#### **TECHNICAL MEMORANDUM**

TO: County of San Bernardino

SUBJECT: Greenhouse Gas Emissions Technical Memo For Sai Ram Mandir

FROM: Aruna Reddy, Project Manager

**DATE:** March 30, 2020

#### 1.0 PURPOSE

This Greenhouse Gas (GHG) Study was conducted to evaluate potential GHG impacts of the proposed project. This study will help inform the Conditional Use Permit (CUP) required for the proposed use.

#### 2.0 **PROJECT LOCATION**

The proposed Sai Ram Mandir will be located on a 4.83 acre site in unincorporated San Bernardino County at 12594 Roswell Avenue, Chino, CA (Figure 1). The project study area is in the South Coast Air Basin (SCAB). The site is on two parcels with APN 1016-331-05 and -06. The project site is zoned RS-20M within a Single Residential land use designation. Adjacent parcels to the north, west, south, and east are also Single Residential within unincorporated San Bernardino County, except one adjoining parcel to the north which is in the City of Chino right of way for Walnut Avenue. The site is bordered to the northeast by a rail road track. The proposed site is on the Ontario, California United States Geological Survey (USGS) topographic quadrangle (latitude 34.024943° N and longitude 117.721223°W at an elevation of 754 feet above mean sea level).

#### 3.0 **PROJECT DESCRIPTION**

Sri Jayaram Foundation proposes to build a temple for Sri Sai Baba and provide community services. The project would involve the construction of a two story temple within the site (Figure 2). The main temple structure will have a square footage of 32,400 square feet. A three story caretaker quarters of 4,500 square feet will be built toward the east property line. About 2 acres of the 4.83 acre site will be left unpaved and empty for future residential use so the built area will be 2.83 acres. Access to the temple will be from the north (Walnut Avenue) and east (Rosewell Avenue). Parking will be provided to the east and west of the temple.

The first level is designed to serve as the main 270- seat congregation area for the purpose of worship and prayer (Figure 2). There will also be a kitchen facility for cooking and a dining hall located adjacent to the main congregation hall at the first floor, as well as. classrooms for the youth, multipurpose meeting rooms, administrative offices and prayer/meditation rooms. The second level will house a prayer hall where devotees can view the idols and perform rituals. There will also be three classrooms for youth to learn about music, dance, yoga, education, etc. The facility will also be designed to offer spaces for community events and activities. Both the larger hall or the smaller multipurpose rooms and classrooms will function individually for community services such as health fairs, counseling sessions, job search assistance, environmental awareness campaigns, community pantry and food drive.

#### **Project Construction**

Construction would consist of site preparation, grading, temple construction, paving and architectural coating. Construction defaults in CalEEMod version 2016.3.2 (CalEEMod) for "Places of

Worship" land use were utilized. Construction would require approximately 12 months from March 2020 to March 2021. Utilizing the CalEEMod construction schedule, it was assumed site preparation would last 5 days, grading 8 days, building construction 230 days, paving 18 days and architectural coating 18 days (Attachment 1). It was assumed that no demolition would be required because the site is empty and there are no existing structures on site. Construction would occur between 7:00 a.m. and 4:00 p.m. 5 days per week.

#### **Operations**

Sai Ram Mandir will conduct religious and cultural activities at the project site. The hours of operation are from 6:00 AM to 1:00 PM and 6:00 PM to 9 PM on weekdays. The facility will be closed from 1:00 PM to 6 PM on weekdays. On weekends (Saturdays and Sundays) the facility will be open from 6:00 AM to 9:00 PM. Every day four aarthis or services will be performed. The timings of the daily services are 6:00 AM (morning aarthi), 12:00 PM (afternoon aarthi), 7:00 PM (evening aarthi) and 8:30 PM (night aarthi). These services last for 10-15 minutes. It is expected that the members of the congregation would attend one of the four services once or twice a month.

An onsite manager will provide leadership, manage two staff including the temple priest, and oversee day-to-day temple operations and perform daily hands-on operational duties. All temple staff will reside on site in the adjunct staff quarters. The manager will work closely with all constituents including devotees, priests, staff, volunteers, neighbors, and management and ensure smooth functioning of religious, human services, cultural, youth & education, and other temple events. According to the Trip Generation Report for this project, daily trip volumes to the temple are 152 trips per day Monday to Friday, 192 trips per day on Saturday and 556 trips per day on Sunday.

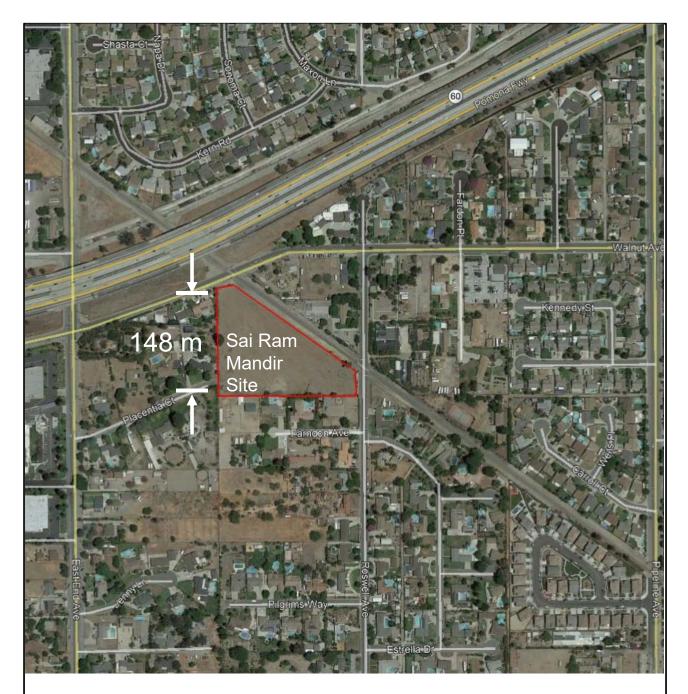
#### 4.0 ENVIRONMENTAL SETTING

#### **Greenhouse Gas Emissions Characteristics**

The standard definition of GHG emissions refers to the atmospheric presence of the following six gaseous substances: carbon dioxide ( $CO_2$ ); methane ( $CH_4$ ); nitrous oxide ( $N_2O$ ); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulfur hexafluoride (SF<sub>6</sub>). Tropospheric ozone and black carbon are also important climate pollutants.  $CO_2$  is the most abundant GHG, and collectively  $CO_2$ ,  $CH_4$ , and  $N_2O$  amount to 80 percent of GHG effects.

 $CO_2$ ,  $CH_4$ , and  $N_2O$  concentrations have increased in the atmosphere since pre-industrial times, and this increase is the main driver of climate change. Globally,  $CO_2$  has increased by 40 percent from 278 parts per million (ppm) circa 1750 to 390.5 ppm in 2011 (ARB, 2014). During the same period,  $CH_4$  increased by 150 percent, from 722 parts per billion (ppb) to 1,803 ppb, and  $N_2O$  increased by 20 percent, from 271 ppb to 324.2 ppb. The increase of  $CO_2$ ,  $CH_4$ , and  $N_2O$  is caused by anthropogenic emissions from the use of fossil fuel and fertilizer, and from land use changes, in particular agriculture.

