



**PUBLIC NOTICE OF AVAILABILITY OF ENVIRONMENTAL DOCUMENT
DRAFT MITIGATED NEGATIVE DECLARATION
CITY OF BUELLTON**

Notice is hereby given that a draft Mitigated Negative Declaration has been prepared for the below described project in accordance with the provisions of the California Environmental Quality Act of 1970, as set forth in the Public Resources Code, Sections 21000 et. seq., as amended. As a result of the project, no significant environmental impacts have been identified.

1. Environmental Document No: 15-MND-01
2. Applicant: Carol Leshler-Peterson (property owner) and Sid Goldstien (agent)
3. Project Description:
 - A. Project Title: Live Oak Lanes, 13-FDP-03, 13-LLA-02, and 13-CUP-02
 - B. Assessor's Parcel Numbers: 099-690-045 and 099-690-046
 - C. Location: 39 and 41 Industrial Way
 - D. Project Description:

The proposed project consists of a Final Development Plan (13-FDP-03) for a 30,630 square foot Family Entertainment Center, a 18,470 square foot storage facility, and parking and landscaping in support of those facilities. There would also be a lighted 5-stall batting cage outside the building adjunct to the Family Entertainment Center. The Family Entertainment Center includes a bowling alley, arcade, sports bar and lounge, party and meeting rooms, toddler area and office space. A Conditional Use Permit (13-CUP-02) is required for the proposed outdoor batting cages and outdoor deck for the proposed sports bar. The 5.08-acre property is located at the south end of Industrial Way, and includes two parcels (Assessor's Parcel Numbers 099-690-045 and 099-690-046). The property is currently vacant. A Lot Line Adjustment (13-LLA-02) is also proposed in order to modify the boundary between the two parcels, to facilitate a more logical configuration of the facilities onsite. The larger "Parcel 1" (4.01 acres) will be developed with the Family Entertainment Center and required parking, while the smaller "Parcel 2" (1.07 acres) will be developed with the commercial storage facility.

A draft Mitigated Negative Declaration was prepared for this project in March 2014 and circulated for public review from April 10, 2014 to May 12, 2014. However, the March 2014 Draft MND was never adopted as the project was changed thereby requiring a new environmental document.

The draft Mitigated Negative Declaration and all referenced documents may be reviewed at the City of Buellton Planning Department, 107 W. Highway 246, Buellton, CA 93427, Phone No. (805) 688-7474, FAX No. (805) 686-1729; at the Buellton Public Library, 140 West Highway 246, Buellton, CA 93427; and on the City's website, www.cityofbuellton.com. Written comments on the draft Mitigated Negative Declaration will be accepted during the period from **July 2, 2015 through August 3, 2015**. Please submit comments on or before 5:00 p.m. on August 3, 2015, the close of the public comment period. The project is scheduled for a Planning Commission public hearing on August 6, 2015.

Marc P. Bierdzinski

Planning Director

Newspaper Publish Date: July 2, 2015

Draft

**Initial Study/Mitigated Negative Declaration
for the
Live Oak Lanes Project
15-MND-01**

Prepared for:
City of Buellton
107 West Highway 246
Buellton, California 93427



Prepared by:
City of Buellton
107 West Highway 246
Buellton, California 93427

June 30, 2015

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INTRODUCTION

LEGAL AUTHORITY

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared in accordance with the *CEQA Guidelines* and relevant provisions of the California Environmental Quality Act (CEQA) of 1970, as amended.

Initial Study. Section 15063(c) of the *CEQA Guidelines* defines an Initial Study as the proper preliminary method of analyzing the potential environmental consequences of a project. The purposes of an Initial Study are:

- (1) To provide the Lead Agency with the necessary information to decide whether to prepare an Environmental Impact Report (EIR) or a Mitigated Negative Declaration;
- (2) To enable the Lead Agency to modify a project, mitigating adverse impacts, thus avoiding the need to prepare an EIR; and
- (3) To provide sufficient technical analysis of the environmental effects of a project to permit a judgment based on the record as a whole, that the environmental effects of a project have been adequately mitigated.

IMPACT ANALYSIS AND SIGNIFICANCE CLASSIFICATION

The following sections of this IS/MND provide discussions of the possible environmental effects of the proposed project for specific issue areas that have been identified in the CEQA Initial Study Checklist. For each issue area, potential effects are isolated.

A “significant effect” is defined by Section 15382 of the *CEQA Guidelines* as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by a project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.” According to the *CEQA Guidelines*, “an economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.”

