012 PM2.5 standard effective April 15, 2015.

The following rules and regulations have been adopted by the Air District to reduce PM2.5 emissions throughout the San Joaquin Valley and verification by the City of compliance with these rules and regulations will be required, as applicable, to construct and operation of the project.

- Rule 4002 – National Emission Standards for Hazardous Air Pollutants. There are no existing structures located on the proposed site.

- Rule 4102 – Nuisance
  This rule applies to any source operation that emits or may emit air contaminants or other materials. In the event that the project or construction of the project creates a public nuisance, it could be in violation and be subject to district enforcement action.

- Rule 4601 – Architectural coatings. The purpose of this rule is to limit volatile organic compound (VOC) emissions from architectural coatings. Emission are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling

- Rule 4641- Cutback, slow cure, and emulsified asphalt, paving and maintenance operations. The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641.

- Rule 9510 – Indirect Source Review (ISR) This rule reduces the impact PM10 and NOX emissions from growth on the SJVB. This rule places application and emission reduction requirements on applicable development projects in order to reduce emissions through onsite mitigation, offsite SJVAPCD-administered projects, or a combination of the two. This project will submit an Air Impact Assessment (AIA) application in accordance with Rule 9510's requirements.

- Compliance with SJVAPCD Rule 9510 (ISR) reduces the emissions impact of the project through incorporation of onsite measures as well as payment of an offsite

fee that funds emissions reduction projects in the SJVAB. A number of "optional"/Above and Beyond" mitigation measures included in this project can be created as Rule 9510 – onsite mitigation measures.

- Regulation VIII – fugitive PM10 Prohibitions Rules 8011 – 8081 are designed to reduce PM10 emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track-out etc. Among the Regulation VIII Rules applicable to the project are the following:

- Rule 8011 – Fugitive Dust Administrative Requirements for Control of Fine Particulate Matter (PM10)

- Rule 8021 – Fugitive Dust Requirements for Control of fine Particulate Matter (PM10) from Construction, Excavation, and Extraction Activities

- Rule 8030 – Fugitive dust Requirements for Control of Fine Particulate Matter (PM10) from Handling and Storage of Fine Bulk Materials.

- Rule 8060 – Fugitive dust Requirements for Control of fine Particulate Matter (PM10) from Paved and Unpaved Roads.

**DISCUSSION:**

a) **Less Than Significant Impact:** The proposed project is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD is responsible for bringing air quality in the City of Tulare into compliance with federal and state air quality standards. The air district has Particulate Matter (PM) plans, Ozone Plans, and Carbon Monoxide Plans that serve as the clean air plans for the basin. Together, these plans quantify the required emission reductions to meet federal and state air quality standards and provide strategies to meet these standards.

**Construction Phase.** Project construction would generate pollution emissions from the following construction activities: site preparation, grading, building construction, and application of architectural coatings. The construction related emissions from these activities were calculated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2. The full CalEEMod Modeling output sheets can be found in Appendix A. As shown in Table 2 below, project construction related emissions do not exceed the thresholds established by the SJVAPCD.

**Table 2: Estimated Project Construction Emissions in Tons Per Year**

| | CO | ROG | $SO_x$ | $NO_x$ | PM10 | PM2.5 |
|---|---|---|---|---|---|---|
| Maximum Annual Emissions Generated from Project Construction | 2.1812 | 0.4772 | 0.0046 | 2.7044 | 0.2910 | 0.1852 |
| SJVAPCD Air Quality Thresholds of Significance | 100 | 10 | 27 | 10 | 15 | 15 |
| *Threshold established by SJVAPCD for $SO_x$, however emissions are reported as SO2 by CalEEMod. | | | | | | |

Source: SJVAPCD, CalEEMod (Appendix A)

**Operation Phase.** Implementation of the proposed project would result in long-term emissions associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, as well as mobile emissions. Operational emissions from these factors were calculated using CalEEMod. The full CalEEMod Modeling output sheets can be found in Appendix A. As shown in Table 3 below, the project's operational emissions do not exceed the thresholds established by the SJVAPCD. Because the emissions from both construction and operation of the proposed project would be below the thresholds of significance established by the SJVAPCD, the project would not conflict with or obstruct implementation of an applicable air quality plan and impacts would be *less than significant*.

**Table 3: Estimated Project Operational Emissions in Tons Per Year**

| | CO | ROG | $SO_x$ | $NO_x$ | PM10 | PM2.5 |
|---|---|---|---|---|---|---|
| Maximum Annual Emissions Generated from Project Operations | 1.9191 | 0.4547 | 0.0087 | 2.2184 | 0.4889 | 0.1389 |
| SJVAPCD Air Quality Thresholds of Significance | 100 | 10 | 27 | 10 | 15 | 15 |
| *Threshold established by SJVAPCD for $SO_x$, however emissions are reported as SO2 by CalEEMod. | | | | | | |

Source: SJVAPCD, CalEEMod (Appendix A)

b) **Less Than Significant Impact:** The SJVAPCD accounts for cumulative impacts to air quality in Section 1.8 "Thresholds of Significance – Cumulative Impacts" in its 2015 Guide for Assessing and Mitigating Air Quality Impacts. The SJVAPCD considered basin-wide cumulative impacts to air quality when developing its significance thresholds. Because construction emissions are relatively insignificant and can be mitigated with implementation of air district control measures and operational emissions would be well below air district thresholds established to attain and/or maintain attainment with state and federal air quality standards, impacts regarding cumulative emissions would be *less than significant*.

c) **Less Than Significant Impact:** During construction, pollution concentrations will temporarily increase, however construction activities will remain below the thresholds of significance established by the San Joaquin Valley Unified Air Pollution Control District. During operations, the facility would not produce any notable air pollution. Because impacts to air quality would be below the significance thresholds established by CARB and SJVAPCD, the impact is *less than significant*.

d) **Less Than Significant Impact:** The project would create temporary typical construction odors during the construction phase. Since any odors from project construction would be temporary and common to any construction activity, and the project would not create objectionable odors during facility operations, impacts are *less than significant*.

## IV. BIOLOGICAL RESOURCES

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish & Game or U.S. fish and Wildlife Service? | ☐ | ☑ | ☐ | ☐ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☑ |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☑ |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ☑ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☑ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☑ |

The project site is bound by single family residences to the west and south, Bardsley Avenue and single-family residences to the north, and Morrison Street, a health clinic, single-family residences, and a 65 unit multi-family apartment complex currently under construction to the east.

The California Natural Diversity Database (CNDDB) QuickView Tool was used to evaluate special status species occurrences in the Tulare USGS 7.5 minute quadrangle where the project is located. Six special status animal species and two special status plant species were

identified within this search area. These species and their protection status are listed in the tables below:

**Table 4: Special Status Animal Species**

| Common Name | Scientific Name | Status |
|---|---|---|
| western spadefoot | Spea hammondii | CSC |
| Swainson's hawk | Buteo swainsoni | CT |
| burrowing owl | Athene cunicularia | CSC |
| An andrenid bee | Andrena macswaini | - |
| San Joaquin kit fox | Vulpes macrotis mutica | FE, CT |
| Tipton kangaroo rat | Dipodomys nitratoides nitratoides | FE, CE |

**Status Codes**

| | | | |
|---|---|---|---|
| FE | Federally Endangered | CE | California Endangered |
| | | CT | California Threatened |
| | | CSC | California Species of Special Concern |

Source: CNDDB Quickview Tool

**Table 5: Special Status Plant Species**

| Common Name | Scientific Name | Status |
|---|---|---|
| San Joaquin adobe sunburst | Pseudobahia peirsonii | FT, CE, 1B |
| California jewelflower | Caulanthus californicus | FE, CE, 1B |

**Status Codes**

| | | | |
|---|---|---|---|
| FE | Federally Endangered | CE | California Endangered |
| FT | Federally Threatened | | |
| 1B | Plants Rare, Threatened, or Endangered in California and Elsewhere | | |

Source: CNDDB Quickview Tool

Federal Endangered Species Act (FESA**)** - defines an *endangered species* as "any species or subspecies that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

The Federal Migratory Bird Treaty Act (FMBTA: 16 USC 703-712): FMBTA prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it actually covers almost all birds native to the United States, even those that are non-migratory. The FMBTA encompasses whole birds, parts of birds, and bird nests and eggs.

Although the United States Fish & Wildlife Service (USFWS) and its parent administration, the U.S. Department of the Interior, have traditionally interpreted the FMBTA as prohibiting incidental as well as intentional "take" of birds, a January 2018 legal opinion issued by the Department of the Interior now states that incidental take of migratory birds while engaging in otherwise lawful activities is permissible under the FMBTA. However, California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the FMBTA (Section 3513), as well as any other native non-game bird (Section 3800), even if incidental to lawful activities.

Birds of Prey (CA Fish and Game Code Section 3503.5): Birds of prey are protected in California under provisions of the Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The bald eagle and golden eagle are afforded additional protection under the federal Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs.

California Endangered Species Act (CESA) **–** prohibits the take of any state-listed threatened and endangered species. CESA defines *take* as "any action or attempt to hunt, pursue, catch, capture, or kill any listed species." If the proposed project results in a take of a listed species, a permit pursuant to Section 2080 of CESA is required from the CDFW.

**DISCUSSION:**

**a) Less Than Significant Impact with Mitigation Incorporated:** Based on the existing conditions of the project site and vicinity (vacant open field with wild grasses and scrubland with larger semi-rural lots to the north and nearby agricultural fields on the edge of the existing residential subdivisions), there is potential for the following special status species to occur within the vicinity of the project site:

Swainson's hawk: The Swainson's hawk is a raptor that migrates to California during its breeding season. The species usually nests in mature trees in riparian areas, oak savannah, and at the margins of agricultural fields. The species forages for small rodents in grasslands and low profile agricultural fields. The project site could be used as foraging habitat for this species. The following mitigation measures will be implemented to prevent significant impacts from occurring to the Swainson's hawk and other nesting raptors.

**Mitigation Measure BIO-1a:** In order to avoid impacts to nesting raptors and migratory birds, the project shall be constructed, if feasible, outside the nesting season, or between September 1st and January 31st.

**Mitigation Measure BIO-1b:** If project activities must occur during the nesting season (February 1-August 31), a qualified biologist shall conduct preconstruction surveys for active raptor and migratory bird nests within 14 days prior to the start of these activities. The survey shall include the proposed work area(s) and surrounding lands within 500 feet,

where accessible, for all nesting raptors and migratory birds save Swainson's hawk; the Swainson's hawk survey shall extend to 0.5 mile outside of work area boundaries. If no nesting pairs are found within the survey area, no further mitigation is required.

**Mitigation Measure BIO-1c:** Should any active nests be discovered near proposed work areas, the biologist shall determine appropriate construction setback distances based on applicable CDFW guidelines and/or the biology of the affected species. Construction-free buffers shall be identified on the ground with flagging, fencing, or by other easily visible means, and shall be maintained until the biologist has determined that the young have fledged.

Burrowing Owl: The burrowing owl can be found in dry annual or perennial grasslands, deserts, and scrublands characterized by low growing vegetation. The species is dependent upon burrowing mammals, most notably the California ground squirrel, for nest burrows. The project site consists of open space and low scrubland vegetation, which could be suitable habitat for the burrowing owl. The following mitigation measures shall be implemented to prevent significant impacts from occurring to the burrowing owl:

**Mitigation Measure BIO-2a:** (Take Avoidance Survey). A take avoidance survey for burrowing owls shall be conducted by a qualified biologist knowledgeable of the species within 14 days prior to the start of construction. This take avoidance survey shall be conducted according to methods described in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The survey area shall include all suitable habitat on and within 200 meters of project impact areas, where accessible.

**Mitigation Measure BIO-2b:** (Avoidance of Active Nests and Roosts). If project activities are undertaken during the breeding season (February 1-August 31) and active nest burrows are identified within or near project impact areas, a 200-meter disturbance-free buffer shall be established around these burrows, unless a qualified biologist approved by CDFW verifies through noninvasive methods either that the birds have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Owls present on site after February 1 will be assumed to be nesting unless evidence indicates otherwise. The protected exclusion zone established for the breeding season shall remain in effect until August 31 or, as determined based on monitoring evidence, until the young owl(s) is foraging independently or the nest is no longer active.

**Mitigation Measure BIO-2c:** (Passive Relocation of Resident Owls). During the nonbreeding season (September 1-January 31), resident owls occupying burrows in project impact areas may be passively relocated to alternative habitat after consulting with the CDFW. Prior to passively relocating burrowing owls, a Burrowing Owl Exclusion Plan shall be prepared by a qualified biologist in accordance with Appendix E of the *Staff Report on Burrowing Owl Mitigation* (CDFW, 2012). The Burrowing Owl Exclusion Plan shall be submitted to the CDFW for review prior to implementation. Relocation of any owls during the nonbreeding season

shall be performed by a qualified biologist using one-way doors, which shall be installed in all burrows in the impact area and left in place for at least two nights. The doors shall be removed and the burrows backfilled immediately before the initiation of grading or, if no grading would occur, left in place until the end of construction. To avoid the potential for owls evicted from a burrow to occupy other burrows in the project site, one-way doors shall be placed in all potentially suitable burrows within the impact area when eviction occurs.

San Joaquin kit fox : The San Joaquin kit fox relies primarily on grassland or scrubland habitat; however, they can also be found in grazing areas, urban settings, and in areas adjacent to tilled or fallow fields. They require underground dens for protection from predators, heat regulation, and to raise pups, and usually utilize burrows created by other small, burrowing mammals. The project site consists of open space and low scrubland vegetation, which could be suitable foraging or burrowing habitat for the San Joaquin kit fox.