For each GHG, a Global Warming Potential (GWP) has been calculated to reflect how long emissions remain in the atmosphere and how strongly energy is absorbed on a per-kilogram basis relative to CO<sub>2</sub>. GWP is a metric that indicates the relative climate forcing of a kilogram of emissions when averaged over the period of interest (both 20-year and 100-year horizons are used) for the GWP. To account for this higher potential, emissions of other GHGs are frequently expressed as an equivalent of CO<sub>2</sub>, denoted as CO<sub>2</sub>e. CO<sub>2</sub>e is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect.

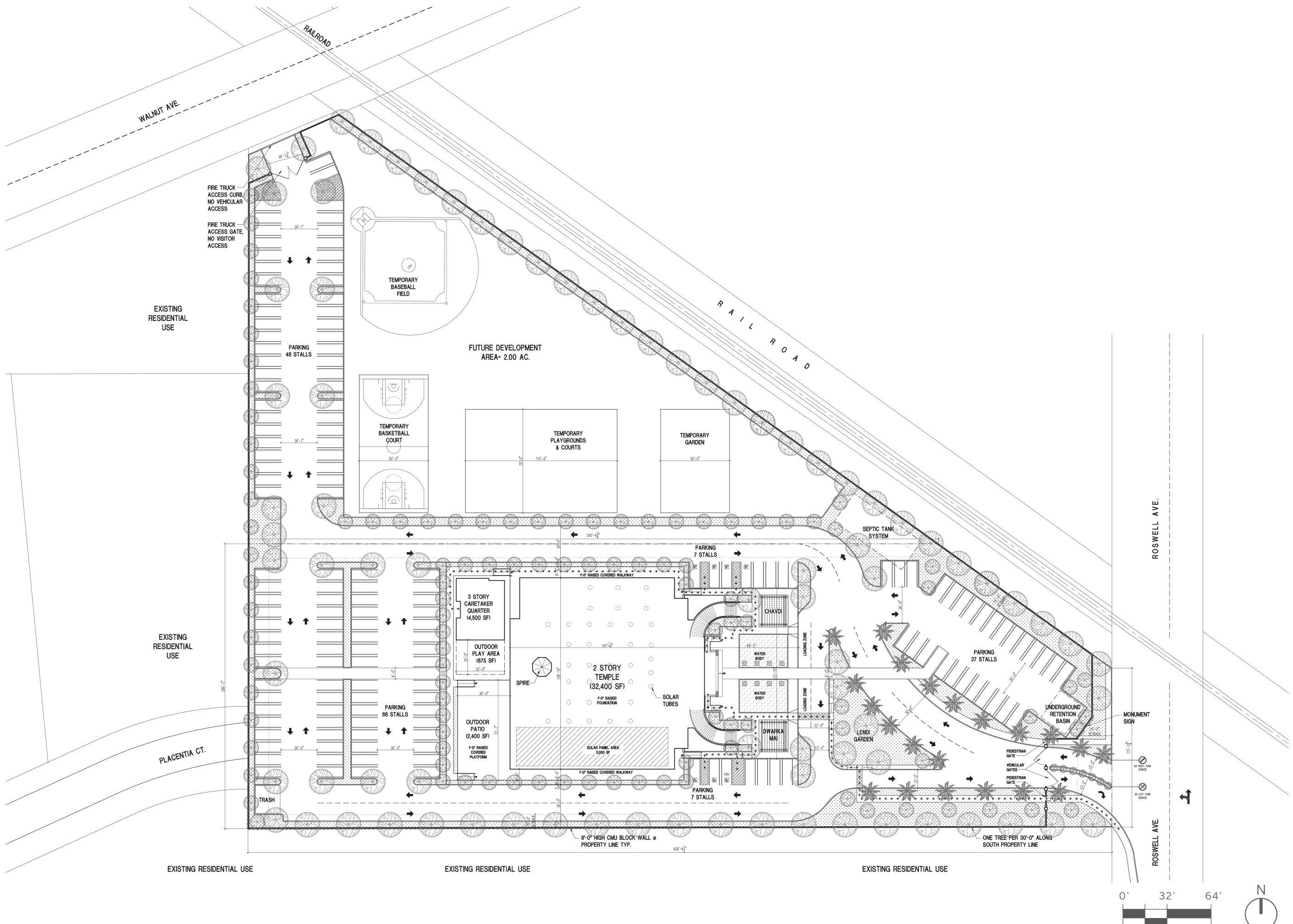


Source: Google Maps

# SITE LOCATION MAP

FIGURE 1 DATE: AUGUST 26, 2019 SAI RAM MANDIR 12594 ROSEWELL AVENUE, CHINO, CA 91710







6169 Athena Street Chino, CA 91710

Contact: Keyur Maru 714.390.0525 www.sajnidesign.com

# Client:

# Sri Jayaram Foundation, Inc.

6549 Pimlico Place Eastvale, CA 92880

Contact: Arunasri Reddy 951.544.5832

Project:

# Sri Sairam Mandir

12594 Roswell Ave. Chino, CA 91710-3036

# Revisions:

110 1101	0113.	
01	Conceptual Drawings	11.20.2019
02	Conceptual Drawings v2	11.26.2019
03	Conceptual Drawings v3	12.03.2019
04	Conceptual Drawings v4	12.05.2019
05	Conceptual Drawings v5	12.15.2019
06	Conceptual Drawings v6	12.24.2019
07	Conceptual Drawings v7	01.20.2020
08	Conceptual Drawings v8	03.16.2020

Stamp:



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Drawing Data:

Project No	19026
Issue Date	03.16.2020
Scale	1/32" = 1'-0"
Drawn By	KM
Sheet	22" x 34"
lf sheet is less than siz	e indicated above, this

is a reduced print. Reduce scale accordingly.

Sheet:

# Site Plan FIGURE 2

#### **California GHG Emissions Inventory**

The California Air Resources Board (ARB) prepared a statewide GHG emissions inventory covering 2000 to 2014, which concluded that GHG emissions have decreased by 7.9 percent over that period from 466 million metric tons (MMT) CO<sub>2</sub>e to 442 MMTCO<sub>2</sub>e (ARB, 2016). Emissions in 2014 from the transportation sector, which represents California's largest source of GHG emissions and contributed 37 percent of total annual emissions, declined marginally relative to 2011 even while the economy and population continued to grow over that 3-year period. The long-term direction of transportation-related GHG emissions is another clear trend, with a 13 percent drop over the past 10 years.

Statewide, mobile vehicular sources account for approximately 36 percent of GHG emissions as of 2014. Direct stationary sources of emissions include solid waste decomposition, haul trucks, and the use of refrigerants. The emissions in 2011 are the lowest of the 12-year period between 2000 and 2011, while 2004 had the highest emissions at 495 MMTCO<sub>2</sub>e. From 2000–2011, California's population grew by 10.5 percent. California's per capita GHG emissions decreased by 11.9 percent over that same period. Emissions were of similar magnitude from 2011–2014.

#### **County of San Bernardino GHG Emissions**

Total GHG emissions for San Bernardino County from the County GHG Emissions Reduction Plant (County, 2011) are 7,586,908 MTCO<sub>2</sub>e for 2020 with the following distribution; Stationary sources (42 percent), transportation (32 percent), building energy (20.3 percent), solid waste/landfill (4.7 percent) with the remainder from agriculture, water and miscellaneous sources. Stationary sources, transportation and energy represent the largest GHG emissions sources.