INITIAL STUDY

PROJECT TITLE

Live Oak Lanes – Industrial Way, Buellton – APNs 099-690-045 and 099-690-046
Final Development Plan (13-FDP-03), Lot Line Adjustment (13-LLA-02), Conditional Use
Permit (13-CUP-02) and Mitigated Negative Declaration (15-MND-01)

LEAD AGENCY and CONTACT PERSON

City of Buellton Planning Department
P.O. Box 1819
Buellton, CA 93427

Contact: Irma Tucker, Contract Planner
(805) 688-7474
John Rickenbach, AICP, Consulting Planner
(805) 610-1109

PROJECT APPLICANT AND OWNER

Applicant Agent:
Sid Goldstien, Civil Engineer
650 Alamo Pintado #302
Solvang, CA 93463

Owner:
Carol Leshner-Peterson
980 Old Ranch Road
Solvang, CA 93463

PROJECT SITE CHARACTERISTICS

Location and Surrounding Land Uses: The 5.08-acre property is located at the south end of Industrial Way, and includes two parcels (Assessor's Parcel Numbers 099-690-045 and 099-690-046). The property is currently vacant. Existing industrial uses in the M zone are located to the east and north of the site along the end of Industrial Way. Open space is located to the west, within the floodplain of the Santa Ynez River. The river flows generally from east to west, south of project site. See Appendix A for a map showing the project location.

Existing General Plan Designation (Land Use Category) and Zoning: The northern two-thirds of the site has a General Plan designation of Industrial, while the southern third of the site is designated Open Space, Parks and Recreation. Corresponding Zoning designations are M (Industrial and Manufacturing) and Open Space (OS).

PROJECT DESCRIPTION

The proposed project consists of a Final Development Plan (13-FDP-03) for a single building that encompasses a 30,630 square foot Family Entertainment Center (which includes a bowling alley and other amenities as described below), a 18,470 square foot warehouse facility, and parking and landscaping in support of those facilities. There would also be a lighted 5-stall batting cage outside the building adjunct to the Family Entertainment Center. The 5.08-acre property is located at the south end of Industrial Way, and includes two parcels (Assessor's Parcel Numbers 099-690-045 and 099-690-046). The property is currently vacant. A Lot Line Adjustment (13-LLA-02) is also proposed in order to modify the boundary between the two parcels, to facilitate a more logical configuration of the facilities onsite. The larger "Parcel 1" (4.01 acres) will be developed into the Family Entertainment Center and required parking, while the smaller "Parcel 2" (1.07 acres) will be developed with the commercial storage facility.

Each major project component is described in more detail below.

Family Entertainment Center (Live Oak Lanes)

The 30,630 square foot Family Entertainment Center will be built on reconfigured 4.01-acre "Parcel 1", and will include the following functions:

- A 16-lane bowling alley (Live Oak Lanes), four of which are in a section that can be closed off for private parties and functions;
- Game/Arcade section
- Sports bar and lounge (Live Oak Sports Bar and Grille) with an outdoor deck area and a full commercial kitchen
- Party and corporate meeting rooms
- Toddler area
- Office space, with additional offices provided on a second floor mezzanine
- Restrooms

In addition to the indoor uses, the development includes a 5-station batting cage, as well as landscaping around the entire property. Parking is proposed to be provided adjacent to the building in a paved lot in the floodway south of the building, roughly seven feet below the level of the building floor. Access from the parking area to the building is by stairs and a ramp through a landscaped entry area.

Hours of operation for the entertainment center will be approximately 9 AM to 11 PM, Monday through Thursday, 9 AM to 2 AM on Friday and Saturday, and 10 AM to 10 PM on Sunday. The batting cages would be open 11 AM to 8 PM Monday through Thursday, and 10 AM to 10 PM Friday through Sunday. The maximum shift would be staffed by an estimated 10 to 15 employees.

Warehouse Facility

The 18,470 square foot warehouse facility will be built on reconfigured 1.07-acre “Parcel 2”, and will consist of a single large space for lease. There will be two overhead doors and two man-doors to provide access to the warehouse space. The warehouse space, while part of the same building as the Family Entertainment Center, is located on a separate parcel (consistent with the Lot Line Adjustment), and will be provided with the required parking and landscaping. Access and some of the required parking will be from an easement across the adjacent Live Oak Lanes parcel. There will be a reciprocal parking agreement between the bowling alley and storage facility.

Hours of operation are proposed to be 7 AM to 7 PM, seven days a week, and 6 to 8 employees are expected to be on the site at any one time.