The following measures adapted from the *U.S. Fish and Wildlife Service 2011 Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* will be implemented:

**Mitigation Measure BIO-3a:** Preconstruction surveys for the San Joaquin kit fox shall be conducted on and within 200 feet of the project site, no more than 30 days prior to the start of ground disturbance activities on the site. The primary objective is to identify kit fox habitat features (e.g., potential dens and refugia) on and adjacent to the site and evaluate their use by kit foxes. Protection provided by dens for shelter, escape, cover, and reproduction is vital to the survival of San Joaquin kit foxes. For San Joaquin kit foxes, the ecological value of potential, known, and natal/pupping dens differs; therefore, each den type requires the appropriate level of protection. The following text describes the different steps involved with implementing this mitigation measure:

Determine Den Status. When a suitable den or burrow is discovered, a qualified biologist shall determine whether the hole is occupied by a San Joaquin kit fox. Den entrances at least 4 inches in diameter (but not greater than 20 inches) qualify as suitable for San Joaquin kit fox use. Some dens can be immediately identified as recently used by kit fox; qualifying signs include kit fox tracks, scats, and a fresh soil apron extending up to 6 feet from the den entrance. Dens with proper dimensions, but no obvious sign will require further investigation. A remote motion-sensing camera with tracking medium shall be deployed for at least 5 days in an attempt to document a San Joaquin kit fox using the den. If, after 5 days, no San Joaquin kit foxes are detected and the hole has remained unchanged (no new tracks or excavations are observed), and there is no historic record of an active kit fox den at that location, the den will be deemed a “potential den” and unoccupied. The den will be considered occupied if a kit fox is photographed using the den or if a recent sign is found. The biologist shall contact CDFW and the USFWS upon the confirmation of any occupied den.

Preconstruction surveys shall be repeated following any lapses in construction of 30 days or more.

**Mitigation Measure BIO-3b:** Should active kit fox dens be detected during preconstruction surveys, the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW shall be notified. A disturbance-free buffer shall be established around the burrows in consultation with the USFWS and CDFW, to prevent access to the occupied den by construction equipment and personnel who are not biologists, and to be maintained until an agency-approved biologist has determined that the burrows have been abandoned. After construction activities would no longer affect the den, all fencing and flagging shall be removed to avoid attracting attention to the den by other animals or humans. All onsite flagging and buffer delineations shall be kept in good working order for the duration of activity near the den or until the den is determined to be unoccupied, whichever occurs first. The following radii are standard San Joaquin kit fox buffer distances:

- Known occupied den—100 feet
- Occupied natal/pupping den—500 feet
- Occupied atypical den—50 feet

In the exclusion zones, only essential vehicle and foot traffic shall be permitted. No activity that would destroy the den may occur, and no activity that may harm a San Joaquin kit fox will proceed until the individual is out of harm's way, without harassment. No activity that may cause strong ground vibrations may occur in the exclusion zone until the den is no longer occupied. Essential vehicle traffic shall include any emergency vehicles. If San Joaquin kit foxes are not observed above ground, essential foot traffic also may be allowed. The USFWS and CDFW shall be notified of any reductions in the standard radii or allowance for additional activity in the restrictive exclusion zones based on individual circumstances to provide USFWS and CDFW an opportunity to offer technical guidance. If a known or occupied den cannot be avoided, consultation with the USFWS and CDFW shall be required.

**Mitigation Measure BIO-3c:** Construction activities shall be carried out in a manner that minimizes disturbance to kit foxes in accordance with the USFWS Standardized Recommendations. The applicant shall implement all minimization measures presented in the Construction and On-going Operational Requirements section of the Standardized Recommendations, including, but not limited to:

• Project-related vehicles shall observe a daytime speed limit of 15-mph throughout the site in all project areas, except on county roads and State and Federal highways; this is particularly important at night when kit foxes are most active. Night-time construction should be minimized to the extent possible. However if it does occur, then the speed limit shall be reduced to 10-mph. Off-road traffic outside of designated project areas shall be prohibited.

• To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than 2-feet deep shall be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or

wooden planks shall be installed. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the USFWS and CDFW shall be contacted.

• Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe shall not be moved until USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.

• All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from a construction or project site.

• No firearms shall be allowed on the project site.

• No pets, such as dogs or cats, shall be permitted on the project site, to prevent harassment, mortality of kit foxes, or destruction of dens.

• Use of rodenticides and herbicides in project areas shall be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional project-related restrictions deemed necessary by USFWS. If rodent control must be conducted, zinc phosphide shall be used because of a proven lower risk to kit fox.

• An employee education program shall be conducted for the project. The program shall consist of a brief presentation by persons knowledgeable in kit fox biology and protection to explain endangered species concerns to contractors, their employees, and agency personnel involved in the project. This training will include a description of the kit fox and its habitat needs; a report of the occurrence of kit fox in the project vicinity; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of the measures being taken to reduce impacts to the species during project construction and implementation. The training will include a handout with all of the training information included in it. The applicant will use this handout to train any construction personnel that were not in attendance at the first meeting, prior to those personnel starting work on the site.

• A representative shall be appointed by the Applicant who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a

dead, injured or entrapped kit fox. The representative shall be identified during the employee education program and their name and telephone number shall be provided to USFWS.

• Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. shall be re-contoured if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the project, but after project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas shall be determined on a site-specific basis in consultation with USFWS, CDFW, or revegetation experts.

• Any contractor, employee, or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified in writing within three working days in case of the accidental death or injury of a San Joaquin kit fox during project-related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal, and any other pertinent information. The CDFW contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or Mr. Paul Hoffman, the wildlife biologist, at (530) 934-9309.

• New sightings of kit fox shall be reported to the CNDDB. A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed shall also be provided to USFWS.

Tipton kangaroo rat: The Tipton kangaroo rat occupies underground burrows in scrubland habitats within the San Joaquin Valley. The species was once widely distributed throughout the valley; however, their remaining habitat is extremely limited. A Habitat Suitability Study was conducted in 2016 for CDFW. The report found that the project site and surrounding areas are not considered suitable habitat for the Tipton kangaroo rat. The project will not impact the Tipton kangaroo rat and no mitigation is required.

Western spadefoot: The Western spadefoot is a small toad found in grasslands within the San Joaquin Valley. The species requires wetland for breeding and is typically found within 1,200 ft. of aquatic habitat. Wetland habitat suitable for breeding by the western spadefoot is absent from the project site and adjacent lands. The Project would have no impact on western spadefoot and no mitigation is required.

San Joaquin adobe sunburst: The San Joaquin adobe sunburst is found in valley and foothill grassland and cismontane woodland. The flowering plant requires heavy clay soils often found on grassy valley floors and rolling foothills. According to Figure 4.6-1 in the City of Tulare's General Plan EIR, the soils found on the project site are loams and sandy loams.

Therefore, the project site is not suitable habitat for this species and no impact on this species would occur. No mitigation is required.

California jewelflower **:** The California jewelflower is a State and Federally endangered species that can occur in chenopod scrub, pinyon and juniper woodland, and sandy valley and foothill grassland. The species is presumed be extirpated from Tulare County by CDFW and the project site and adjacent lands do not contain suitable habitat for this species. It is extremely unlikely for the species to occur on the project site. The Project would have no impact on this species and no mitigation is required.

Implementation of Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-2a, BIO-2b, BIO-2c, BIO-3a, BIO-3b, and BIO-3c, will ensure that impacts to species identified as a candidate, sensitive, or special status will be *less than significant with mitigation incorporated.*

b) **No Impact:** As identified in the City's General Plan EIR, the project site in not located within or adjacent to an identified sensitive riparian habitat or other natural community. Therefore, the proposed project would have *no impact* to riparian habitat.

c) **No Impact:** As identified in the City's General Plan EIR, there are no known wetlands located in or around the Project site as reviewed on the U.S. Fish and Wildlife Service National Wetlands Inventory map, and in addition, there are no state protected wetlands at or in the vicinity of the Project site. Therefore, the project will have *no impact* on federal or state protected wetlands.

d) **No Impact:** As identified in the City's General Plan EIR, there are no identified migratory corridors on or immediately surrounding the site. Therefore, the proposed project would have *no impacts*.

e) **No Impact:** The City of Tulare has an oak tree preservation policy according to Tulare Municipal Code 8.52.100 (Preservation of Heritage Trees). There are no oak trees on the project site, therefore there would be *no impacts*.

f) **No Impact:** There are no local or regional habitat conservation plans for the area and *no impacts* would occur.

## V. CULTURAL RESOURCES

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5? | ☐ | ☑ | ☐ | ☐ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | ☐ | ☑ | ☐ | ☐ |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☑ | ☐ | ☐ |

**Discussion:**

a) **Less Than Significant Impact with Mitigation Incorporated:** There are no known historical resources located within the project area and the soils in the project area have been previously disturbed and were most recently disturbed in the development of the adjacent residential subdivisions. There would be no excavation in undisturbed soils or in areas with known historical resources. However, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measure CUL-1 would ensure that impacts due to discovery of cultural resources during excavation would be *less than significant with mitigation incorporated*.

**Mitigation Measure CUL-1:** If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery, excavation and Native American consultation may be warranted to mitigate any potential significant impacts.

b) **Less Than Significant Impact with Mitigation Incorporated:** There are no known archaeological resources located within the project area and no excavation proposed in undisturbed soils. However, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measure CUL-1 would ensure that impacts due to discovery of cultural resources during excavation would be *less than significant with mitigation incorporated*.

c) **Less Than Significant Impact with Mitigation Incorporated:** There are no known human remains buried in the project vicinity and the soils in the project area have been previously disturbed. No excavation in undisturbed soils is proposed, however if human remains are unearthed during development, there is a potential for a significant impact. As such, implementation of Mitigation Measure CUL-2 would ensure that impacts remain *less than significant with mitigation incorporated*.

**Mitigation Measure CUL-2:** The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

## VI. ENERGY

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☑ | ☐ |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☐ | ☑ |

a) **Less Than Significant Impact:** The proposed project would require the use of electricity, natural gas, and use of transportation fuel during the construction phase. The demand for these resources would be supplied from existing services within the proposed project area. The overall construction activities would require minimal consumption of these resources as these activities would be temporary and conclude once the proposed project is complete.

The proposed project consists of a five building church campus development. Operation of the Project would result in an increase in energy consumption for multiple purposes, including, but not limited to, inside and outside lighting, building heating and cooling, and commercial equipment.

The project would be required to comply with the 2016 California Green Building Standards Code. The project also would be required to comply with the building energy efficiency standards of California Code of Regulations Title 24, Part 6 in effect at the time of project approval. Compliance with these standards would reduce energy consumption associated with project operations. The emissions estimates for energy use provided in the CalEEMod output sheets in Appendix A take into account these mandatory compliance measures.

Overall, project construction and operations would not consume energy resources in a manner considered wasteful, inefficient, or unnecessary. Project impacts related to energy consumption would be considered *less than significant*.

b) **No Impact:** The proposed project would be required to abide by the requirements of state and local plans for renewable energy efficiency, including Title 24 2013 standards. There would be *no impact*.

## VII. GEOLOGY AND SOILS

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☑ | ☐ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☑ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☑ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☐ | ☑ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☑ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ☐ | ☑ | ☐ |
| d) Be located on expansive soil, as defined in Table 18- 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ☐ | ☑ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☑ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☐ | ☑ | ☐ |

**Discussion:**

a-i and ii) **Less Than Significant Impact:** According to the state Regulatory Earthquake maps, no active faults underlay the project site, nor are any active faults located in the surrounding project vicinity. Although the project is located in an area of low seismic activity, the project could be affected by ground shaking from nearby faults. The potential for strong seismic ground shaking on the project site is not a significant environmental concern due to the infrequent seismic activity of the area and distance to

the faults. Furthermore, the proposed project would not expose people to seismic ground shaking beyond the conditions that currently exist throughout the project area. The project would be constructed to the standards of the most recent seismic Uniform Building and Safety Code (UBSC). Compliance with these design standards will ensure potential impacts related to strong seismic ground shaking would be *less than significant.*

a-iii) **Less Than Significant Impact:** Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil. The 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan identifies the risk of liquefaction within the county as low because the soil types in the area are either too coarse or too high in clay content to be suitable for liquefaction. According to state soils maps, the project site consists mostly of Colpien loam and also Nord fine sandy loam and does not contain soils suitable for liquefaction. The impact would be *less than significant*.

a-iv) **No Impact:** The project site is generally flat and previously disturbed. There are no hill slopes in the area and no potential for landslides. No geologic landforms exist on or near the site that would result in a landslide event. There would be *no impact.*

b) **Less Than Significant Impact:** Because the project site is relatively flat, the potential for erosion is low. However, construction-related activities and increased impermeable surfaces can increase the probability for erosion to occur. Construction-related impacts to erosion will be temporary and subject to best management practices (BMPs) required by stormwater pollution prevention plans (SWPPP), which are developed to prevent significant impacts related to erosion from construction. After construction, stormwater will be directed to the regional stormwater basin, located just over ¼ mile south of the project site, to prevent erosion from occurring on- or off-site. Because impacts related to erosion would be temporary and limited to construction and required best management practices would prevent significant impacts related to erosion, the impact will remain *less than significant*.

c) **Less Than Significant Impact:** Substantial grade change would not occur in the topography to the point where the project would expose people or structures to potential adverse effects on-, or off-site, such as landslides, lateral spreading, subsidence, liquefaction or collapse. The impact would be *less than significant*.

d) **No Impact:** Expansive soils contain large amounts of clay, which absorb water and cause the soil to increase in volume. Conversely, the soils associated with the proposed project site are granular, well-draining, and therefore have a limited ability to absorb water or exhibit expansive behavior. Because the soils associated with the project are

not suitable for expansion, implementation of the project will pose no risk to life or property caused by expansive soils and there is *no impact*.

e) **No Impact:** The proposed project will have access to existing City wastewater infrastructure and would not require the use of septic tanks or alternative wastewater disposal systems. There is *no impact*.

f) **Less Than Significant Impact:** There are no known paleontological resources located within the project area and no excavation proposed in undisturbed soils, particularly to a depth with a potential to unearth paleontological resources. Potential impacts would be *less than significant*.

## VIII. GREENHOUSE GAS EMISSIONS

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

**Climate Change -** (also referred to as Global Climate change) is sometimes used to refer to all forms of climatic inconsistency, but because the earth's climate is never static, the term is more properly used to imply a significant change from one climatic condition to another. In some cases, climate change has been used synonymously with the term "global warming." Scientists however, tend to use the term in the wider sense to address uneven patterns of predicted global warming and cooling and include natural changes in climate.