#### 5.0 REGULATORY SETTING

The absence of federal regulations for GHG emissions is typically approached by the State of California (State) by the establishment of a broad policy framework for the State's long-term GHG emissions-reduction and climate change adaptation program. These policies have been established to develop statewide action plans that set emissions-reduction targets for existing sources of GHG emissions that promote renewable energy and increase energy efficiency; however, the State framework is used as a threshold to screen City projects.

#### State

The State has adopted statewide legislation to address issues related to various aspects of climate change and GHG emissions. The Governor of California has also issued several Executive Orders (EO) related to the State's evolving climate change policy. Of importance to local governments is the direction provided by the 2008 Assembly Bill (AB) 32 *Scoping Plan*, which recommends that local governments should reduce their GHG emissions to a level consistent with State goals (i.e., 15 percent below current levels).

In the absence of federal regulations, GHG emissions are generally regulated at the State level and typically approached by setting emissions-reduction targets for existing sources of GHG emissions, establishing policies to promote renewable energy and increase energy efficiency, and developing statewide action plans.

Summaries of key policies, legal cases, regulations, and legislation at the State level relevant to the project are provided below. Key statewide GHG regulations that are directly applicable to the project are also included below:

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*EO* S-3-05: EO S-3-05, signed in June 2005, proclaimed that California is vulnerable to the impacts of climate change. To combat those concerns, the EO established total GHG emissions targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

In addition, achieving these long-term GHG reduction policies will require systemic changes in how energy is produced and used. There are several studies that discuss potential mechanisms for limiting statewide GHG emissions to meet the aggressive goals identified by EO S-3-05. A report by the California Center for Science and Technology, the California Department of Transportation's *California Transportation Plan 2040*, ARB's First Update to the AB 32 *Scoping Plan*, and a study published in *Science* that analyzes the changes that will be required to reduce GHG emissions to 80 percent below 1990 levels by 2050. In general, these studies reach similar conclusions—deep reductions in GHG emissions can only be achieved with significant changes in electricity production, transportation fuels, and industrial processes (e.g., decarbonizing electricity production, electrifying transportation, using alternative fuels for aviation).

**EO B-16-2012 (2012):** EO B-16-2012 establishes benchmarks for reducing transportation-related GHG emissions. It requires agencies to implement the Plug-in Electric Vehicle Collaborative and California Fuel Cell Partnership by 2015 and sets forth targets specific to the transportation section, including the goal of reducing transportation-related GHG emissions to 80 percent less than 1990 levels.

**EO B-30-15 (2015):** EO B-30-15 established a medium-term goal for 2030 of reducing GHG emissions by 40 percent below 1990 levels and requires ARB to update its current AB 32 Scoping *Plan* to identify the measures to meet the 2030 target. The EO supports EO S-03-05, described above, but it is only binding on State agencies. However, there are (2015/2016) proposals (i.e., *Senate Bill* [SB] 32) at the State legislature to adopt a legislative target for 2030.

**AB 1493–Pavley Rules (2002, amendments 2009)/Advanced Clean Cars (2011):** AB 1493 required ARB to develop and implement regulations to reduce automobile and light-truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009 model year. In June 2009, the U.S. Environmental Protection Agency administrator granted a Clean Air Act (CAA) waiver of preemption to California. This waiver allowed California to implement its own GHG emissions standards for motor vehicles beginning with model year 2009. ARB approved joint rulemaking efforts to reduce GHG emissions from passenger cars (model years 2017 to 2025) on December 31, 2012 (ARB, 2014).

**Renewable Energy Standard/Renewable Portfolio Standard (2002/2006/2011):** SB 1078 (2002) and SB 107 (2006) created the Renewable Energy Standard (RES), which required electric utility companies to increase procurements from eligible renewable energy resources by at least 1 percent of their retail sales annually until reaching 20 percent by 2010. SB 2X 1 (2011) requires a Renewable Portfolio Standard (RPS), functionally the same thing as the RES, of 33 percent by 2020. In 2013, the statewide average for the three largest electrical suppliers (Pacific Gas and Electric, Southern California Edison, and San Diego Gas & Electric) was 22.7 percent. As noted below, SB 350 increased the renewable requirement to 50 percent for 2030.

**AB 32:** AB 32 codified the State's GHG emissions target by requiring California's global warming emissions to be reduced to 1990 levels by 2020. Since being adopted, the ARB, the California Energy Commission, the California Public Utilities Commission, and the California Building Standards Commission have been developing regulations that will help the State meet the goals of AB 32 and EO S-03-05. The Scoping Plan for AB 32 identifies specific measures to reduce GHG emissions to 1990 levels by 2020 and requires ARB and other State agencies to develop and enforce regulations

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and other initiatives to reduce GHG emissions. Specifically, the Scoping Plan articulates a key role for local governments by recommending that local governments establish GHG emissions-reduction goals that are consistent with those of the State (i.e., approximately 15 percent below current levels) (ARB, 2008).

ARB re-evaluated its emissions forecast considering the economic downturn and updated the projected 2020 emissions to 545 MMT of CO<sub>2</sub>e. Two reduction measures (Pavley I and RPS [12 to 20 percent]) that were not previously included in the 2008 *Scoping Plan* baseline were incorporated into the updated baseline, further reducing the 2020 statewide emissions projection to 507 MMTCO<sub>2</sub>e. The updated forecast of 507 MMTCO<sub>2</sub>e is referred to as the AB 32 2020 baseline. An estimated reduction of 80 MMT CO<sub>2</sub>e is necessary to lower statewide emissions to the AB 32 target of 427 MMTCO<sub>2</sub>e by 2020 (ARB, 2011).

ARB approved the *First Update to the Scoping* Plan on May 22, 2014, and finalized the environmental analysis following public review on May 15, 2014 (ARB, 2014). The first update includes a 2020 element and a post-2020 element. The 2020 element focuses on the State, regional, and local initiatives that are being implemented now to help the State meet the 2020 goal.

ARB's Scoping Plan 2017 outlines the following vision for 2030 (ARB, 2017):

- Cap and Trade: Firm Limit on 80% of Emissions
- Clean Energy at Least 50% Renewable Electricity
- Clean Fuels 18% Carbon Intensity Reduction
- Double Energy Efficiency in Existing Buildings
- High Density, Transit-Oriented Housing
- Natural & Working Lands Restoration 15-20 Million Metric Tons of Reductions
- Walkable & Bikable Communities
- Reduce "Super Pollutants" 40% Reduction in Methane and HFCs
- Clean Cars over 4 Million Affordable Electric Cars on the Road
- Clean Transit 100% of New Buses are Zero-Emission
- Sustainable Freight Transitioning to Zero Emissions Everywhere Feasible, and Near-Zero Emissions with Renewable Fuels Everywhere Else

**SB 350 (2015):** SB 350 (De Leon, also known as the "Clean Energy and Pollution Reduction Act of 2015") was approved in 2015 and includes key provisions to require the following by 2030: (1) a renewable portfolio standard of 50 percent and (2) a doubling of efficiency for existing buildings.