The project would require the following entitlements from the City:

- Lot Line Adjustment (13-LLA-02)
- Conditional Use Permit (13-CUP-02)
- Final Development Plan (13-FDP-03)

Reduced copies of the project plans are attached as Appendix A.

PUBLIC AGENCIES WHOSE APPROVAL MAY BE REQUIRED FOR SUBSEQUENT ACTIONS (e.g. permits, financing approval, or participation agreement):

None.

REFERENCES

This Initial Study was prepared using the following information sources:

- Application Materials;
- Field Reconnaissance;
- Buellton General Plan;
- Buellton Municipal Code;
- Buellton Zoning Ordinance;
- General Plan EIR;
- March 2014 Air Quality Analysis from Rincon Consultants;
- March 2014 Global Climate Change Analysis from Rincon Consultants;
- Departmental and Public Agency Consultations
- County of Sacramento, Community Planning and Development Department. *General Plan Noise Element Background.*

- Federal Transit Administration, Office of Planning and Environment. *Transit Noise and Vibration Impact Assessment*. May 2006.
- Health and Safety Authority. *The Noise of Music, Guidance on how to comply with the Safety, Health and Welfare at Work (General Application) Regulations*. 2007.
- Association of Environmental Professionals. *California Environmental Quality Act (CEQA) Statute and Guidelines*. 2012
- Associated Transportation Engineers. *Trip Generation and Trip Distribution Analysis for the Live Oak Lanes Project*. March 19, 2014.
- Kevin Merk Associates. *Live Oak Lanes & Industrial Center Focused Biological Resources Assessment*. October 14, 2014.

The Air Quality and Greenhouse Gas analyses in the Initial Study were prepared by Rincon Consultants, and were based on the following reference materials:

- California Air Resources Board. *Ambient Air Quality Standards*. Updated June 4, 2013. Available at: <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>
- California Air Resources Board. 2010, 2011, & 2012 Annual Air Quality Data Summaries. <http://www.arb.ca.gov/adam/topfour/topfour1.php>. Accessed February 24, 2014.
- County of Santa Barbara Planning and Development. *Environmental Thresholds and Guidelines Manual*. Published October 2008. <http://www.sbcapcd.org/cap/2013cap20130611.pdf>
- Imperial County. *Evaluation of PM₁₀ Emissions from Unpaved Parking Lots and Staging Areas in Imperial County (TAA06-026)*. October 2008. Available at: http://server.cocef.org/Final_Reports_B2012/20014/20014_Final_Report_EN.pdf
- Santa Barbara County Air Pollution Control District (SBCAPCD). *Clean Air Plan*. June 2013. Available at: <http://www.sbcapcd.org/cap/2013cap20130611.pdf>
- SBCAPCD. *Environmental Review Guidelines*. Revised November 16, 2000.
- SBCAPCD. *Scope and Content of Air Quality Sections in Environmental Documents*. December 2011.
- Associated Transportation Engineers. *Trip Generation and Trip Distribution Analysis for the Live Oak Lanes Project*. February 14, 2014.
- California Air Pollution Control Officers Association (CAPCOA). *Quantifying Greenhouse Gas Mitigation Measures*. August 2010.
- CAPCOA. *CEQA & Climate Change*. January 2008.
- CAPCOA. *CalEEMod User's Guide*. July 2013.
- California Air Resources Board. October 2011. *Greenhouse Gas Inventory Data – 2000 to 2009*. Available: <http://www.arb.ca.gov/cc/inventory/data/data.htm>
- California Climate Action Registry General Reporting Protocol, *Reporting Entity-Wide Greenhouse Gas Emissions*, Version 3.1, January 2009.
- California Environmental Protection Agency (CalEPA). *Climate Action Team Biennial Report*. Final Report. April 2010.
- California Environmental Protection Agency (CalEPA), March 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*.

http://www.climatechange.ca.gov/climate_action_team/reports/2006-04-03_FINAL_CAT_REPORT_EXECSUMMARY.PDF

- County of Santa Barbara Planning and Development. *Environmental Thresholds and Guidelines Manual*. Published October 2008.
<http://www.sbcapcd.org/cap/2013cap20130611.pdf>
- Intergovernmental Panel on Climate Change [IPCC]. *Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories*. [Penman, J.; Gytarsky, M.; Hiraishi, T.; Irving, W.; Krug, T.]. Paris: OECD, 2006.
- Intergovernmental Panel on Climate Change [IPCC], 2007: *Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- Intergovernmental Panel on Climate Change [IPCC], 2013: *Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- National Oceanic & Atmospheric Administration (NOAA). *Annual Greenhouse Gas Index*. September 2010. <http://www.esrl.noaa.gov/gmd/aggi/>
- San Luis Obispo Air Pollution Control District. *Greenhouse Gas Thresholds and Supporting Evidence*. March 28, 2012.
<http://www.slocleanair.org/images/cms/upload/files/Greenhouse%20Gas%20Thresholds%20and%20Supporting%20Evidence%204-2-2012.pdf>
- Santa Barbara County Air Pollution Control District. *Environmental Review Guidelines*. Revised November 16, 2000.