**Global Warming -** refers to an increase in the near surface temperature of the earth. Global warming has occurred in the distant past as the result of natural influences, but the term is commonly used to refer to the warming predicted to occur because of increased emissions of greenhouse gases. Scientists generally agree that the earth's surface has warmed by about $1^{o}$ F in the past 140 years, but warming is not predicted evenly around the globe. Due to predicted changes in the ocean currents, some places that are currently moderated by warm ocean currents are predicted to fall into deep freeze as the pattern changes.

**Greenhouse Effect -** is the warming of the earth's atmosphere attributed to a buildup of carbon dioxide ($CO_2$) or other gases; some scientists think that this build-up allows the sun's

rays to heat the earth, while making the infrared radiation atmosphere opaque to infrared radiation, thereby preventing a counterbalancing loss of heat.

**Greenhouse Gases -** are those that absorb infrared radiation in the atmosphere. GHG include water vapor, $CO_2$, methane, nitrous oxide ($N_2O$), halogenated fluorocarbons, ozone, per fluorinated carbons PFCs), and hydroflurocarbons.

**Discussion:**

a) **Less Than Significant Impact:** Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. The project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Implementation of the proposed project would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of $CO_2$ and other GHG pollutants, such as methane (CH4) and nitrous oxide ($N_2O$), from mobile sources and utility usage.

   The proposed project's short-term construction-related and long-term operational GHG emissions were estimated using CalEEMod Version 2016.3.2. See Appendix A of this IS-MND for complete CalEEMod inputs and results. CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Emissions are expressed in annual metric tons of $CO_2$ equivalent units of measure (i.e., $MTCO_2e$), based on the global warming potential of the individual pollutants.

   **Short-Term Construction GHG Emissions:** Estimated increases in GHG emissions associated with construction of the proposed project are summarized in Table 6. As presented in the table, the total short-term construction emissions of GHG associated with the Project are estimated to be approximately 515 metric tons (MT) of $CO_2e$. This represents a low of approximately 104 and a high of 411 MT of $CO_2e$ emitted during each of the construction years (2020 and 2021). These construction GHG emissions are a one-time release and are comparatively much lower than emissions associated with operational phases of a project. Cumulatively, these construction emissions would not generate a significant contribution to global climate change, as they would not continue to occur into the future.

**Table 6: Estimated Project Construction GHG Emissions (Mitigated Metric Tons Per Year)**

| | Bio-$CO_2$ | NBio-$CO_2$ | Total $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
|---|---|---|---|---|---|---|
| 2020 | 0.0 | 409.1503 | 409.1503 | 0.0758 | 0.0 | 411.0458 |
| 2021 | 0.0 | 103.2845 | 103.2845 | 0.0199 | 0.0 | 103.7824 |
| **Total** | **0.0** | **512.4348** | **512.4348** | **0.0957** | **0.0** | **514.8282** |

Source: SJVAPCD, CalEEMod (Appendix A)

**Long-Term Operational GHG Emissions:** Implementation of the proposed project would result in long-term greenhouse gas emissions associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, as well as mobile emissions. These estimated operational emissions are summarized in Table 7.

**Table 7: Estimated Project Operation GHG Emissions (Mitigated Metric Tons Per Year)**

| Category | Bio-$CO_2$ | NBio-$CO_2$ | Total $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
|---|---|---|---|---|---|---|
| Area | 0.0 | 0.4532 | 0.4532 | 0.004 | 0.001 | 0.4565 |
| Energy | 0.0 | 134.5332 | 134.5332 | 0.0046 | 0.0016 | 135.1128 |
| Mobile | 0.0 | 791.1242 | 791.1242 | 0.064 | 0.0 | 792.7231 |
| Waste | 24.5873 | 0.0 | 24.5873 | 1.4531 | 0.0 | 60.914 |
| Water | 1.5558 | 14.7280 | 16.2838 | 0.1604 | 0.0039 | 21.4557 |
| **Total** | **26.1431** | **940.8385** | **966.9815** | **1.6821** | **0.0055** | **1,010.6621** |

Source: SJVAPCD, CalEEMod (Appendix A)

The U.S. Environmental Protection Agency (EPA) published a rule for the mandatory reporting of greenhouse gases (GHG) from sources that in general emit 25,000 MT or more of $CO_2e$ per year. Project GHG emissions were calculated using CalEEMod (emissions output results found in Appendix A) based on 53,490 square feet of development with a church campus and 386 parking spaces at full buildout. The proposed project is estimated to produce 1,010.66 MT of $CO_2e$ per year, which is well below the 25,000 MT threshold for GHG emissions.

Therefore, because the GHG emissions related to construction and operation of the proposed project are below accepted thresholds of significance, the potential impacts are considered *less than significant*.

b) **No Impact:** The proposed project would comply with all federal, state, and local rules pertaining to the regulation of greenhouse gas emissions. In addition, the project would implement Best Performance Standards developed by the SJVAPCD. Projects implementing Best Performance Standards are determined to have a less than significant impact on global climate change. The project would not conflict with any plan, policy, or regulation developed to reduce GHG emissions. There would be *no impact*.

## IX. HAZARDS AND HAZARDOUS MATERIALS

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

**Discussion:**

a) **Less Than Significant Impact:** Project construction activities may involve the use and transport of hazardous materials. During construction, the contractor will use fuel trucks to refuel onsite equipment, and may use paints and solvents to a limited degree. The project must adhere to applicable zoning and fire regulations regarding the use and storage of any hazardous substances. During operation the church campus would not produce any hazardous waste. Further, there is no evidence that the site has been used

for underground storage of hazardous materials. Therefore, the proposed project will have *less than significant impacts* to hazardous materials.

b) **Less Than Significant Impact:** There is no reasonably foreseeable condition or incident involving the project that could result in release of hazardous materials into the environment. There are *less than significant impacts.*

c) **Less Than Significant Impact:** The project is located within ¼ mile south of Alpine Vista School and Mission Oak High School, however there is no reasonably foreseeable condition or incident involving the emission, handling, or disposal of hazardous materials, substances, or waste that would affect these existing schools. The project does not involve the use or storage of hazardous substances. Therefore, there would be a *less than significant impact*.

d) **No Impact:** The project site is not listed as a hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control. There would be *no impact*.

e) **No Impact:** The proposed project site is not located within the boundary of an airport land use plan and is not within two miles of a public airport or public use airport. Mefford Field Airport is located over 2 ½ miles southwest of the project site and Visalia Municipal Airport is located over nine miles northwest of the project site. Therefore, there is *no impact*.

f) **No Impact:** The City's site plan and environmental review procedures shall ensure compliance with emergency response and evacuation plans. In addition, the site plan has been reviewed by the Fire Department per standard City procedure to ensure consistency with emergency response and evacuation needs, which will be verified and checked during building plan submittals. Therefore, the proposed project would have *no impact* on emergency evacuation.

g) **No Impact:** The land surrounding the project site is developed with suburban and agricultural uses and is not considered to be wildlands. Additionally, the 2017 Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan finds that fire hazards within the City of Tulare, including the proposed project site, have low frequency, limited extent, limited magnitude, and low significance. The proposed project would not expose people or structures to significant risk of loss, injury or death involving wildland fires and there is *no impact*.

## X. HYDROLOGY AND WATER QUALITY

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ☐ | ☑ | ☐ |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☑ | ☐ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | ☐ | ☐ | ☐ | ☐ |
| (i) result in substantial erosion or siltation on- or off-site; | ☐ | ☐ | ☑ | ☐ |
| (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | ☐ | ☐ | ☑ | ☐ |
| (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | ☐ | ☐ | ☑ | ☐ |
| (iv) Impede or redirect flood flows? | ☐ | ☐ | ☐ | ☑ |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☐ | ☑ |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☑ | ☐ |

**Discussion:**

a) **Less Than Significant Impact:** Construction would include excavation, grading, and other earthwork that may occur across the 8 acre project site. During storm events, exposed construction areas across the project site may cause runoff to carry pollutants, such as chemicals, oils, sediment, and debris. However, the project would require complying with a Stormwater Pollution Prevention Plan (SWPPP), which identifies all

potential sources of pollution that could affect stormwater discharges from the project site and identifies best management practices (BMPs) related to stormwater runoff for the project to use. The proposed project would tie into the City's sewer system and wastewater treatment plant, which has sufficient capacity to accommodate this project. Therefore, since the project will not violate any water quality standards, the impacts would be *less than significant*.

b) **Less Than Significant Impact:** The project would result in a reduction in on-site percolation to the groundwater basin, because the project would create an increase in the amount of paved and impervious surfaces. However, this impact would be greatly reduced because the stormwater flows would be directed to the regional basin located just over a ¼ mile south of the project site, where the water would be allowed to pool and percolate to the groundwater basin. The project has been reviewed by the City of Tulare Engineer who has determined that the Project will not have a significant impact on the existing water system, and would tie in to the existing water infrastructure for this part of the City. Therefore, the project would have a *less than significant impact* on groundwater resources.

c) **Less Than Significant Impact:**

(i) The proposed project includes the construction and operation of a five building church campus to be constructed in seven (7) phases. The construction of this project may be considered an alteration in drainage patterns, however this would not result in substantial erosion or siltation on- or off-site. A Stormwater Pollution Prevention Plan (SWPPP) will be implemented during project construction. SWPPPs include mandated erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction. The impact is *less than significant.*

(ii) See discussion X. c) (i) above for discussion of project-related changes to site drainage and runoff. There will be less than significant impacts to flooding on or off site. The off-site storm water collection shall meet City standards for capacity. As such, the potential for flooding on or off-site as a result of the project is considered *less than significant*.

(iii) See discussion X.c) (i) above for discussion of project-related changes to site drainage and runoff. Construction and grading activities could create a potential for surface water to carry sediment from onsite erosion into the storm water system and downstream waterways. However, stormwater pollution prevention

BMP's, including the implementation of adopted management practices and compliance with the provisions of the National Pollutant Discharge Elimination System (NPDES) permit will ensure that these impacts remain *less than significant*.

(iv) The Project site is generally flat and no significant grading or leveling will be required. The proposed project site is not in proximity to a stream or river and will not alter the course of a stream or river. According to National Flood Hazard mapping by the Federal Emergency Management Agency, the site is not within a 100-year flood hazard zone. The site is located in Flood Zone X, an Area of Minimal Flood Hazard. There would be *no impact* in regard to impeding or redirecting flood flows.

d) **No Impact:** The proposed project is located inland and not near an ocean or large body of water, and therefore, would not be affected by a tsunami. The proposed project is located in a relatively flat area and would not be impacted by inundation related to mudflow. Therefore, the proposed project would have *no impact* due to seiche, tsunami, or mudflow.

e) **Less Than Significant Impact:** The proposed project will not conflict with or obstruct implementation of a water quality control plan. The proposed project will be subject to the requirements of the NPDES Stormwater Program and will be required to comply with a SWPPP which will identify all potential sources of pollution that could affect stormwater discharges from the project site and identify Best Management Practices (BMPs) related to stormwater runoff for the project to use.

The proposed project is located within the Kaweah Groundwater Subbasin and is included within the Mid-Kaweah Groundwater Sustainability Agency (GSA). The California Department of Water Resources (DWR) in its Bulletin 118 – Interim Update, classified the Kaweah Subbasin as a High-Priority Groundwater Subbasin. Under the requirements for the Sustainable Ground Water Management Act (SGMA), a high-priority basin shall develop and implement a groundwater sustainability plan (GSP) to meet the sustainability goal established by the SGMA. All basins designated as high-priority by DWR are required to be managed under a GSP or coordinated GSP by January 31, 2020. On September 21, 2017 the Mid-Kaweah GSA submitted a Notice of Intent to initiate development of a GSP to DWR. Preparation of a GSP for the Mid-Kaweah GSA is ongoing. It is the intent of the Mid-Kaweah GSA to submit a completed GSP to DWR for review shortly prior to January 31, 2020. Therefore, the proposed project would have *a less than significant impact* on implementation of a water quality control plan or sustainable groundwater management plan.

## XI. LAND USE AND PLANNING

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Physically divide an established community? | ☐ | ☐ | ☐ | ☑ |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☐ | ☑ |

**Discussion:**

a) **No Impact:** The proposed project will not physically divide an established community, as it will develop a church campus on a vacant parcel surrounded by suburban residential uses, a medical clinic, and nearby schools. Therefore, there will be *no impact*.

b) **No Impact:** The proposed project is a conditionally permitted conditional use under the current zoning and general plan land use designations. The project does not conflict with any land use plans for the area, and there is *no impact*.

## XII. MINERAL RESOURCES

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☑ |
| b) Result in the loss of availability of a locally - important mineral resource recovery site delineated on a local general plan, specific plan or other lands use plan? | ☐ | ☐ | ☐ | ☑ |

**Discussion:**

a,b) **No Impact:** There are no known mineral resources of importance to the region and the project site is not designated under the City's General Plan as an important mineral resource recovery site. Therefore, the proposed project would not result in the loss or

impede the mining of regionally or locally important mineral resources and less than significant impact would result. There is *no impact*.

## XIII. NOISE

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☐ | ☑ | ☐ |
| b) Generation of excessive ground-borne vibration or ground-borne noise levels? | ☐ | ☐ | ☑ | ☐ |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☑ |

The City of Tulare's Noise Element was adopted in 2013 to protect the citizens of the City of Tulare from the harmful effects of exposure to excessive noise pollution and to protect the economic base of the City by preventing the encroachment of incompatible land uses near known noise-producing industries, railroads, airports and other sources. Noise pollution is defined as unwanted or excessive sound. Sound is a variation in air pressure that the human ear can detect. This pressure is measured within the human hearing range as decibels on the A scale (dBA). As the pressure of sound waves increases, the sound appears louder and the dBA level increases logarithmically. A noise level of 120 dB represents a million fold increases in sound pressure above the 0 dB level.