**SB** 375: SB 375 requires metropolitan planning organizations (MPO) to incorporate a "sustainable communities strategy" (SCS) in their regional transportation plans that will achieve the GHG emissions-reduction targets set by ARB. In February 2011, ARB finalized the regional targets. SB 375 also includes provisions for streamlined CEQA review for some infill projects, such as transit-oriented development. The final targets require the Southern California Association of Governments (SCAG), the regional planning agency and largest MPO in the nation, to identify strategies that will reduce per capita GHG emissions from passenger vehicles by approximately 8 percent by 2020 and 13 percent by 2035 over the base year (i.e., 2005). SCAG adopted the final 2012 Regional Transportation Plan (RTP), which incorporates the SCS, on April 4, 2012 (SCAG, 2012).

**State CEQA Guidelines (2010):** The State CEQA Guidelines require lead agencies to describe, calculate, or estimate the amount of GHG emissions that would result from a project. Section 15064.6 calls for a good-faith effort when describing, calculating, or estimating GHG emissions. Section 15064.6 also states that a determination of the significance of GHG impacts should

consider whether the project would increase or reduce GHG emissions, exceed a locally applicable threshold of significance, or comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. However, the revised guidelines do not require or recommend specific analytical methods or provide quantitative significance criteria for GHG emissions, and the guidelines confirm that lead agencies have the discretion to determine appropriate significance thresholds.

#### Regional

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties. SCAG addresses regional issues related to transportation, the economy, community development, and the environment. SCAG is the federally designated MPO for most of the southern California region and the largest MPO in the nation. As required by federal and State law, SCAG develops plans pertaining to transportation, growth management, hazardous waste management, housing, and air quality. SCAG has prepared the Regional Comprehensive Plan and Guide, including Growth Management and Regional Mobility chapters that support the land use and transportation components of the Air Quality Management Plan (AQMP), which provides some GHGreduction co-benefits. These chapters are used in the preparation of air quality forecasts and the consistency analysis included in the AOMP. The 2016-2040 RTP/SCS integrates land use and transportation strategies to achieve required emission reductions per SB 375 of 8 percent by 2020 and 13 percent by 2040 over the base year (i.e., 2005). The RTP/SCS was adopted by SCAG in April 2016 and approved by Federal Highway Administration in June 2016. The SCS includes setting forth a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, aims to reduce GHG emissions from automobiles and light trucks consistent with ARB targets for SCAG. The RTP/SCS must conform to the federal CAA.

#### Local

**South Coast Air Quality Management District:** South Coast Air Quality Management District (SCAQMD) has primary responsibility for developing and implementing rules and regulations for attainment of the National Ambient Air Quality Standards and California Ambient Air Quality Standards, as well as permitting new or modified sources, developing air quality management plans, and adopting and enforcing air pollution regulations within the Air Basin. The AB 32 *Scoping Plan* states that ARB will work actively with air districts in coordinating emissions reporting, encouraging and coordinating GHG reductions, and providing technical assistance in quantifying reductions.

CEQA requires lead agencies to inform decision makers and the public about the potentially significant environmental impacts of a proposed project. The ability of air districts to control emissions (both criteria pollutants and GHGs) is provided primarily through permitting but also through their role as a CEQA lead or commenting agency, the establishment of CEQA thresholds, and the development of analytical requirements for CEQA documents.

Scientists are unable to identify the direct climate effects of projected GHG emissions from a specific project. It can be safely concluded, however, that the individual contributions of most projects to climate change would be negligible to extremely minor and thus would not be significant. Regional or global climate change related to man-made GHG emissions is, by its nature, a cumulative impact. According to the Association of Environmental Professionals (AEP), in its paper titled *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents* (AEP, 2007), "an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change."

County of San Bernardino General Plan Conservation Element (GHG): Since the project site in not within the precincts of the City of Chino, the applicable general plan would be the County of San

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Bernardino General Plan (County, 2007). The General Plan text was adopted by the Board of Supervisors on March 13, 2007 and became effective on April 12, 2007. The GHG plan is contained in Section V.C.3 within the Conservation Element. Policies CO 4.1 through 4.12 pertain to Air Quality, while policy 4.13 pertains to greenhouse gas emissions. The following GHG policy is applicable to the project: CO 4.13 (emission inventories and GHG reduction plan).

#### 6.0 THRESHOLDS

All development projects, including those otherwise determined to be exempt from CEQA will be subject to applicable County Development Code provisions (County, 2015), including the GHG performance standards, and state requirements, such as the California Building Code requirements for energy efficiency. With the application of the GHG performance standards, projects that are exempt from CEQA and small projects that do not exceed 3,000 MTCO2e per year will be considered to be consistent with the Plan and determined to have a less than significant individual and cumulative impact for GHG emissions.

#### 7.0 IMPACT ANALYSIS

SCAQMD recommends that annual construction emissions associated with a project be amortized over the life of the project (in this case, 30 years) and the annual amortized emissions added to the annual operational emissions. Therefore, this analysis includes a quantification of the total modeled construction-related GHG emissions. Those emissions are then amortized and evaluated over the 30-year life of the project and compared the annual amortized construction and annual operational emissions to the threshold of 3,000 MTCO<sub>2</sub>e per year.

#### Construction

Operation of construction equipment, deliveries of materials and equipment to the site, and hauling away demolition debris and construction equipment would require combustion of liquid petroleum fuels such as diesel fuel and gasoline. Heavy-duty off-road equipment, materials transport, and worker commutes during construction of the proposed project would result in exhaust-related GHG emissions. The construction scenario from CalEEMod version 2016.3.2 (CalEEMod) for "Places of Worship" land use was utilized. As calculated by CalEEMod (Attachment A), an estimated total of 329 MTCO<sub>2</sub>e for the entire construction period would be generated, and the estimated yearly amortized GHG over the life of the project (30 years) is 11 MT.

The significance of GHG emissions from construction is not determined independently but is considered together with operational GHG emissions. It is highly unlikely that construction of any individual project would generate GHG emissions of sufficient quantity to conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Standard construction procedures would be undertaken in accordance with SCAQMD and ARB regulations applicable to heavy-duty construction equipment and diesel haul trucks. Adhering to requirements pertinent to construction equipment maintenance and inspections and emissions standards, as well as diesel fleet requirements including idling time restrictions and maintenance, would ensure that construction of the proposed project would be inconsistent with GHG emissions reductions efforts and, therefore, would not create a significant effect.

#### **Operations**

The proposed project would generate GHG emissions directly from building operations from combustion of natural gas and from vehicle trips generated by the patrons. According to the Trip Generation Report for this project, daily trip volumes to the temple are 152 trips per day Monday to Friday, 192 trips per day on Saturday and 556 trips per day on Sunday. Additionally, the proposed project would generate offsite GHG emissions indirectly through its consumption of electricity. Combustion of

natural gas would occur in water heaters. Both direct and indirect emissions were estimated using CalEEMod.

As calculated by CalEEMod, operation of the proposed project is expected overall to generate approximately 572 MT per year of CO<sub>2</sub>e. The significance of GHG emissions from operations is not determined independently but is considered cumulatively with construction GHG emissions. It is highly unlikely that operations of any individual project would generate GHG emissions of sufficient quantity to conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

The proposed project is consistent with anticipated long-term statewide strategies to reduce GHG emissions. As shown in Table 1, the total annual amortized annual construction-related and annual operational-related GHG emissions of 572.0 MTCO<sub>2</sub>e associated with the project would be less than the 3,000 MTCO<sub>2</sub>e per year threshold. The 572 MTCO<sub>2</sub>e annual emissions represents approximately 19 percent of the annual significance threshold for nonindustrial projects. Thus, the project would not directly or indirectly generate GHG emissions that would have a significant effect on the environment.

Emissions Category	CO <sub>2</sub> e (MT per Year)						
Amortized Construction over 30 years	11.0						
Operations	561.0						
Total GHG Emissions	572.0						
SCAQMD Proposed Threshold (MT CO <sub>2</sub> e/year) <sup>1</sup>	3,000						
Exceed Threshold?	No						
Key: MT CO <sub>2</sub> e/year = metric tons of carbon dioxide equivalents per year.							

Table 1. Maximum Annual Greenhouse Gas Emissions

Source: See Attachment 1 for CalEEMod results for Construction and Operation.

As discussed previously, GHG emissions are regionally cumulative in nature, and it is highly unlikely that construction of any individual project would generate GHG emissions of sufficient quantity to conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Therefore, the project would have no significant effect to GHG.

#### 8.0 **REFERENCES**

- AEP. 2007. Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents. Available at: <u>https://www.counties.org/sites/main/files/file-attachments/aep\_global\_climate\_change\_june\_29\_final1.pdf</u>.
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County of San Bernardino. 2007. Available: Countywide General Plan, https://cms.sbcounty.gov/lus/Planning/GeneralPlan.aspx

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.2015. GHG Development Review Process. Available at: <u>http://www.sbcounty.gov/Uploads/lus/GreenhouseGas/FinalGHGUpdate.pdf</u>

Southern California Association of Governments. 2012. Final 2012 Regional Transportation Plan. Available at: <u>http://scagrtpscs.net/Pages/2012RTPSCS.aspx</u>.

-----. 2016. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Available at: <u>http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf</u>. Sai Ram Mandir GHG Technical Memorandum

# ATTACHMENT 1 CalEEMod Output Results

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Sai Ram Mandir - South Coast AQMD Air District, Annual

#### Sai Ram Mandir

South Coast AQMD Air District, Annual

#### **1.0 Project Characteristics**

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Place of Worship	36.90	1000sqft	4.83	36,900.00	0

#### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2021
Utility Company	Statewide Average				
CO2 Intensity (Ib/MWhr)	1001.57	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

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

Project Characteristics -

Land Use - Land Use - Lot acerage of 4.83 acre from the CUP application while the square footage is total of place of worship plus caretaker office.

Construction Phase - Assume one year for construction duration.

Grading - Assume whole site will be graded during site preparation and area of place of worship will be further graded during the grading phase. Assume there will be no soil import of export.

Trips and VMT -

Construction Off-road Equipment Mitigation - See page 3-7 of WRAP Fugitive Dust Handbook for PM10/PM2.5 % reduction with watering of exposed area

Vehicle Trips - - Matched wkday/Sat/Sun trip rate to Traffic Trip Generation Report

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#### Sai Ram Mandir - South Coast AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	5/20/2021	9/24/2021
tblConstructionPhase	PhaseEndDate	3/31/2021	8/5/2021
tblConstructionPhase	PhaseEndDate	5/13/2020	9/17/2020
tblConstructionPhase	PhaseEndDate	4/26/2021	8/31/2021
tblConstructionPhase	PhaseEndDate	5/1/2020	9/7/2020
tblConstructionPhase	PhaseStartDate	4/27/2021	9/1/2021
tblConstructionPhase	PhaseStartDate	5/14/2020	9/18/2020
tblConstructionPhase	PhaseStartDate	5/2/2020	9/8/2020
tblConstructionPhase	PhaseStartDate	4/1/2021	8/6/2021
tblConstructionPhase	PhaseStartDate	4/25/2020	9/1/2020
tblGrading	AcresOfGrading	4.00	2.83
tblGrading	AcresOfGrading	0.00	4.83
tblLandUse	LotAcreage	0.85	4.83
tblVehicleTrips	ST_TR	10.37	5.00
tblVehicleTrips	SU_TR	36.63	15.00
tblVehicleTrips	WD_TR	9.11	4.10

#### 2.0 Emissions Summary

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#### Sai Ram Mandir - South Coast AQMD Air District, Annual

#### 2.1 Overall Construction

#### **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Year	tons/yr											MT/yr						
2020	0.1033	0.9575	0.7825	1.3600e- 003	0.0825	0.0527	0.1351	0.0410	0.0493	0.0903	0.0000	118.1319	118.1319	0.0278	0.0000	118.8275		
2021	0.3375	1.5117	1.4729	2.5500e- 003	0.0188	0.0806	0.0994	5.0600e- 003	0.0757	0.0808	0.0000	221.7316	221.7316	0.0492	0.0000	222.9612		
Maximum	0.3375	1.5117	1.4729	2.5500e- 003	0.0825	0.0806	0.1351	0.0410	0.0757	0.0903	0.0000	221.7316	221.7316	0.0492	0.0000	222.9612		

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr												M	Г/yr		
2020	0.1033	0.9575	0.7825	1.3600e- 003	0.0378	0.0527	0.0904	0.0175	0.0493	0.0668	0.0000	118.1318	118.1318	0.0278	0.0000	118.8274
2021	0.3375	1.5117	1.4729	2.5500e- 003	0.0188	0.0806	0.0994	5.0600e- 003	0.0757	0.0808	0.0000	221.7314	221.7314	0.0492	0.0000	222.9610
Maximum	0.3375	1.5117	1.4729	2.5500e- 003	0.0378	0.0806	0.0994	0.0175	0.0757	0.0808	0.0000	221.7314	221.7314	0.0492	0.0000	222.9610
	ROG	NOx	со	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	44.15	0.00	19.07	51.03	0.00	13.73	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
2	6-29-2020	9-28-2020	0.3066	0.3066
3	9-29-2020	12-28-2020	0.7178	0.7178
4	12-29-2020	3-28-2021	0.6464	0.6464
5	3-29-2021	6-28-2021	0.6582	0.6582
6	6-29-2021	9-28-2021	0.5620	0.5620
		Highest	0.7178	0.7178

#### 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	0.1505	0.0000	4.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e- 004	9.2000e- 004	0.0000	0.0000	9.8000e- 004	
Energy	6.4600e- 003	0.0588	0.0494	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	234.1298	234.1298	6.1500e- 003	2.1900e- 003	234.9369	
Mobile	0.0564	0.2965	0.6416	2.1900e- 003	0.1730	1.8100e- 003	0.1748	0.0464	1.6900e- 003	0.0481	0.0000	202.5836	202.5836	0.0108	0.0000	202.8523	
Waste						0.0000	0.0000		0.0000	0.0000	42.6951	0.0000	42.6951	2.5232	0.0000	105.7753	
Water						0.0000	0.0000		0.0000	0.0000	0.3663	15.9445	16.3108	0.0381	9.8000e- 004	17.5561	
Total	0.2133	0.3553	0.6914	2.5400e- 003	0.1730	6.2800e- 003	0.1793	0.0464	6.1600e- 003	0.0525	43.0614	452.6588	495.7202	2.5782	3.1700e- 003	561.1216	