**Discussion**:

a) **Less Than Significant Impact:** The proposed project would develop a church campus on an 8 acre parcel. A bell tower is proposed as part of the project, however bells would not be operated except on major religious holidays. There would not be a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

The Project will result in an increase in noise levels due to construction, however long term noise level increases in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies are not expected. Construction equipment would include generators, excavators, bore/drill Rigs, track-mounted skid steers, plate compactors and backhoes. High noise levels resulting from construction activities generally would be limited to daytime hours. Section 6.40.030 of the City of Tulare Municipal Code requires that noise-producing equipment used during construction shall be restricted to the hours of 6:00 a.m. to 10:00 p.m. These noise levels would be intermittent and short term, and would be considered *less than significant*.

b) **Less Than Significant Impact:** Some construction activities have the potential to generate ground-borne vibration, however excessive vibration is not expected to the extent that it would be perceptible to nearby sensitive receptors, such as residences. Operation of the proposed church campus will not result in excessive ground-borne vibration. Therefore, impacts would be *less than significant*.

c) **No Impact:** The proposed project site is not located within the boundary of an airport land use plan and is not within two miles of a public airport or public use airport. Mefford Field Airport is located over 2 ½ miles southwest of the project site and Visalia Municipal Airport is located over nine miles northwest of the project site. There are no private airstrips in the vicinity of the proposed project. Therefore, there would be *no impact*.

## XIV. POPULATION AND HOUSING

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

**Discussion:**

a,b) **No Impact:** The proposed project would not result in any population growth or population displacement in the City of Tulare. The project would serve as a church for the existing population in the City of Tulare as well as in some neighboring cities

and communities. The proposed project would be developed on vacant land zoned for residential use within the City limits. There are no existing residences that would be removed and no individuals would be displaced because of the project. Therefore, there would be *no impact*.

## XV. PUBLIC SERVICES

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

**Discussion:**

a. **Less Than Significant Impact:** The City of Tulare already provides fire protection services to the project site and although the proposed project may slightly increase the demand for fire protection services, demand would not increase to the extent that it would create a need for new or physically altered fire protection facilities. The impact is therefore *less than significant.*

b. **Less Than Significant Impact:** The City of Tulare already provides police protection services to the project site and although the proposed project may slightly increase the demand for fire protection services, demand would not increase to the extent that it would require the provision of new or physically alter existing facilities related to police protection. The impact is therefore *less than significant.*

c. **No Impact:** Since the project will not result in additional residents, the project will not increase the number of students in the school district. Therefore, there is *no impact*.

d. **No Impact:** The City standard is currently 4.0 acres of parkland per 1,000 population. However, the project will not result in additional residents, so the project will not create a need for additional parkland. Therefore, there is *no impact*.

e. **Less Than Significant Impact:** Water and wastewater services for the proposed development would be serviced by existing infrastructure beneath neighboring streets. The proposed project would increase the demand for water and wastewater service. However, according to Tulare's 2035 General Plan Land Use Element, new development must be responsible for expanding existing water and sewage systems. Therefore, the project applicant shall pay the required development impact fees to accommodate the expansion of existing systems. Therefore, the impact would be *less than significant*.

## XVI. RECREATION

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☑ |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☑ |

**Discussion:**

a) **No Impact:** The City standard is currently 4.0 acres of parkland per 1,000 population. Because the project will not result in additional residents, the project will not create need for additional parkland. Therefore, there is *no impact*.

b) **No Impact:** There are no parkland or recreational facilities associated with the project. The City standard is currently 4.0 acres of parkland per 1,000 population. However, because the project will not result in additional residents, the project will not create need for additional parkland. Therefore, there is *no impact*.

## XVII. TRANSPORTATION

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? | ☐ | ☐ | ☑ | ☐ |
| b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☐ | ☐ | ☑ | ☐ |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☐ | ☑ |
| d) Result in inadequate emergency access? | ☐ | ☐ | ☑ | ☐ |

**Discussion:**

a,b) **Less Than Significant Impact:** The project would not conflict with any transportation policies plans or programs regarding public transit, bicycle, or pedestrian facilities. The proposed project would maintain the existing frontage improvements, including sidewalks. Any congestion during construction would be temporary. Vehicular access to the project site would be through four gates, three gates along Morrison Street, and one gate will be on Bardsley Avenue.

The project site was originally entitled for the development of approximately 50 single-family homes. A Trip Generation Assessment Memorandum (attached as Appendix B to this document) was prepared to compare the trips associated with the approved single-family homes and the trips associated with the proposed St. Rita's Church project. As noted in the Trip Generation Assessment Memorandum, the proposed St. Rita's Church project will generate more trips on Sunday than the 50 single-family homes. However, the proposed church project will generate fewer weekday daily and AM and PM peak hour trips. In addition, background traffic is substantially less on Sunday compared to a typical weekday. As a result, it is not anticipated that traffic generated from St. Rita's Church will create significant impacts to adjacent roadway networks. Furthermore, the proposed project site is an infill site, surrounded by development, as opposed to a project site on the edge of town or further away from a population center, where distances for drivers, and vehicle miles traveled would be higher. Therefore, a *less than significant impact* would result from development of the proposed project.

c) **No Impact:** No geometric design feature associated with the project would pose a hazard to the public and there would be no incompatible uses. There would be *no impact*.

d) **Less Than Significant Impact:** This project would not result in inadequate emergency access. Emergency access to the site would be via Bardsley Avenue and Morrison Street. Any impacts related to emergency access would be *less than significant.*

## XVIII. TRIBAL CULTURAL RESOURCES

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | ☐ | ☐ | ☐ | ☑ |
| ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☑ | ☐ | ☐ |

**Discussion:**

a)

**(i)** **No Impact:** The proposed project is located on a site that has been previously disturbed and most recently for development of the adjacent residential subdivisions. The Project site is within the limits of the City of Tulare and is not listed or eligible for listing in the California Register of Historical Resources, or in a

local register of historical resources as defined in Public Resources Code section 5020.1(k). Therefore, there is *no impact*.

**(ii)** **Less Than Significant with Mitigation Incorporated:** The proposed project site has been previously disturbed for the development of the adjacent residential subdivisions, has no record of listing it in any register of historical resources, and is located entirely within the City of Tulare limits. Nonetheless, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measure CUL-1 would ensure that impacts due to discovery of unanticipated cultural resources during excavation would be *less than significant with mitigation incorporated*.

**Mitigation Measure CUL-1:** If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any potential significant impacts.

## XIX. UTILITIES AND SERVICE SYSTEMS

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ☑ | ☐ |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☐ | ☐ | ☑ | ☐ |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☑ | ☐ |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☑ | ☐ |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☐ | ☑ |

According to the Tulare Municipal Service Review (2013), the City would be able to provide the necessary infrastructure services and utility systems required for new development within the General Plan projections for growth within the City limits. Utilities and service systems include wastewater treatment, storm water drainage facilities, water supply, landfill capacity, and solid waste disposal. Wastewater will be collected and treated at the City's wastewater treatment facility, which is located at the intersection Paige Avenue and West Street. Solid waste disposal will be provided by the Tulare County Solid Waste Department, which operates two landfills and six transfer stations within the county. Combined, these landfills receive approximately 300,000 tons of solid waste per day. Water for the proposed development will be provided by the City of Tulare. The City's primary water source is groundwater. Tulare is currently in an agreement with Tulare Irrigation District (TID). The City pumps storm water into canals owned by TID. Storm water is also disposed and detained in storm drainage detention and retention basins throughout the City. Tulare actively improves its storm drainage system to accommodate new urban development.

**Discussion:**

a) **Less Than Significant Impact:** The City's wastewater treatment facility (WWTF) has two wastewater treatment trains, domestic and industrial. Both operate in accordance to the Central Valley Regional Water Quality Control Board *Waste Discharge Requirements (WDR) Order NO. R5-2002-0186*. The City's Municipal Service Review (2013) indicates that Tulare's WWTF is at sufficient capacity to accommodate new development, including the proposed church campus, which would tie into existing City sewage lines in the project vicinity. The City of Tulare's existing sewer pipes and lines on Bardsley Avenue and Morrison Street would be extended to the project site. The wastewater generated from the proposed development would not exceed the City's wastewater treatment facility of 6.0 MGD, and would not require the construction of new or expansion of existing facilities to treat wastewater. The impact would be *less than significant*.

b) **Less Than Significant Impact:** The City's urban water supply is comprised entirely of groundwater pumped from the underground aquifer by wells located throughout the City. Water service to the site will be provided by pumping groundwater, and future water demand has been planned for through the City's General Plan and Urban Water Management Plan for growth within the city limits. Water will be brought in using water trucks during construction. After construction, operation of the church campus would generate demand for water that would not exceed the City's water supply sources, and the project would tie into the existing water lines on Cartmill Avenue.

The projected water demand for the proposed project is based on the City's standard water demand factors, which were applied in the City's Water System Master Plan to calculate projected water demands summarized in Table 3.7 of the Water System Master Plan (2009). The projected water demand for the proposed project is shown in Table 8.

**Table 8: Projected Water Demand for St. Rita's Catholic Church Project**

| Land Use Type | Units | Quantity | Water Demand Factor[(A)] | Average Day Demand, GPD | Annual Water Demand, AFY[(B)] |
|---|---|---|---|---|---|
| Public/Quasi-Public | Acres | 7.99 | 800 gpd/AC[(c)] | 6,392 | 7.16 |
| Note: (A) Water Demand Factors are Provided from Table 3.8 of the City of Tulare Water System Master Plan, July 2009.<br>(B) AFY=Acre-feet Per Year<br>(C) GPD/AC = Gallons Per Day Per Acre | | | | | |

Source: City of Tulare Water System Master Plan, 2009.

As shown in the table, the total projected annual water demand for the proposed Project is 7.16 AFY. The proposed uses are consistent with the most similar demand coefficient, which is the Public/Quasi-Public demand coefficient (800 gpd/acre) has been utilized to calculate the projected annual and daily water demand for the Project.

As described in the City's 2015 UWMP, the City will continue to periodically drill new supply wells in the future. The City continues to examine supply enhancement options, including surface water supply, urban recycled water use, etc., and additional supplies from Tulare Irrigation District (TID).

A comparison of the City's projected water supply and demand is shown in Table 8 for Normal, Single-Dry, and Multiple-Dry Years. The water supply and demand projections are based on the City's projected drought supply conditions as described in the City's 2015 UWMP. The supply-demand comparison in Table 9 indicates that the City will have sufficient water to meet its customers' needs through 2040. Current and ongoing management of these supplies is achieved through both voluntary and state-mandated consumption conservation efforts, and the Sustainable Groundwater Management Act (SGMA). The City has adopted outdoor water use conservation strategies as outlined in the UWMP and Chapter 7.32 of the Tulare Municipal Code.

Tulare General Plan Policy LU-P11.5 requires developers to assure that there is sufficient available water supply to meet projected demand for all new development. The proposed Project is planned to be consistent with the 2015 UWMP, which demonstrates adequate water supply to serve development in the City. Additionally, Tulare General Plan Policy LU-P11.3 requires all new development to be responsible for expansion of existing facilities, such as water systems, made necessary to serve the new development.

**Table 9: Projected Water Supply (2020-2040)**

| Water Supply Source | 2020 | | 2025 | | 2030 | | 2035 | | 2040 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | RAV[1] | TR/SY[2] | RAV[1] | TR/SY[2] | RAV[1] | TR/SY[2] | RAV[1] | TR/SY[2] | RAV[1] | TR/SY[2] |
| Groundwater | 6,241.4 | 6,241.4 | 7,130.8 | 7,130.8 | 8,146.8 | 8,146.8 | 9,307.6 | 9,307.6 | 10,284.9 | 10,284.9 |
| Surface Water | -- | 0 | -- | 0 | -- | 0 | -- | 0 | -- | 0 |
| Recycled Water | 4,864.4 | 0 | 5,837.3 | 0 | 7,004.8 | 0 | 8,405.7 | 0 | 10,086.9 | 0 |
| Total | 11,105.8 | 6,241.4 | 12,968.1 | 7,130.8 | 15,151.6 | 8,146.8 | 17,713.3 | 9,307.6 | 20,371.8 | 10,284.9 |

Notes: Unit of measurement is million gallons
[1] RAV=Reasonably Available Volume
[2] TR/SY = Total Right or Safe Yield

Source: City of Tulare Urban Water Management Plan, Table 6-9, 2015.

The Project would extend the existing public water lines located along Bardsley Avenue and Morrison Street into the property in accordance with City standards.

As described above, the proposed project would be expected to generate an annual water demand of 7.16 AFY. The City of Tulare 2015 UWMP describes that the City would have available water supply for normal year, single-year, and multi-dry year scenarios. The proposed project would generate an annual water demand that would be well within the limits of water demand, as described in the UWMP.

However, as noted previously, the Kaweah Sub basin is one of many in the Central Valley that is critically over-drafted. The City has developed strategies to assure that this source of supply remains available and viable in future years. For example, the City maintains the Water Conservation Ordinance to eliminate waste of water and will continue to periodically drill new supply wells in the future. Additionally, the City has joined the City of Visalia and the TID to form the Mid-Kaweah Joint Powers Authority (MKJPA) in an attempt to create a coordinated plan for the Sub basin. The City has also invested significantly in their detention basins to increase their recharge capacity.