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#### 2.2 Overall Operational

#### Mitigated Operational

Percent Reduction	0.00		0.00	0.00	0.00	0.00	) 0.	00 0	.00	0.00	0.0	0.0	0 (	0.00	0.0	0 0.0	0 00	.00	0.00	0.00
	ROG		NOx	со	SO2	Fugiti PM1			/10 otal	Fugitive PM2.5	Exha PM			- CO2	NBio-	CO2 Total	CO2 C	H4	N20	CO2e
Total	0.2133	0.3553	0.6914	2.5400 003	e- 0.1	730	6.2800e- 003	0.1793	0.046	4 6.16 0	00e- )3	0.0525	43.0614	452	.6588	495.7202	2.5782	3.1700e 003	- 561.12	:16
Water	n   						0.0000	0.0000		0.0	000	0.0000	0.3663	15.	9445	16.3108	0.0381	9.8000e 004	- 17.55	61
Waste	*						0.0000	0.0000		0.0	000	0.0000	42.6951	0.0	0000	42.6951	2.5232	0.0000	105.77	'53
Mobile	0.0564	0.2965	0.6416	2.1900 003	e- 0.1	730	1.8100e- 003	0.1748	0.046		00e- )3	0.0481	0.0000	202	.5836	202.5836	0.0108	0.0000	202.85	23
Energy	6.4600e- 003	0.0588	0.0494	3.5000 004			4.4700e- 003	4.4700e- 003			00e- )3	4.4700e- 003	0.0000	234	.1298	234.1298	6.1500e- 003	2.1900e 003	- 234.93	69
Area	0.1505	0.0000	4.7000e 004	e- 0.000	)		0.0000	0.0000		0.0	000	0.0000	0.0000		000e- 004	9.2000e- 004	0.0000	0.0000	9.8000 004	
Category		tons/yr										MT/yr								
	ROG	NOx	СО	SO2	Fug PM	itive /10	Exhaust PM10	PM10 Total	Fugitiv PM2.			PM2.5 Total	Bio- CO2	2 NBio	- CO2	Total CO2	CH4	N2O	CO2	е

# 3.0 Construction Detail

**Construction Phase** 

CalEEMod Version: CalEEMod.2016.3.2

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2020	9/7/2020	5	5	
2	Grading	Grading	9/8/2020	9/17/2020	5	8	
3	Building Construction	Building Construction	9/18/2020	8/5/2021	5	230	
4	Paving	Paving	8/6/2021	8/31/2021	5	18	
5	Architectural Coating	Architectural Coating	9/1/2021	9/24/2021	5	18	

Acres of Grading (Site Preparation Phase): 4.83

Acres of Grading (Grading Phase): 2.83

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 55,350; Non-Residential Outdoor: 18,450; Striped Parking Area: 0 (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
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	7.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
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	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	16.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2016.3.2

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#### **3.1 Mitigation Measures Construction**

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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0477	0.0000	0.0477	0.0251	0.0000	0.0251	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e- 004		5.4900e- 003	5.4900e- 003		5.0500e- 003	5.0500e- 003	0.0000	8.3577	8.3577	2.7000e- 003	0.0000	8.4253
Total	0.0102	0.1060	0.0538	1.0000e- 004	0.0477	5.4900e- 003	0.0532	0.0251	5.0500e- 003	0.0302	0.0000	8.3577	8.3577	2.7000e- 003	0.0000	8.4253

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#### 3.2 Site Preparation - 2020

#### Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	2.0000e- 004	1.5000e- 004	1.7000e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4445	0.4445	1.0000e- 005	0.0000	0.4448
Total	2.0000e- 004	1.5000e- 004	1.7000e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4445	0.4445	1.0000e- 005	0.0000	0.4448

#### 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					ton	s/yr							МТ	7/yr		
Fugitive Dust					0.0186	0.0000	0.0186	9.7900e- 003	0.0000	9.7900e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e- 004		5.4900e- 003	5.4900e- 003		5.0500e- 003	5.0500e- 003	0.0000	8.3577	8.3577	2.7000e- 003	0.0000	8.4252
Total	0.0102	0.1060	0.0538	1.0000e- 004	0.0186	5.4900e- 003	0.0241	9.7900e- 003	5.0500e- 003	0.0148	0.0000	8.3577	8.3577	2.7000e- 003	0.0000	8.4252

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#### 3.2 Site Preparation - 2020

#### Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	2.0000e- 004	1.5000e- 004	1.7000e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4445	0.4445	1.0000e- 005	0.0000	0.4448
Total	2.0000e- 004	1.5000e- 004	1.7000e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4445	0.4445	1.0000e- 005	0.0000	0.4448

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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0256	0.0000	0.0256	0.0134	0.0000	0.0134	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	9.7200e- 003	0.1055	0.0642	1.2000e- 004		5.0900e- 003	5.0900e- 003		4.6900e- 003	4.6900e- 003	0.0000	10.4235	10.4235	3.3700e- 003	0.0000	10.5078
Total	9.7200e- 003	0.1055	0.0642	1.2000e- 004	0.0256	5.0900e- 003	0.0307	0.0134	4.6900e- 003	0.0181	0.0000	10.4235	10.4235	3.3700e- 003	0.0000	10.5078

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#### 3.3 Grading - 2020

#### Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	2.7000e- 004	2.1000e- 004	2.2700e- 003	1.0000e- 005	6.6000e- 004	1.0000e- 005	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5926	0.5926	2.0000e- 005	0.0000	0.5930
Total	2.7000e- 004	2.1000e- 004	2.2700e- 003	1.0000e- 005	6.6000e- 004	1.0000e- 005	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5926	0.5926	2.0000e- 005	0.0000	0.5930

#### 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			<u>.</u>		ton	s/yr		<u>.</u>					МТ	/yr		
Fugitive Dust					9.9800e- 003	0.0000	9.9800e- 003	5.2300e- 003	0.0000	5.2300e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e- 003	0.1055	0.0642	1.2000e- 004		5.0900e- 003	5.0900e- 003		4.6900e- 003	4.6900e- 003	0.0000	10.4235	10.4235	3.3700e- 003	0.0000	10.5078
Total	9.7200e- 003	0.1055	0.0642	1.2000e- 004	9.9800e- 003	5.0900e- 003	0.0151	5.2300e- 003	4.6900e- 003	9.9200e- 003	0.0000	10.4235	10.4235	3.3700e- 003	0.0000	10.5078

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#### 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					ton	s/yr							МТ	/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	2.7000e- 004	2.1000e- 004	2.2700e- 003	1.0000e- 005	6.6000e- 004	1.0000e- 005	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5926	0.5926	2.0000e- 005	0.0000	0.5930
Total	2.7000e- 004	2.1000e- 004	2.2700e- 003	1.0000e- 005	6.6000e- 004	1.0000e- 005	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5926	0.5926	2.0000e- 005	0.0000	0.5930

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					ton	s/yr							МТ	/yr		
Off-Road	0.0795	0.7195	0.6318	1.0100e- 003		0.0419	0.0419		0.0394	0.0394	0.0000	86.8537	86.8537	0.0212	0.0000	87.3835
Total	0.0795	0.7195	0.6318	1.0100e- 003		0.0419	0.0419		0.0394	0.0394	0.0000	86.8537	86.8537	0.0212	0.0000	87.3835

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#### 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					ton	s/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	7.5000e- 004	0.0240	5.9500e- 003	6.0000e- 005	1.4200e- 003	1.2000e- 004	1.5400e- 003	4.1000e- 004	1.1000e- 004	5.2000e- 004	0.0000	5.5339	5.5339	3.6000e- 004	0.0000	5.5430
Worker	2.6800e- 003	2.0500e- 003	0.0227	7.0000e- 005	6.5800e- 003	5.0000e- 005	6.6300e- 003	1.7500e- 003	5.0000e- 005	1.8000e- 003	0.0000	5.9260	5.9260	1.7000e- 004	0.0000	5.9303
Total	3.4300e- 003	0.0261	0.0287	1.3000e- 004	8.0000e- 003	1.7000e- 004	8.1700e- 003	2.1600e- 003	1.6000e- 004	2.3200e- 003	0.0000	11.4599	11.4599	5.3000e- 004	0.0000	11.4733

#### 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					ton	s/yr							МТ	/yr		
Off-Road	0.0795	0.7195	0.6318	1.0100e- 003		0.0419	0.0419	1 1 1	0.0394	0.0394	0.0000	86.8536	86.8536	0.0212	0.0000	87.3834
Total	0.0795	0.7195	0.6318	1.0100e- 003		0.0419	0.0419		0.0394	0.0394	0.0000	86.8536	86.8536	0.0212	0.0000	87.3834

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#### 3.4 Building Construction - 2020

#### Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	'/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	7.5000e- 004	0.0240	5.9500e- 003	6.0000e- 005	1.4200e- 003	1.2000e- 004	1.5400e- 003	4.1000e- 004	1.1000e- 004	5.2000e- 004	0.0000	5.5339	5.5339	3.6000e- 004	0.0000	5.5430
Worker	2.6800e- 003	2.0500e- 003	0.0227	7.0000e- 005	6.5800e- 003	5.0000e- 005	6.6300e- 003	1.7500e- 003	5.0000e- 005	1.8000e- 003	0.0000	5.9260	5.9260	1.7000e- 004	0.0000	5.9303
Total	3.4300e- 003	0.0261	0.0287	1.3000e- 004	8.0000e- 003	1.7000e- 004	8.1700e- 003	2.1600e- 003	1.6000e- 004	2.3200e- 003	0.0000	11.4599	11.4599	5.3000e- 004	0.0000	11.4733

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	s/yr							МТ	/yr		
Off-Road	0.1473	1.3510	1.2846	2.0900e- 003		0.0743	0.0743		0.0699	0.0699	0.0000	179.5189	179.5189	0.0433	0.0000	180.6016
Total	0.1473	1.3510	1.2846	2.0900e- 003		0.0743	0.0743		0.0699	0.0699	0.0000	179.5189	179.5189	0.0433	0.0000	180.6016

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#### 3.4 Building Construction - 2021

#### Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	1.3200e- 003	0.0450	0.0112	1.2000e- 004	2.9300e- 003	9.0000e- 005	3.0200e- 003	8.5000e- 004	9.0000e- 005	9.3000e- 004	0.0000	11.3528	11.3528	7.2000e- 004	0.0000	11.3708
Worker	5.1700e- 003	3.8200e- 003	0.0432	1.3000e- 004	0.0136	1.0000e- 004	0.0137	3.6100e- 003	9.0000e- 005	3.7100e- 003	0.0000	11.8502	11.8502	3.2000e- 004	0.0000	11.8581
Total	6.4900e- 003	0.0488	0.0544	2.5000e- 004	0.0165	1.9000e- 004	0.0167	4.4600e- 003	1.8000e- 004	4.6400e- 003	0.0000	23.2030	23.2030	1.0400e- 003	0.0000	23.2289

#### 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					ton	s/yr							МТ	'/yr		
Off-Road	0.1473	1.3510	1.2846	2.0900e- 003		0.0743	0.0743		0.0699	0.0699	0.0000	179.5187	179.5187	0.0433	0.0000	180.6014
Total	0.1473	1.3510	1.2846	2.0900e- 003		0.0743	0.0743		0.0699	0.0699	0.0000	179.5187	179.5187	0.0433	0.0000	180.6014

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#### 3.4 Building Construction - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	1.3200e- 003	0.0450	0.0112	1.2000e- 004	2.9300e- 003	9.0000e- 005	3.0200e- 003	8.5000e- 004	9.0000e- 005	9.3000e- 004	0.0000	11.3528	11.3528	7.2000e- 004	0.0000	11.3708
Worker	5.1700e- 003	3.8200e- 003	0.0432	1.3000e- 004	0.0136	1.0000e- 004	0.0137	3.6100e- 003	9.0000e- 005	3.7100e- 003	0.0000	11.8502	11.8502	3.2000e- 004	0.0000	11.8581
Total	6.4900e- 003	0.0488	0.0544	2.5000e- 004	0.0165	1.9000e- 004	0.0167	4.4600e- 003	1.8000e- 004	4.6400e- 003	0.0000	23.2030	23.2030	1.0400e- 003	0.0000	23.2289

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					ton	s/yr							МТ	/yr		
Off-Road	9.8500e- 003	0.0976	0.1103	1.7000e- 004		5.2100e- 003	5.2100e- 003		4.8100e- 003	4.8100e- 003	0.0000	14.7336	14.7336	4.6300e- 003	0.0000	14.8493
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8500e- 003	0.0976	0.1103	1.7000e- 004		5.2100e- 003	5.2100e- 003		4.8100e- 003	4.8100e- 003	0.0000	14.7336	14.7336	4.6300e- 003	0.0000	14.8493

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#### 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					ton	s/yr							МТ	'/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	7.5000e- 004	5.5000e- 004	6.2700e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7202	1.7202	5.0000e- 005	0.0000	1.7213
Total	7.5000e- 004	5.5000e- 004	6.2700e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7202	1.7202	5.0000e- 005	0.0000	1.7213

#### 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					ton	s/yr							МТ	7/yr		
Off-Road	9.8500e- 003	0.0976	0.1103	1.7000e- 004		5.2100e- 003	5.2100e- 003		4.8100e- 003	4.8100e- 003	0.0000	14.7335	14.7335	4.6300e- 003	0.0000	14.8493
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8500e- 003	0.0976	0.1103	1.7000e- 004		5.2100e- 003	5.2100e- 003		4.8100e- 003	4.8100e- 003	0.0000	14.7335	14.7335	4.6300e- 003	0.0000	14.8493

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#### 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					ton	s/yr							МТ	/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	7.5000e- 004	5.5000e- 004	6.2700e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7202	1.7202	5.0000e- 005	0.0000	1.7213
Total	7.5000e- 004	5.5000e- 004	6.2700e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7202	1.7202	5.0000e- 005	0.0000	1.7213

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	'/yr		
U U	0.1710		- - - -			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
- Chi ricoud	1.9700e- 003	0.0137	0.0164	3.0000e- 005		8.5000e- 004	8.5000e- 004		8.5000e- 004	8.5000e- 004	0.0000	2.2979	2.2979	1.6000e- 004	0.0000	2.3019
Total	0.1730	0.0137	0.0164	3.0000e- 005		8.5000e- 004	8.5000e- 004		8.5000e- 004	8.5000e- 004	0.0000	2.2979	2.2979	1.6000e- 004	0.0000	2.3019