The project would result in a reduction in on-site percolation to the groundwater basin, because the project would create an increase in the amount of paved and impervious surfaces. However, this impact would be greatly reduced by directing the stormwater flows to the regional basin located just a ¼ mile south of the project site, where the water will be allowed to collect and percolate to the groundwater basin. The Project has been reviewed by the City of Tulare Engineer who has determined that the Project will not have a significant impact on the existing water system, and would tie in to the existing water infrastructure for this part of the City. Therefore, the Project would have a *less than significant impact* on groundwater resources.

c) **Less Than Significant Impact:** The City of Tulare's existing sewer pipes and lines on Bardsley Avenue and Morrrison Street would be extended to the project site. The wastewater generated from the proposed development would be less than was expected from the previously proposed 50 single-family residences at this site, and the proposed church campus' wastewater flows would not exceed the City's wastewater treatment facility of 6.0 MGD, and would not require the construction of new or expansion of existing facilities to treat wastewater. The impact would *be less than significant*.

d) **Less Than Significant Impact:** Based on CalRecycle waste generation estimates, the proposed project is estimated to generate 0.007 pounds of solid waste per gross square foot per day. The proposed project would include the development of up to five church and associated buildings on an 8 acre site, consisting of 53,490 square feet of gross building area. Based on the generation estimate rate of 0.007 pounds of solid waste per gross square feet per day, the project would generate a maximum of 374.43 pounds per day or 0.19 tons per day. The project would be required to comply with state and local

requirements including those pertaining to solid waste, construction waste diversion, and recycling. For example, a minimum of 50% diversion of construction waste materials are required to be diverted from landfills. The City of Tulare disposes of its solid waste at the Visalia and Teapot Dome landfills within the County. These landfills have sufficient permitted capacity to accommodate the project's solid waste disposal needs. Any impacts would be *less than significant*.

e) **No Impact:** During construction, all solid waste generated by the project would be disposed of at the Visalia landfill or the Teapot Dome landfill. These facilities conform to all applicable statutes and regulations related to solid waste disposal. The proposed project would comply with the adopted policies related to solid waste, including recycling. Therefore, the proposed project would have *no impact* on solid waste regulations.

## XX. WILDFIRE

| **Would the project:** | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☑ |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☐ | ☑ |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☐ | ☑ |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☐ | ☑ |

a,b, c, d) **No Impact:** The proposed project site is not within or near a state responsibility area or area classified as very high fire hazard severity zone. The proposed project

would not impair an adopted emergency response plan or evacuation plan. The proposed project site would not exacerbate wildfire risks or expose occupants to pollutant concentrations from wildfire. The proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk. The proposed project site is generally flat and is not near any streams or waterways and would not expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability or drainage changes. Therefore, there would be *no impacts* related to wildfire.

## XXI. MANDATORY FINDINGS OF SIGNIFICANCE

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

**Discussion:**

a) **Less Than Significant Impact with Mitigation Incorporated:** There are several special status species with a potential to occur on the project site, including Swainson's hawk, Burrowing Owl, and San Joaquin kit fox. Implementation of Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-2a, BIO-2b, BIO-2c, BIO-3a, BIO-3b, and BIO-3c, will ensure that impacts to species identified as a candidate, sensitive, or special status will be *less than*

*significant with mitigation incorporated*. There are no known historical resources located within the project area and the soils in the project area have been previously disturbed and were most recently disturbed in the development of the adjacent residential subdivisions. There would be no excavation in undisturbed soils or in areas with known historical resources. However, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measures CUL-1 and CUL-2 would ensure that impacts due to discovery of cultural resources during excavation would be *less than significant with mitigation incorporated*.

b) **Less Than Significant Impact:** CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable, especially considering the project would serve the existing and projected future population, and would not induce population growth. The proposed project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increased need for housing, increase in traffic, air pollutants, etc). Impacts would be *less than significant*.

c) **Less Than Significant Impact:** The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have a substantial impact on human beings, either directly or indirectly. All potential impacts of the project have been found to be *less than significant*.

## SECTION 4:
## Supporting Information and Sources

**1)** *Tulare General Plan, Land Use Element (2014)*
**2)** *City of Tulare Zoning Ordinance*
**3)** *Final Program EIR Land Use and Circulation Element Update (SCH 89062606)*
**4)** *SJVAPCD Regulations and Guidelines*
**5)** *Tulare General Plan, Housing Element (April 2016)*
**6)** *Tulare General Plan Seismic-Safety Element*
**7)** *Tulare County Seismic Element, Volume I and II*
**8)** FEMA National *Flood Hazard Layers & Mapping Tool*
**9)** *Tulare General Plan, Circulation Element*
**10)** *Tulare General Plan, Noise Element*
**11)** *City of Tulare Sewer Systems Master Plan (2009)*
**12)** *Engineering Standards, City of Tulare*
**13)** *City of Tulare's Municipal Code*
**14)** *Tulare Heritage Tree Ordinance*
**15)** *Tulare County Environmental Resources Management Element*
**16)** *Source Reduction and Recycling Element*
**17)** *City of Tulare Urban Water Management Plan (2015)*
**18)** *City of Tulare Water System Master Plan (2009)*
**19)** *City of Tulare Emergency Response Plan*
**20)** *Tulare Municipal Airport-Mefford Field Master Plan, (February 2005)*
**21)** *Tulare County Airport Land Use Compatibility Plan*
**22)** *California Air Resources Board's (CARB's) Air Quality and Land Use Handbook*
**23)** *2019 California Environmental Quality Act CEQA Guidelines*
**24)** *The Five County Seismic Safety Element*
**25)** *California Building Code*
**26)** *California Stormwater Pollution Prevention Program (SWPPP)*
**27)** *Government Code Section 65962.5*
**28)** *California Environmental Protection Agency (CEPA)*
***29)*** *California Department of Conservation*
***30)*** *Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan (2017)*
***31)*** *California Natural Diversity Database Search Tool*
***32)*** *Natural Resource Conservation Service SoilWeb Tool*

***City of Tulare***
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# SECTON 5
# List of Preparers

***Project Title: St. Rita's Catholic Church***

**City of Tulare**

Mario A. Anaya, Principal Planner

Steven Sopp, Associate Planner

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# Appendix A

# California Emissions Estimator Model (CalEEMod) Input and Output Sheet for the St. Rita's Catholic Church Project

# St. Rita's Catholic Church

**San Joaquin Valley Unified APCD Air District, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Place of Worship | 23.50 | 1000sqft | 0.54 | 23,500.00 | 0 |
| Arena | 7.56 | 1000sqft | 2.43 | 7,557.00 | 0 |
| Elementary School | 18.97 | 1000sqft | 0.44 | 18,968.00 | 0 |
| General Office Building | 1.67 | 1000sqft | 0.04 | 1,665.00 | 0 |
| Single Family Housing | 1.00 | Dwelling Unit | 0.32 | 1,800.00 | 3 |
| Parking Lot | 386.00 | Space | 3.47 | 154,400.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.7 | **Precipitation Freq (Days)** | 45 |
| **Climate Zone** | 7 | | | **Operational Year** | 2021 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 702.44 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstructionPhase | PhaseEndDate | 8/18/2020 | 4/23/2021 |
| tblConstructionPhase | PhaseEndDate | 6/23/2020 | 2/26/2021 |
| tblConstructionPhase | PhaseEndDate | 8/6/2019 | 4/10/2020 |
| tblConstructionPhase | PhaseEndDate | 7/21/2020 | 3/26/2021 |
| tblConstructionPhase | PhaseEndDate | 7/9/2019 | 3/13/2020 |
| tblConstructionPhase | PhaseStartDate | 7/22/2020 | 3/29/2021 |
| tblConstructionPhase | PhaseStartDate | 8/7/2019 | 4/13/2020 |
| tblConstructionPhase | PhaseStartDate | 7/10/2019 | 3/16/2020 |
| tblConstructionPhase | PhaseStartDate | 6/24/2020 | 3/1/2021 |
| tblConstructionPhase | PhaseStartDate | 6/26/2019 | 3/2/2020 |
| tblSequestration | NumberOfNewTrees | 0.00 | 195.00 |
| tblWoodstoves | NumberCatalytic | 0.32 | 0.00 |
| tblWoodstoves | NumberNoncatalytic | 0.32 | 0.00 |

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2020 | 0.2935 | 2.7044 | 2.1812 | 4.6200e-003 | 0.2448 | 0.1319 | 0.3767 | 0.1075 | 0.1236 | 0.2311 | 0.0000 | 409.1506 | 409.1506 | 0.0758 | 0.0000 | 411.0461 |
| 2021 | 0.4772 | 0.5840 | 0.5742 | 1.1700e-003 | 0.0214 | 0.0277 | 0.0491 | 5.8000e-003 | 0.0260 | 0.0318 | 0.0000 | 103.2846 | 103.2846 | 0.0199 | 0.0000 | 103.7825 |
| **Maximum** | **0.4772** | **2.7044** | **2.1812** | **4.6200e-003** | **0.2448** | **0.1319** | **0.3767** | **0.1075** | **0.1236** | **0.2311** | **0.0000** | **409.1506** | **409.1506** | **0.0758** | **0.0000** | **411.0461** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2020 | 0.2935 | 2.7044 | 2.1812 | 4.6200e-003 | 0.1591 | 0.1319 | 0.2910 | 0.0616 | 0.1236 | 0.1852 | 0.0000 | 409.1503 | 409.1503 | 0.0758 | 0.0000 | 411.0458 |
| 2021 | 0.4772 | 0.5840 | 0.5742 | 1.1700e-003 | 0.0214 | 0.0277 | 0.0491 | 5.8000e-003 | 0.0260 | 0.0318 | 0.0000 | 103.2845 | 103.2845 | 0.0199 | 0.0000 | 103.7824 |
| **Maximum** | **0.4772** | **2.7044** | **2.1812** | **4.6200e-003** | **0.1591** | **0.1319** | **0.2910** | **0.0616** | **0.1236** | **0.1852** | **0.0000** | **409.1503** | **409.1503** | **0.0758** | **0.0000** | **411.0458** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **32.20** | **0.00** | **20.13** | **40.46** | **0.00** | **17.44** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **4** | **2-29-2020** | **5-28-2020** | 0.8983 | 0.8983 |
| **5** | **5-29-2020** | **8-28-2020** | 0.8597 | 0.8597 |
| **6** | **8-29-2020** | **11-28-2020** | 0.8613 | 0.8613 |
| **7** | **11-29-2020** | **2-27-2021** | 0.7935 | 0.7935 |
| **8** | **2-28-2021** | **5-28-2021** | 0.5334 | 0.5334 |
| | | **Highest** | 0.8983 | 0.8983 |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.2604 | 5.0000e-004 | 0.0116 | 0.0000 | | 9.0000e-005 | 9.0000e-005 | | 9.0000e-005 | 9.0000e-005 | 0.0000 | 0.4532 | 0.4532 | 4.0000e-005 | 1.0000e-005 | 0.4565 |
| Energy | 4.2000e-003 | 0.0381 | 0.0315 | 2.3000e-004 | | 2.9000e-003 | 2.9000e-003 | | 2.9000e-003 | 2.9000e-003 | 0.0000 | 134.5332 | 134.5332 | 4.6300e-003 | 1.5600e-003 | 135.1128 |
| Mobile | 0.2060 | 2.1839 | 1.8824 | 8.5500e-003 | 0.4806 | 7.7500e-003 | 0.4883 | 0.1293 | 7.3200e-003 | 0.1366 | 0.0000 | 794.2781 | 794.2781 | 0.0640 | 0.0000 | 795.8789 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 32.7830 | 0.0000 | 32.7830 | 1.9374 | 0.0000 | 81.2186 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.5558 | 11.7951 | 13.3509 | 0.1603 | 3.8700e-003 | 18.5124 |
| **Total** | **0.4706** | **2.2225** | **1.9255** | **8.7800e-003** | **0.4806** | **0.0107** | **0.4913** | **0.1293** | **0.0103** | **0.1396** | **34.3388** | **941.0595** | **975.3984** | **2.1664** | **5.4400e-003** | **1,031.1792** |

## 2.2 Overall Operational

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.2448 | 5.0000e-004 | 0.0116 | 0.0000 | | 9.0000e-005 | 9.0000e-005 | | 9.0000e-005 | 9.0000e-005 | 0.0000 | 0.4532 | 0.4532 | 4.0000e-005 | 1.0000e-005 | 0.4565 |
| Energy | 4.2000e-003 | 0.0381 | 0.0315 | 2.3000e-004 | | 2.9000e-003 | 2.9000e-003 | | 2.9000e-003 | 2.9000e-003 | 0.0000 | 134.5332 | 134.5332 | 4.6300e-003 | 1.5600e-003 | 135.1128 |
| Mobile | 0.2057 | 2.1798 | 1.8759 | 8.5100e-003 | 0.4782 | 7.7200e-003 | 0.4859 | 0.1286 | 7.2900e-003 | 0.1359 | 0.0000 | 791.1242 | 791.1242 | 0.0640 | 0.0000 | 792.7231 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 24.5873 | 0.0000 | 24.5873 | 1.4531 | 0.0000 | 60.9140 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.5558 | 14.7280 | 16.2838 | 0.1604 | 3.9000e-003 | 21.4557 |
| **Total** | **0.4547** | **2.2184** | **1.9191** | **8.7400e-003** | **0.4782** | **0.0107** | **0.4889** | **0.1286** | **0.0103** | **0.1389** | **26.1431** | **940.8385** | **966.9815** | **1.6821** | **5.4700e-003** | **1,010.6621** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **3.39** | **0.18** | **0.34** | **0.46** | **0.50** | **0.28** | **0.49** | **0.50** | **0.29** | **0.49** | **23.87** | **0.02** | **0.86** | **22.36** | **-0.55** | **1.99** |

## 2.3 Vegetation

**Vegetation**

| | CO2e |
|---|---|
| Category | MT |
| New Trees | 138.0600 |
| **Total** | **138.0600** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 3/2/2020 | 3/13/2020 | 5 | 10 | |
| 2 | Grading | Grading | 3/16/2020 | 4/10/2020 | 5 | 20 | |
| 3 | Building Construction | Building Construction | 4/13/2020 | 2/26/2021 | 5 | 230 | |
| 4 | Paving | Paving | 3/1/2021 | 3/26/2021 | 5 | 20 | |
| 5 | Architectural Coating | Architectural Coating | 3/29/2021 | 4/23/2021 | 5 | 20 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 10**

**Acres of Paving: 3.47**

**Residential Indoor: 3,645; Residential Outdoor: 1,215; Non-Residential Indoor: 77,535; Non-Residential Outdoor: 25,845; Striped Parking Area: 9,264 (Architectural Coating – sqft)**

## OffRoad Equipment

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

## Trips and VMT

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Architectural Coating | 1 | 17.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 87.00 | 34.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