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#### 3.6 Architectural Coating - 2021

#### Unmitigated Construction Off-Site

	ROG	NOx	со	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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e- 004	8.0000e- 005	9.4000e- 004	0.0000	3.0000e- 004	0.0000	3.0000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2580	0.2580	1.0000e- 005	0.0000	0.2582
Total	1.1000e- 004	8.0000e- 005	9.4000e- 004	0.0000	3.0000e- 004	0.0000	3.0000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2580	0.2580	1.0000e- 005	0.0000	0.2582

#### 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					ton	s/yr							MT	/yr		
Archit. Coating	0.1710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e- 003	0.0137	0.0164	3.0000e- 005		8.5000e- 004	8.5000e- 004		8.5000e- 004	8.5000e- 004	0.0000	2.2979	2.2979	1.6000e- 004	0.0000	2.3019
Total	0.1730	0.0137	0.0164	3.0000e- 005		8.5000e- 004	8.5000e- 004		8.5000e- 004	8.5000e- 004	0.0000	2.2979	2.2979	1.6000e- 004	0.0000	2.3019

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#### 3.6 Architectural Coating - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr					MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e- 004	8.0000e- 005	9.4000e- 004	0.0000	3.0000e- 004	0.0000	3.0000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2580	0.2580	1.0000e- 005	0.0000	0.2582
Total	1.1000e- 004	8.0000e- 005	9.4000e- 004	0.0000	3.0000e- 004	0.0000	3.0000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2580	0.2580	1.0000e- 005	0.0000	0.2582

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	со	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					ton	s/yr							МТ	/yr		
Mitigated	0.0564	0.2965	0.6416	2.1900e- 003	0.1730	1.8100e- 003	0.1748	0.0464	1.6900e- 003	0.0481	0.0000	202.5836	202.5836	0.0108	0.0000	202.8523
Unmitigated	0.0564	0.2965	0.6416	2.1900e- 003	0.1730	1.8100e- 003	0.1748	0.0464	1.6900e- 003	0.0481	0.0000	202.5836	202.5836	0.0108	0.0000	202.8523

#### 4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Place of Worship	151.29	184.50	553.50	455,335	455,335
Total	151.29	184.50	553.50	455,335	455,335

#### **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
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
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Place of Worship	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925

# 5.0 Energy Detail

Historical Energy Use: N

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#### 5.1 Mitigation Measures Energy

	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					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	170.1529	170.1529	4.9300e- 003	1.0200e- 003	170.5799
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	170.1529	170.1529	4.9300e- 003	1.0200e- 003	170.5799
NaturalGas Mitigated	6.4600e- 003	0.0588	0.0494	3.5000e- 004	,	4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	63.9769	63.9769	1.2300e- 003	1.1700e- 003	64.3570
NaturalGas Unmitigated	6.4600e- 003	0.0588	0.0494	3.5000e- 004		4.4700e- 003	4.4700e- 003	     	4.4700e- 003	4.4700e- 003	0.0000	63.9769	63.9769	1.2300e- 003	1.1700e- 003	64.3570

#### 5.2 Energy by Land Use - NaturalGas

#### <u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							МТ	/yr		
Place of Worship	1.19888e +006	6.4600e- 003	0.0588	0.0494	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	63.9769	63.9769	1.2300e- 003	1.1700e- 003	64.3570
Total		6.4600e- 003	0.0588	0.0494	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	63.9769	63.9769	1.2300e- 003	1.1700e- 003	64.3570

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# 5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s 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					ton	s/yr							MT	/yr		
Place of Worship	1.19888e +006	6.4600e- 003	0.0588	0.0494	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	63.9769	63.9769	1.2300e- 003	1.1700e- 003	64.3570
Total		6.4600e- 003	0.0588	0.0494	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	63.9769	63.9769	1.2300e- 003	1.1700e- 003	64.3570

#### 5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	/yr	
Place of Worship	374535	170.1529	4.9300e- 003	1.0200e- 003	170.5799
Total		170.1529	4.9300e- 003	1.0200e- 003	170.5799

CalEEMod Version: CalEEMod.2016.3.2

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# 5.3 Energy by Land Use - Electricity

# Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	/yr	
Place of Worship	374535	170.1529	4.9300e- 003	1.0200e- 003	170.5799
Total		170.1529	4.9300e- 003	1.0200e- 003	170.5799

#### 6.0 Area Detail

#### 6.1 Mitigation Measures Area

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Mitigated	0.1505	0.0000	4.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e- 004	9.2000e- 004	0.0000	0.0000	9.8000e- 004
Unmitigated	0.1505	0.0000	4.7000e- 004	0.0000		0.0000	0.0000	 - - -	0.0000	0.0000	0.0000	9.2000e- 004	9.2000e- 004	0.0000	0.0000	9.8000e- 004

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#### 6.2 Area by SubCategory

#### <u>Unmitigated</u>

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Architectural Coating	0.0171					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1333					0.0000	0.0000	1 1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e- 005	0.0000	4.7000e- 004	0.0000		0.0000	0.0000	1 1 1 1 1	0.0000	0.0000	0.0000	9.2000e- 004	9.2000e- 004	0.0000	0.0000	9.8000e- 004
Total	0.1505	0.0000	4.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e- 004	9.2000e- 004	0.0000	0.0000	9.8000e- 004

#### 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					ton	s/yr							МТ	7/yr		
Architectural Coating	0.0171					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.1333					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e- 005	0.0000	4.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e- 004	9.2000e- 004	0.0000	0.0000	9.8000e- 004
Total	0.1505	0.0000	4.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e- 004	9.2000e- 004	0.0000	0.0000	9.8000e- 004

7.0 Water Detail

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#### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
initigatoa	16.3108	0.0381	9.8000e- 004	17.5561
oniningatou	16.3108	0.0381	9.8000e- 004	17.5561

# 7.2 Water by Land Use

#### <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Place of Worship	1.15456 / 1.80585	16.3108	0.0381	9.8000e- 004	17.5561
Total		16.3108	0.0381	9.8000e- 004	17.5561

CalEEMod Version: CalEEMod.2016.3.2

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#### 7.2 Water by Land Use

#### Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
Place of Worship	1.15456 / 1.80585		0.0381	9.8000e- 004	17.5561
Total		16.3108	0.0381	9.8000e- 004	17.5561

#### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	ī/yr	
Miligatou	42.6951	2.5232	0.0000	105.7753
Unmitigated	42.6951	2.5232	0.0000	105.7753

CalEEMod Version: CalEEMod.2016.3.2

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#### 8.2 Waste by Land Use

#### <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
Place of Worship	210.33	42.6951	2.5232	0.0000	105.7753
Total		42.6951	2.5232	0.0000	105.7753

#### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	7/yr	
Place of Worship	210.33	42.6951	2.5232	0.0000	105.7753
Total		42.6951	2.5232	0.0000	105.7753

# 9.0 Operational Offroad

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

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#### **10.0 Stationary Equipment**

#### Fire Pumps and Emergency Generators

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

#### **Boilers**

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

#### User Defined Equipment

Equipment Type	Number

# 11.0 Vegetation