## 3.2 Site Preparation - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0903 | 0.0000 | 0.0903 | 0.0497 | 0.0000 | 0.0497 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0204 | 0.2121 | 0.1076 | 1.9000e-004 | | 0.0110 | 0.0110 | | 0.0101 | 0.0101 | 0.0000 | 16.7153 | 16.7153 | 5.4100e-003 | 0.0000 | 16.8505 |
| **Total** | **0.0204** | **0.2121** | **0.1076** | **1.9000e-004** | **0.0903** | **0.0110** | **0.1013** | **0.0497** | **0.0101** | **0.0598** | **0.0000** | **16.7153** | **16.7153** | **5.4100e-003** | **0.0000** | **16.8505** |

## 3.2 Site Preparation - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.8000e-004 | 2.6000e-004 | 2.6200e-003 | 1.0000e-005 | 7.2000e-004 | 1.0000e-005 | 7.2000e-004 | 1.9000e-004 | 0.0000 | 2.0000e-004 | 0.0000 | 0.6461 | 0.6461 | 2.0000e-005 | 0.0000 | 0.6466 |
| **Total** | **3.8000e-004** | **2.6000e-004** | **2.6200e-003** | **1.0000e-005** | **7.2000e-004** | **1.0000e-005** | **7.2000e-004** | **1.9000e-004** | **0.0000** | **2.0000e-004** | **0.0000** | **0.6461** | **0.6461** | **2.0000e-005** | **0.0000** | **0.6466** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0407 | 0.0000 | 0.0407 | 0.0223 | 0.0000 | 0.0223 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0204 | 0.2121 | 0.1076 | 1.9000e-004 | | 0.0110 | 0.0110 | | 0.0101 | 0.0101 | 0.0000 | 16.7153 | 16.7153 | 5.4100e-003 | 0.0000 | 16.8505 |
| **Total** | **0.0204** | **0.2121** | **0.1076** | **1.9000e-004** | **0.0407** | **0.0110** | **0.0516** | **0.0223** | **0.0101** | **0.0325** | **0.0000** | **16.7153** | **16.7153** | **5.4100e-003** | **0.0000** | **16.8505** |

## 3.2 Site Preparation - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.8000e-004 | 2.6000e-004 | 2.6200e-003 | 1.0000e-005 | 7.2000e-004 | 1.0000e-005 | 7.2000e-004 | 1.9000e-004 | 0.0000 | 2.0000e-004 | 0.0000 | 0.6461 | 0.6461 | 2.0000e-005 | 0.0000 | 0.6466 |
| **Total** | **3.8000e-004** | **2.6000e-004** | **2.6200e-003** | **1.0000e-005** | **7.2000e-004** | **1.0000e-005** | **7.2000e-004** | **1.9000e-004** | **0.0000** | **2.0000e-004** | **0.0000** | **0.6461** | **0.6461** | **2.0000e-005** | **0.0000** | **0.6466** |

## 3.3 Grading - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0655 | 0.0000 | 0.0655 | 0.0337 | 0.0000 | 0.0337 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0243 | 0.2639 | 0.1605 | 3.0000e-004 | | 0.0127 | 0.0127 | | 0.0117 | 0.0117 | 0.0000 | 26.0588 | 26.0588 | 8.4300e-003 | 0.0000 | 26.2694 |
| **Total** | **0.0243** | **0.2639** | **0.1605** | **3.0000e-004** | **0.0655** | **0.0127** | **0.0783** | **0.0337** | **0.0117** | **0.0454** | **0.0000** | **26.0588** | **26.0588** | **8.4300e-003** | **0.0000** | **26.2694** |

## 3.3 Grading - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.3000e-004 | 4.3000e-004 | 4.3700e-003 | 1.0000e-005 | 1.2000e-003 | 1.0000e-005 | 1.2100e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 1.0769 | 1.0769 | 3.0000e-005 | 0.0000 | 1.0777 |
| **Total** | **6.3000e-004** | **4.3000e-004** | **4.3700e-003** | **1.0000e-005** | **1.2000e-003** | **1.0000e-005** | **1.2100e-003** | **3.2000e-004** | **1.0000e-005** | **3.3000e-004** | **0.0000** | **1.0769** | **1.0769** | **3.0000e-005** | **0.0000** | **1.0777** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0295 | 0.0000 | 0.0295 | 0.0152 | 0.0000 | 0.0152 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0243 | 0.2639 | 0.1605 | 3.0000e-004 | | 0.0127 | 0.0127 | | 0.0117 | 0.0117 | 0.0000 | 26.0587 | 26.0587 | 8.4300e-003 | 0.0000 | 26.2694 |
| **Total** | **0.0243** | **0.2639** | **0.1605** | **3.0000e-004** | **0.0295** | **0.0127** | **0.0422** | **0.0152** | **0.0117** | **0.0269** | **0.0000** | **26.0587** | **26.0587** | **8.4300e-003** | **0.0000** | **26.2694** |

## 3.3 Grading - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.3000e-004 | 4.3000e-004 | 4.3700e-003 | 1.0000e-005 | 1.2000e-003 | 1.0000e-005 | 1.2100e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 1.0769 | 1.0769 | 3.0000e-005 | 0.0000 | 1.0777 |
| **Total** | **6.3000e-004** | **4.3000e-004** | **4.3700e-003** | **1.0000e-005** | **1.2000e-003** | **1.0000e-005** | **1.2100e-003** | **3.2000e-004** | **1.0000e-005** | **3.3000e-004** | **0.0000** | **1.0769** | **1.0769** | **3.0000e-005** | **0.0000** | **1.0777** |

## 3.4 Building Construction - 2020

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2003 | 1.8131 | 1.5922 | 2.5400e-003 | | 0.1056 | 0.1056 | | 0.0993 | 0.0993 | 0.0000 | 218.8714 | 218.8714 | 0.0534 | 0.0000 | 220.2064 |
| **Total** | **0.2003** | **1.8131** | **1.5922** | **2.5400e-003** | | **0.1056** | **0.1056** | | **0.0993** | **0.0993** | **0.0000** | **218.8714** | **218.8714** | **0.0534** | **0.0000** | **220.2064** |

## 3.4 Building Construction - 2020

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0127 | 0.3911 | 0.0742 | 9.1000e-004 | 0.0213 | 2.1500e-003 | 0.0235 | 6.1500e-003 | 2.0600e-003 | 8.2100e-003 | 0.0000 | 86.7574 | 86.7574 | 6.8500e-003 | 0.0000 | 86.9286 |
| Worker | 0.0348 | 0.0236 | 0.2397 | 6.5000e-004 | 0.0657 | 4.7000e-004 | 0.0662 | 0.0175 | 4.3000e-004 | 0.0179 | 0.0000 | 59.0247 | 59.0247 | 1.6900e-003 | 0.0000 | 59.0670 |
| **Total** | **0.0475** | **0.4147** | **0.3139** | **1.5600e-003** | **0.0870** | **2.6200e-003** | **0.0897** | **0.0236** | **2.4900e-003** | **0.0261** | **0.0000** | **145.7820** | **145.7820** | **8.5400e-003** | **0.0000** | **145.9956** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2003 | 1.8131 | 1.5922 | 2.5400e-003 | | 0.1056 | 0.1056 | | 0.0993 | 0.0993 | 0.0000 | 218.8712 | 218.8712 | 0.0534 | 0.0000 | 220.2061 |
| **Total** | **0.2003** | **1.8131** | **1.5922** | **2.5400e-003** | | **0.1056** | **0.1056** | | **0.0993** | **0.0993** | **0.0000** | **218.8712** | **218.8712** | **0.0534** | **0.0000** | **220.2061** |

## 3.4 Building Construction - 2020

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0127 | 0.3911 | 0.0742 | 9.1000e-004 | 0.0213 | 2.1500e-003 | 0.0235 | 6.1500e-003 | 2.0600e-003 | 8.2100e-003 | 0.0000 | 86.7574 | 86.7574 | 6.8500e-003 | 0.0000 | 86.9286 |
| Worker | 0.0348 | 0.0236 | 0.2397 | 6.5000e-004 | 0.0657 | 4.7000e-004 | 0.0662 | 0.0175 | 4.3000e-004 | 0.0179 | 0.0000 | 59.0247 | 59.0247 | 1.6900e-003 | 0.0000 | 59.0670 |
| **Total** | **0.0475** | **0.4147** | **0.3139** | **1.5600e-003** | **0.0870** | **2.6200e-003** | **0.0897** | **0.0236** | **2.4900e-003** | **0.0261** | **0.0000** | **145.7820** | **145.7820** | **8.5400e-003** | **0.0000** | **145.9956** |

## 3.4 Building Construction - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0390 | 0.3574 | 0.3398 | 5.5000e-004 | | 0.0197 | 0.0197 | | 0.0185 | 0.0185 | 0.0000 | 47.4856 | 47.4856 | 0.0115 | 0.0000 | 47.7721 |
| **Total** | **0.0390** | **0.3574** | **0.3398** | **5.5000e-004** | | **0.0197** | **0.0197** | | **0.0185** | **0.0185** | **0.0000** | **47.4856** | **47.4856** | **0.0115** | **0.0000** | **47.7721** |

## 3.4 Building Construction - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.2500e-003 | 0.0769 | 0.0140 | 2.0000e-004 | 4.6200e-003 | 2.2000e-004 | 4.8400e-003 | 1.3300e-003 | 2.1000e-004 | 1.5400e-003 | 0.0000 | 18.6455 | 18.6455 | 1.4200e-003 | 0.0000 | 18.6811 |
| Worker | 6.9500e-003 | 4.5500e-003 | 0.0472 | 1.4000e-004 | 0.0143 | 1.0000e-004 | 0.0144 | 3.7900e-003 | 9.0000e-005 | 3.8800e-003 | 0.0000 | 12.3592 | 12.3592 | 3.3000e-004 | 0.0000 | 12.3674 |
| **Total** | **9.2000e-003** | **0.0814** | **0.0612** | **3.4000e-004** | **0.0189** | **3.2000e-004** | **0.0192** | **5.1200e-003** | **3.0000e-004** | **5.4200e-003** | **0.0000** | **31.0047** | **31.0047** | **1.7500e-003** | **0.0000** | **31.0485** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0390 | 0.3574 | 0.3398 | 5.5000e-004 | | 0.0197 | 0.0197 | | 0.0185 | 0.0185 | 0.0000 | 47.4856 | 47.4856 | 0.0115 | 0.0000 | 47.7720 |
| **Total** | **0.0390** | **0.3574** | **0.3398** | **5.5000e-004** | | **0.0197** | **0.0197** | | **0.0185** | **0.0185** | **0.0000** | **47.4856** | **47.4856** | **0.0115** | **0.0000** | **47.7720** |

## 3.4 Building Construction - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.2500e-003 | 0.0769 | 0.0140 | 2.0000e-004 | 4.6200e-003 | 2.2000e-004 | 4.8400e-003 | 1.3300e-003 | 2.1000e-004 | 1.5400e-003 | 0.0000 | 18.6455 | 18.6455 | 1.4200e-003 | 0.0000 | 18.6811 |
| Worker | 6.9500e-003 | 4.5500e-003 | 0.0472 | 1.4000e-004 | 0.0143 | 1.0000e-004 | 0.0144 | 3.7900e-003 | 9.0000e-005 | 3.8800e-003 | 0.0000 | 12.3592 | 12.3592 | 3.3000e-004 | 0.0000 | 12.3674 |
| **Total** | **9.2000e-003** | **0.0814** | **0.0612** | **3.4000e-004** | **0.0189** | **3.2000e-004** | **0.0192** | **5.1200e-003** | **3.0000e-004** | **5.4200e-003** | **0.0000** | **31.0047** | **31.0047** | **1.7500e-003** | **0.0000** | **31.0485** |

## 3.5 Paving - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0126 | 0.1292 | 0.1465 | 2.3000e-004 | | 6.7800e-003 | 6.7800e-003 | | 6.2400e-003 | 6.2400e-003 | 0.0000 | 20.0235 | 20.0235 | 6.4800e-003 | 0.0000 | 20.1854 |
| Paving | 4.5500e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0171** | **0.1292** | **0.1465** | **2.3000e-004** | | **6.7800e-003** | **6.7800e-003** | | **6.2400e-003** | **6.2400e-003** | **0.0000** | **20.0235** | **20.0235** | **6.4800e-003** | **0.0000** | **20.1854** |

## 3.5 Paving - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.8000e-004 | 3.8000e-004 | 3.9700e-003 | 1.0000e-005 | 1.2000e-003 | 1.0000e-005 | 1.2100e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 1.0395 | 1.0395 | 3.0000e-005 | 0.0000 | 1.0402 |
| **Total** | **5.8000e-004** | **3.8000e-004** | **3.9700e-003** | **1.0000e-005** | **1.2000e-003** | **1.0000e-005** | **1.2100e-003** | **3.2000e-004** | **1.0000e-005** | **3.3000e-004** | **0.0000** | **1.0395** | **1.0395** | **3.0000e-005** | **0.0000** | **1.0402** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0126 | 0.1292 | 0.1465 | 2.3000e-004 | | 6.7800e-003 | 6.7800e-003 | | 6.2400e-003 | 6.2400e-003 | 0.0000 | 20.0235 | 20.0235 | 6.4800e-003 | 0.0000 | 20.1854 |
| Paving | 4.5500e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0171** | **0.1292** | **0.1465** | **2.3000e-004** | | **6.7800e-003** | **6.7800e-003** | | **6.2400e-003** | **6.2400e-003** | **0.0000** | **20.0235** | **20.0235** | **6.4800e-003** | **0.0000** | **20.1854** |

## 3.5 Paving - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 5.8000e-004 | 3.8000e-004 | 3.9700e-003 | 1.0000e-005 | 1.2000e-003 | 1.0000e-005 | 1.2100e-003 | 3.2000e-004 | 1.0000e-005 | 3.3000e-004 | 0.0000 | 1.0395 | 1.0395 | 3.0000e-005 | 0.0000 | 1.0402 |
| **Total** | **5.8000e-004** | **3.8000e-004** | **3.9700e-003** | **1.0000e-005** | **1.2000e-003** | **1.0000e-005** | **1.2100e-003** | **3.2000e-004** | **1.0000e-005** | **3.3000e-004** | **0.0000** | **1.0395** | **1.0395** | **3.0000e-005** | **0.0000** | **1.0402** |

## 3.6 Architectural Coating - 2021

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.4085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 2.1900e-003 | 0.0153 | 0.0182 | 3.0000e-005 | | 9.4000e-004 | 9.4000e-004 | | 9.4000e-004 | 9.4000e-004 | 0.0000 | 2.5533 | 2.5533 | 1.8000e-004 | 0.0000 | 2.5576 |
| **Total** | **0.4107** | **0.0153** | **0.0182** | **3.0000e-005** | | **9.4000e-004** | **9.4000e-004** | | **9.4000e-004** | **9.4000e-004** | **0.0000** | **2.5533** | **2.5533** | **1.8000e-004** | **0.0000** | **2.5576** |

## 3.6 Architectural Coating - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.6000e-004 | 4.3000e-004 | 4.5000e-003 | 1.0000e-005 | 1.3600e-003 | 1.0000e-005 | 1.3700e-003 | 3.6000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 1.1781 | 1.1781 | 3.0000e-005 | 0.0000 | 1.1788 |
| **Total** | **6.6000e-004** | **4.3000e-004** | **4.5000e-003** | **1.0000e-005** | **1.3600e-003** | **1.0000e-005** | **1.3700e-003** | **3.6000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **1.1781** | **1.1781** | **3.0000e-005** | **0.0000** | **1.1788** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.4085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 2.1900e-003 | 0.0153 | 0.0182 | 3.0000e-005 | | 9.4000e-004 | 9.4000e-004 | | 9.4000e-004 | 9.4000e-004 | 0.0000 | 2.5533 | 2.5533 | 1.8000e-004 | 0.0000 | 2.5576 |
| **Total** | **0.4107** | **0.0153** | **0.0182** | **3.0000e-005** | | **9.4000e-004** | **9.4000e-004** | | **9.4000e-004** | **9.4000e-004** | **0.0000** | **2.5533** | **2.5533** | **1.8000e-004** | **0.0000** | **2.5576** |

### 3.6 Architectural Coating - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.6000e-004 | 4.3000e-004 | 4.5000e-003 | 1.0000e-005 | 1.3600e-003 | 1.0000e-005 | 1.3700e-003 | 3.6000e-004 | 1.0000e-005 | 3.7000e-004 | 0.0000 | 1.1781 | 1.1781 | 3.0000e-005 | 0.0000 | 1.1788 |
| **Total** | **6.6000e-004** | **4.3000e-004** | **4.5000e-003** | **1.0000e-005** | **1.3600e-003** | **1.0000e-005** | **1.3700e-003** | **3.6000e-004** | **1.0000e-005** | **3.7000e-004** | **0.0000** | **1.1781** | **1.1781** | **3.0000e-005** | **0.0000** | **1.1788** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Implement NEV Network

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.2057 | 2.1798 | 1.8759 | 8.5100e-003 | 0.4782 | 7.7200e-003 | 0.4859 | 0.1286 | 7.2900e-003 | 0.1359 | 0.0000 | 791.1242 | 791.1242 | 0.0640 | 0.0000 | 792.7231 |
| Unmitigated | 0.2060 | 2.1839 | 1.8824 | 8.5500e-003 | 0.4806 | 7.7500e-003 | 0.4883 | 0.1293 | 7.3200e-003 | 0.1366 | 0.0000 | 794.2781 | 794.2781 | 0.0640 | 0.0000 | 795.8789 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Arena | 80.94 | 80.94 | 80.94 | 157,172 | 156,386 |
| Elementary School | 292.68 | 0.00 | 0.00 | 460,952 | 458,648 |
| General Office Building | 18.36 | 4.10 | 1.75 | 33,344 | 33,177 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Place of Worship | 214.09 | 243.70 | 860.81 | 581,229 | 578,323 |
| Single Family Housing | 9.52 | 9.91 | 8.62 | 27,376 | 27,239 |
| Total | 615.58 | 338.64 | 952.11 | 1,260,073 | 1,253,773 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Arena | 9.50 | 7.30 | 7.30 | 0.00 | 81.00 | 19.00 | 66 | 28 | 6 |
| Elementary School | 9.50 | 7.30 | 7.30 | 65.00 | 30.00 | 5.00 | 63 | 25 | 12 |
| General Office Building | 9.50 | 7.30 | 7.30 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Place of Worship | 9.50 | 7.30 | 7.30 | 0.00 | 95.00 | 5.00 | 64 | 25 | 11 |
| Single Family Housing | 10.80 | 7.30 | 7.50 | 45.60 | 19.00 | 35.40 | 86 | 11 | 3 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arena | 0.506092 | 0.032602 | 0.169295 | 0.124521 | 0.019914 | 0.005374 | 0.021664 | 0.110051 | 0.001797 | 0.001623 | 0.005307 | 0.000969 | 0.000792 |
| Elementary School | 0.506092 | 0.032602 | 0.169295 | 0.124521 | 0.019914 | 0.005374 | 0.021664 | 0.110051 | 0.001797 | 0.001623 | 0.005307 | 0.000969 | 0.000792 |
| General Office Building | 0.506092 | 0.032602 | 0.169295 | 0.124521 | 0.019914 | 0.005374 | 0.021664 | 0.110051 | 0.001797 | 0.001623 | 0.005307 | 0.000969 | 0.000792 |
| Parking Lot | 0.506092 | 0.032602 | 0.169295 | 0.124521 | 0.019914 | 0.005374 | 0.021664 | 0.110051 | 0.001797 | 0.001623 | 0.005307 | 0.000969 | 0.000792 |
| Place of Worship | 0.506092 | 0.032602 | 0.169295 | 0.124521 | 0.019914 | 0.005374 | 0.021664 | 0.110051 | 0.001797 | 0.001623 | 0.005307 | 0.000969 | 0.000792 |
| Single Family Housing | 0.506092 | 0.032602 | 0.169295 | 0.124521 | 0.019914 | 0.005374 | 0.021664 | 0.110051 | 0.001797 | 0.001623 | 0.005307 | 0.000969 | 0.000792 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

St. Rita's Catholic Church - San Joaquin Valley Unified APCD Air District, Annual

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 92.9590 | 92.9590 | 3.8400e-003 | 7.9000e-004 | 93.2916 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 92.9590 | 92.9590 | 3.8400e-003 | 7.9000e-004 | 93.2916 |
| NaturalGas Mitigated | 4.2000e-003 | 0.0381 | 0.0315 | 2.3000e-004 | | 2.9000e-003 | 2.9000e-003 | | 2.9000e-003 | 2.9000e-003 | 0.0000 | 41.5742 | 41.5742 | 8.0000e-004 | 7.6000e-004 | 41.8212 |
| NaturalGas Unmitigated | 4.2000e-003 | 0.0381 | 0.0315 | 2.3000e-004 | | 2.9000e-003 | 2.9000e-003 | | 2.9000e-003 | 2.9000e-003 | 0.0000 | 41.5742 | 41.5742 | 8.0000e-004 | 7.6000e-004 | 41.8212 |

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Arena | 126958 | 6.8000e-004 | 6.2200e-003 | 5.2300e-003 | 4.0000e-005 | | 4.7000e-004 | 4.7000e-004 | | 4.7000e-004 | 4.7000e-004 | 0.0000 | 6.7749 | 6.7749 | 1.3000e-004 | 1.2000e-004 | 6.8152 |
| Elementary School | 202958 | 1.0900e-003 | 9.9500e-003 | 8.3600e-003 | 6.0000e-005 | | 7.6000e-004 | 7.6000e-004 | | 7.6000e-004 | 7.6000e-004 | 0.0000 | 10.8306 | 10.8306 | 2.1000e-004 | 2.0000e-004 | 10.8950 |
| General Office Building | 28621.3 | 1.5000e-004 | 1.4000e-003 | 1.1800e-003 | 1.0000e-005 | | 1.1000e-004 | 1.1000e-004 | | 1.1000e-004 | 1.1000e-004 | 0.0000 | 1.5273 | 1.5273 | 3.0000e-005 | 3.0000e-005 | 1.5364 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Place of Worship | 394800 | 2.1300e-003 | 0.0194 | 0.0163 | 1.2000e-004 | | 1.4700e-003 | 1.4700e-003 | | 1.4700e-003 | 1.4700e-003 | 0.0000 | 21.0680 | 21.0680 | 4.0000e-004 | 3.9000e-004 | 21.1932 |
| Single Family Housing | 25733.7 | 1.4000e-004 | 1.1900e-003 | 5.0000e-004 | 1.0000e-005 | | 1.0000e-004 | 1.0000e-004 | | 1.0000e-004 | 1.0000e-004 | 0.0000 | 1.3733 | 1.3733 | 3.0000e-005 | 3.0000e-005 | 1.3814 |
| **Total** | | **4.1900e-003** | **0.0381** | **0.0315** | **2.4000e-004** | | **2.9100e-003** | **2.9100e-003** | | **2.9100e-003** | **2.9100e-003** | **0.0000** | **41.5742** | **41.5742** | **8.0000e-004** | **7.7000e-004** | **41.8212** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Arena | 126958 | 6.8000e-004 | 6.2200e-003 | 5.2300e-003 | 4.0000e-005 | | 4.7000e-004 | 4.7000e-004 | | 4.7000e-004 | 4.7000e-004 | 0.0000 | 6.7749 | 6.7749 | 1.3000e-004 | 1.2000e-004 | 6.8152 |
| Elementary School | 202958 | 1.0900e-003 | 9.9500e-003 | 8.3600e-003 | 6.0000e-005 | | 7.6000e-004 | 7.6000e-004 | | 7.6000e-004 | 7.6000e-004 | 0.0000 | 10.8306 | 10.8306 | 2.1000e-004 | 2.0000e-004 | 10.8950 |
| General Office Building | 28621.3 | 1.5000e-004 | 1.4000e-003 | 1.1800e-003 | 1.0000e-005 | | 1.1000e-004 | 1.1000e-004 | | 1.1000e-004 | 1.1000e-004 | 0.0000 | 1.5273 | 1.5273 | 3.0000e-005 | 3.0000e-005 | 1.5364 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Place of Worship | 394800 | 2.1300e-003 | 0.0194 | 0.0163 | 1.2000e-004 | | 1.4700e-003 | 1.4700e-003 | | 1.4700e-003 | 1.4700e-003 | 0.0000 | 21.0680 | 21.0680 | 4.0000e-004 | 3.9000e-004 | 21.1932 |
| Single Family Housing | 25733.7 | 1.4000e-004 | 1.1900e-003 | 5.0000e-004 | 1.0000e-005 | | 1.0000e-004 | 1.0000e-004 | | 1.0000e-004 | 1.0000e-004 | 0.0000 | 1.3733 | 1.3733 | 3.0000e-005 | 3.0000e-005 | 1.3814 |
| **Total** | | **4.1900e-003** | **0.0381** | **0.0315** | **2.4000e-004** | | **2.9100e-003** | **2.9100e-003** | | **2.9100e-003** | **2.9100e-003** | **0.0000** | **41.5742** | **41.5742** | **8.0000e-004** | **7.7000e-004** | **41.8212** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Arena | 17834.5 | 5.6825 | 2.3000e-004 | 5.0000e-005 | 5.7028 |
| Elementary School | 139225 | 44.3601 | 1.8300e-003 | 3.8000e-004 | 44.5188 |
| General Office Building | 16600 | 5.2891 | 2.2000e-004 | 5.0000e-005 | 5.3081 |
| Parking Lot | 54040 | 17.2183 | 7.1000e-004 | 1.5000e-004 | 17.2799 |
| Place of Worship | 55460 | 17.6707 | 7.3000e-004 | 1.5000e-004 | 17.7340 |
| Single Family Housing | 8594.06 | 2.7383 | 1.1000e-004 | 2.0000e-005 | 2.7481 |
| **Total** | | **92.9590** | **3.8300e-003** | **8.0000e-004** | **93.2916** |

### 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Arena | 17834.5 | 5.6825 | 2.3000e-004 | 5.0000e-005 | 5.7028 |
| Elementary School | 139225 | 44.3601 | 1.8300e-003 | 3.8000e-004 | 44.5188 |
| General Office Building | 16600 | 5.2891 | 2.2000e-004 | 5.0000e-005 | 5.3081 |
| Parking Lot | 54040 | 17.2183 | 7.1000e-004 | 1.5000e-004 | 17.2799 |
| Place of Worship | 55460 | 17.6707 | 7.3000e-004 | 1.5000e-004 | 17.7340 |
| Single Family Housing | 8594.06 | 2.7383 | 1.1000e-004 | 2.0000e-005 | 2.7481 |
| **Total** | | **92.9590** | **3.8300e-003** | **8.0000e-004** | **93.2916** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.2448 | 5.0000e-004 | 0.0116 | 0.0000 | | 9.0000e-005 | 9.0000e-005 | | 9.0000e-005 | 9.0000e-005 | 0.0000 | 0.4532 | 0.4532 | 4.0000e-005 | 1.0000e-005 | 0.4565 |
| Unmitigated | 0.2604 | 5.0000e-004 | 0.0116 | 0.0000 | | 9.0000e-005 | 9.0000e-005 | | 9.0000e-005 | 9.0000e-005 | 0.0000 | 0.4532 | 0.4532 | 4.0000e-005 | 1.0000e-005 | 0.4565 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0409 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.2189 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 4.0000e-005 | 3.7000e-004 | 1.6000e-004 | 0.0000 | | 3.0000e-005 | 3.0000e-005 | | 3.0000e-005 | 3.0000e-005 | 0.0000 | 0.4332 | 0.4332 | 1.0000e-005 | 1.0000e-005 | 0.4358 |
| Landscaping | 6.0000e-004 | 1.2000e-004 | 0.0115 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | 0.0000 | 0.0200 | 0.0200 | 3.0000e-005 | 0.0000 | 0.0208 |
| **Total** | **0.2604** | **4.9000e-004** | **0.0116** | **0.0000** | | **9.0000e-005** | **9.0000e-005** | | **9.0000e-005** | **9.0000e-005** | **0.0000** | **0.4532** | **0.4532** | **4.0000e-005** | **1.0000e-005** | **0.4565** |

### 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0409 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.2033 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 4.0000e-005 | 3.7000e-004 | 1.6000e-004 | 0.0000 | | 3.0000e-005 | 3.0000e-005 | | 3.0000e-005 | 3.0000e-005 | 0.0000 | 0.4332 | 0.4332 | 1.0000e-005 | 1.0000e-005 | 0.4358 |
| Landscaping | 6.0000e-004 | 1.2000e-004 | 0.0115 | 0.0000 | | 6.0000e-005 | 6.0000e-005 | | 6.0000e-005 | 6.0000e-005 | 0.0000 | 0.0200 | 0.0200 | 3.0000e-005 | 0.0000 | 0.0208 |
| **Total** | **0.2448** | **4.9000e-004** | **0.0116** | **0.0000** | | **9.0000e-005** | **9.0000e-005** | | **9.0000e-005** | **9.0000e-005** | **0.0000** | **0.4532** | **0.4532** | **4.0000e-005** | **1.0000e-005** | **0.4565** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

Use Water Efficient Landscaping

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 16.2838 | 0.1604 | 3.9000e-003 | 21.4557 |
| Unmitigated | 13.3509 | 0.1603 | 3.8700e-003 | 18.5124 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Arena | 3.25662 / 0.20787 | 6.8796 | 0.1064 | 2.5600e-003 | 10.3001 |
| Elementary School | 0.550072 / 1.41447 | 2.7003 | 0.0180 | 4.4000e-004 | 3.2835 |
| General Office Building | 0.296815 / 0.181919 | 0.8088 | 9.7000e-003 | 2.3000e-004 | 1.1212 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Place of Worship | 0.735289 / 1.15007 | 2.7835 | 0.0241 | 5.9000e-004 | 3.5602 |
| Single Family Housing | 0.065154 / 0.0410754 | 0.1788 | 2.1300e-003 | 5.0000e-005 | 0.2474 |
| **Total** | | **13.3509** | **0.1603** | **3.8700e-003** | **18.5124** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Arena | 3.25662 / 0.390379 | 7.0831 | 0.1064 | 2.5600e-003 | 10.5044 |
| Elementary School | 0.550072 / 2.65637 | 4.0852 | 0.0181 | 4.6000e-004 | 4.6734 |
| General Office Building | 0.296815 / 0.341644 | 0.9869 | 9.7100e-003 | 2.4000e-004 | 1.2999 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Place of Worship | 0.735289 / 2.15983 | 3.9095 | 0.0241 | 6.0000e-004 | 4.6903 |
| Single Family Housing | 0.065154 / 0.0771395 | 0.2190 | 2.1300e-003 | 5.0000e-005 | 0.2878 |
| **Total** | | **16.2838** | **0.1604** | **3.9100e-003** | **21.4557** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 24.5873 | 1.4531 | 0.0000 | 60.9140 |
| Unmitigated | 32.7830 | 1.9374 | 0.0000 | 81.2186 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Arena | 0.21 | 0.0426 | 2.5200e-003 | 0.0000 | 0.1056 |
| Elementary School | 24.66 | 5.0058 | 0.2958 | 0.0000 | 12.4016 |
| General Office Building | 1.55 | 0.3146 | 0.0186 | 0.0000 | 0.7795 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Place of Worship | 133.95 | 27.1906 | 1.6069 | 0.0000 | 67.3637 |
| Single Family Housing | 1.13 | 0.2294 | 0.0136 | 0.0000 | 0.5683 |
| **Total** | | **32.7831** | **1.9374** | **0.0000** | **81.2186** |

### 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Arena | 0.1575 | 0.0320 | 1.8900e-003 | 0.0000 | 0.0792 |
| Elementary School | 18.495 | 3.7543 | 0.2219 | 0.0000 | 9.3012 |
| General Office Building | 1.1625 | 0.2360 | 0.0140 | 0.0000 | 0.5846 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Place of Worship | 100.462 | 20.3930 | 1.2052 | 0.0000 | 50.5227 |
| Single Family Housing | 0.8475 | 0.1720 | 0.0102 | 0.0000 | 0.4262 |
| **Total** | | **24.5873** | **1.4531** | **0.0000** | **60.9139** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT | | | |
| Unmitigated | 138.0600 | 0.0000 | 0.0000 | 138.0600 |

## 11.2 Net New Trees

**Species Class**

| | Number of Trees | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| | | MT | | | |
| Miscellaneous | 195 | 138.0600 | 0.0000 | 0.0000 | 138.0600 |
| **Total** | | **138.0600** | **0.0000** | **0.0000** | **138.0600** |

# Appendix B

# Trip Generation Assessment for the

# St. Rita's Catholic Church Project

# MEMORANDUM

DATE: January 30, 2019

TO: Jan Bowen, Senior Civil Engineer, City of Tulare Engineering Division

FROM: Jason Ellard, Transportation Engineer, VRPA Technologies, Inc.

SUBJECT: Trip Generation Assessment for St. Rita's Catholic Church in Tulare, California

This Trip Generation Assessment Memorandum has been prepared for the purpose of identifying daily and peak hour trips associated with the St. Rita's Catholic Church Development (Project). The Project seeks to develop the Project site over two (2) phases. Phase 1 includes the first phase of the church sanctuary. Phase 2 includes the buildout of the church/sanctuary and day chapel in addition to the church office, classrooms, rectory, and youth center/parish hall (see Figure 1). The Project will be located at the southwest corner of Bardsley Avenue and Morrison Street in the city of Tulare (see Figure 2).

The Project site was originally approved for the development of approximately 50 single-family homes. This Trip Generation Assessment Memorandum includes a comparison of trips associated with the approved single-family homes and trips associated with the proposed Project. VRPA estimated Daily and Weekday AM and PM peak hour trips as well as Weekend trips.

**TRIP GENERATION**

Trip generation was determined using trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition). Trips associated with the approved single-family homes (50) were derived from the Single-Family Detached Housing (210) Land Use Code in the Trip Generation Manual. Trips associated with the Project were derived from the Church (560) Land Use Code. Each of the ITE Land Use Codes identified above were used to identify Daily and Weekday AM and PM peak hour trips as shown in Table 1. Trips were also identified for Saturday and Sunday as shown in Table 2.

Considering the trip generation process described above, the approved single-family homes (50) would generate 550 daily trips, 40 trips during the AM peak hour, and 52 trips during the PM peak hour. St. Rita's Church is estimated to generate 338 daily trips, 18 trips during the AM peak hour, and 23 trips during the PM peak hour. St. Rita's Church will generate fewer weekday trips than the 50 single-family homes approved for the Project site.

The approved single-family homes (50) would generate 511 trips on Saturday and 378 trips on Sunday. St. Rita's Church is estimated to generate 313 trips on Saturday and 1,443 trips on Sunday. The proposed Project will generate fewer trips on Saturday but is projected to generate more trips (1,065) on Sunday. It should be noted that ambient (background) traffic near the Project is significantly less on Sunday in comparison to weekday traffic. Traffic related to Mission Oak High School and Alpine Vista (K-8) School

(located within ¼ mile) would be nonexistent on Sunday given typical school operating hours.

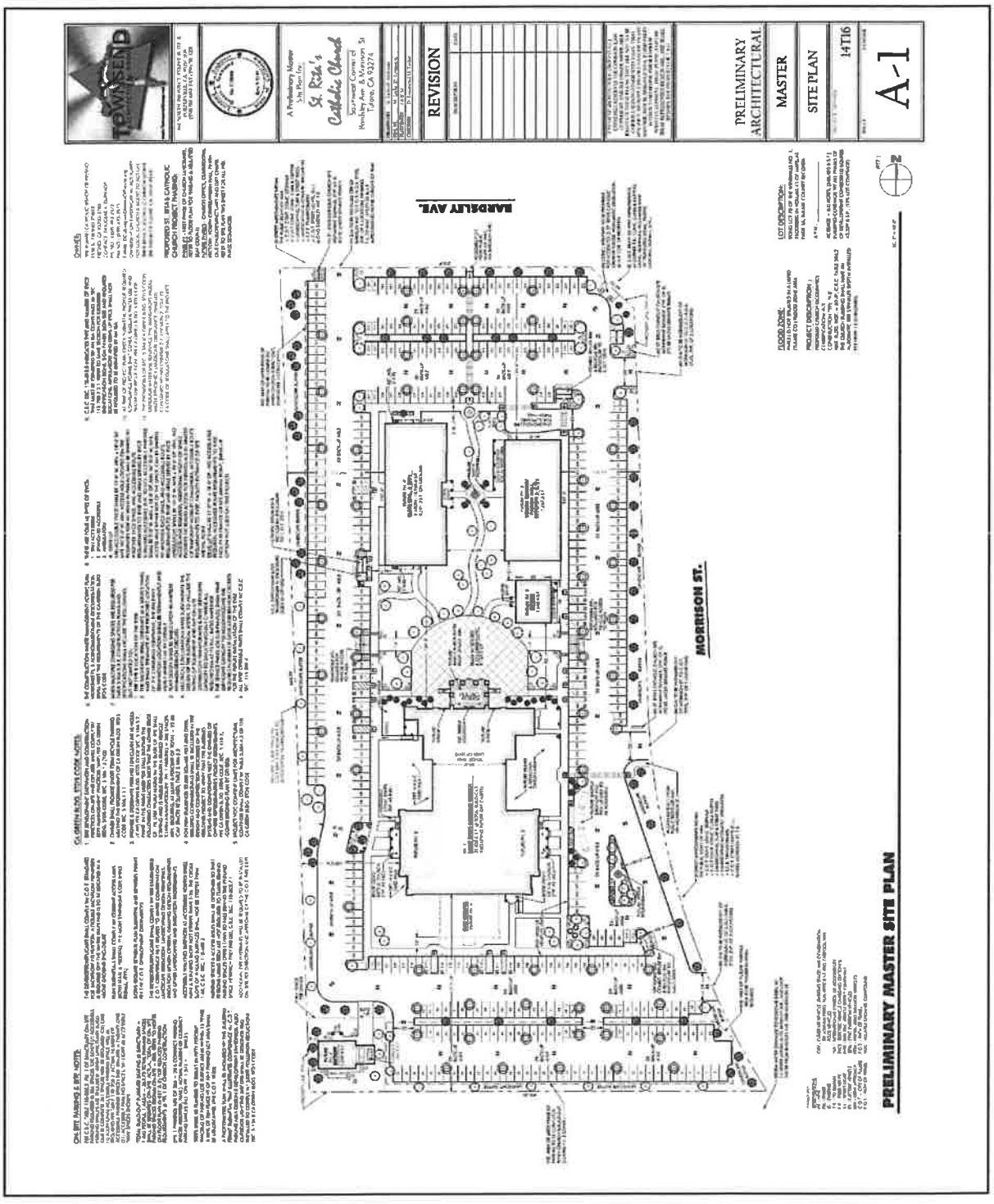
VRPA staff obtained traffic volume data along State Route (SR) 99 (between Bardsley Avenue and Paige Avenue) from Caltrans' Performance Measurement System (PeMS) Website. Many PeMS sites now have the capability to retrieve speed, truck flow, vehicle miles traveled (VMT), vehicle hours traveled (VHT), and delay data. Traffic volume data between the hours of 7 and 11am for the week of March 4th, 2018 was reviewed. Results show that traffic along SR 99 is approximately 65-70% less on Sunday than a typical weekday. Traffic along Bardsley Avenue would experience similar reductions in traffic when comparing Sunday and weekday traffic.

**CONCLUSION**

As noted above, the Project will generate more trips on Sunday than 50 single-family homes. However, the Project will generate fewer weekday daily and AM and PM peak hour trips. In addition, background traffic is substantially less on Sunday compared to a typical weekday. As a result, it is not anticipated that traffic generated from St Rita's Church will create significant impacts to adjacent roadway networks.

**St. Rita's Catholic Church**
**Site Plan**

**Figure 1**



## St. Rita's Catholic Church
## Project Location

Figure 2

# Table 1
## Weekday Trip Generation

| LAND USE | INDENDANT VARIABLE | | DAILY TRIP ENDS (ADT) | | WEEKDAY AM PEAK HOUR | | | | | | WEEKDAY PM PEAK HOUR | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | IN:OUT SPLIT | | VOLUME | | | | IN:OUT SPLIT | | VOLUME | | |
| | QUANTITY | UNITS | RATE | VOLUME | RATE | | | IN | OUT | TOTAL | RATE | | | IN | OUT | TOTAL |
| Single-Family Detatched Housing (ITE LANE USE CODE 210) | 50 | Dwelling Units | 11.00 | **550** | 0.80 | 0.25 | 0.75 | 10 | 30 | **40** | 1.04 | 0.63 | 0.37 | 33 | 19 | **52** |
| St. Rita's Catholic Church (ITE LANE USE CODE 560) | 52.22 | 1000 Sq. Ft. | 6.47 | **338** | 0.34 | 0.60 | 0.40 | 11 | 7 | **18** | 0.44 | 0.45 | 0.55 | 10 | 13 | **23** |

Source: Generation factors from ITE Trip Generation Manual, 10th Edition.
Trip ends are one-way traffic movements, entering or leaving.
The numbers in parenthesis are ITE land use codes.

# Table 2
## Weekend Trip Generation

| LAND USE | INDENDANT VARIABLE | | SATURDAY TRIP ENDS (ADT) | | SUNDAY TRIP ENDS (ADT) | |
|---|---|---|---|---|---|---|
| | QUANTITY | UNITS | RATE | VOLUME | RATE | VOLUME |
| Single-Family Detatched Housing (ITE LANE USE CODE 210) | 50 | Dwelling Units | 10.22 | **511** | 7.56 | **378** |
| St. Rita's Catholic Church (ITE LANE USE CODE 560) | 52.22 | 1000 Sq. Ft. | 5.99 | **313** | 27.63 | **1,443** |

Source: Generation factors from ITE Trip Generation Manual, 10th Edition.
Trip ends are one-way traffic movements, entering or leaving.
The numbers in parenthesis are ITE land use codes.