ENVIRONMENTAL DETERMINATION

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.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture Resources	<input type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Geology / Soils
<input checked="" type="checkbox"/> Hazards & Hazardous Materials	<input type="checkbox"/> Hydrology / Water Quality	<input type="checkbox"/> Land Use / Planning
<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise	<input type="checkbox"/> Population / Housing
<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation/Traffic
<input type="checkbox"/> Utilities / Service Systems		

On the basis of this initial evaluation:

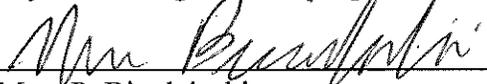
I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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 applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

I find that the proposed project MAY have a "potentially significant impact" or "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. An ENVIRONMENTAL IMPACT REPORT 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 pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



 Marc P. Bierzinski
 Environmental Officer
 City of Buellton

6-17-2015

 Date

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 referenced 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) "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 is required.
- 4) "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). Earlier analyses and references are discussed at the end of the checklist.
- 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.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) The analysis of each issue should identify:
 - a) the significance criteria or threshold used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance

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

a., b. Scenic Vistas/Resources: No roadways in the project area are designated as state or local scenic highways. No scenic aspects are associated with the property and development of the project would not block any scenic vistas from other properties since it is an infill project located adjacent to existing industrial development. No impacts would result.

c. Visual Quality: Development of the project site would result in a new building, parking areas, and landscaping that would replace a vacant parcel bounded on the north and east by existing industrial uses. The architecture of the proposed project is considered Contemporary Ranch as defined in the City’s Community Design Guidelines.

The proposed project intends to reduce the potential effects of a monolithic building front through the use of awnings, lighting, and other architectural features that provide some degree of articulation. Landscaping on the site (as shown in accompanying documentation) would further soften the visual presentation of the site, which would only be publicly visible to those within the parking lot for the facility, as well as cars entering the site from Industrial Way.

The impact is considered less than significant for the following reasons: 1) the project conforms to the design requirements of the Community Design Guidelines; and 2) this is an infill project within an area designated for Industrial uses under the existing General Plan.

d. Light and Glare: The project includes a photometric lighting plan, which shows onsite fixtures and the intensity of lighting at the site boundaries. The project would include a variety of downward directed light pole and wall-mounted fixtures in the parking lot and on building faces. Pole-mounted fixtures would range from 12 to 20 feet in height. All specified lighting is indicated to be energy efficient, and parking lot lighting is shown to be decorative in nature. Lighting intensity at the northern, western and southern site boundaries would not exceed 0.6 foot-candles, which is within City requirements, and would not adversely affect drivers on Industrial Way or those using adjacent industrial buildings. Parking lot lighting on the east side could result in intensities as great as 1.6 foot-candles, but this level of light would be only experienced along the western wall (loading side) of an adjacent industrial building, where there are no windows or doors. That building would also block the light from spilling farther in that direction (toward Industrial Way), so no impacts would be experienced east of the project site. Impacts would be less than significant.

The batting cage would include five 400-watt floodlights, one to illuminate each batting station. In that area, lighting would be directed downward, and slightly westward or eastward, away from existing and proposed buildings and toward open space or the adjacent proposed parking lot. There are no sensitive receptors (including homes or other uses) that would be adversely affected by this lighting, nor would any housing anticipated under the General Plan be potentially affected. Impacts would be less than significant.

Findings and Mitigation: Impacts would be less than significant, so no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES - Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to nonagricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X

a., b., c. Farmland: The site is an urban infill site and is not designated as farmland in the City’s General Plan.

Findings and Mitigation: No impacts would occur, therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
a) Conflict with or obstruct implementation of the applicable Clean Air Plan?			X	
b) Violate any stationary source air quality standard or contribute to an existing or projected air quality violation?			X	
c) Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

The air quality section has been prepared by Rincon Consultants on contract to the City of Buellton. All data used in the creation of this section is on file at the Buellton Planning Department and is hereby incorporated by reference into this Initial Study.

Setting

Federal and state ambient air quality standards for certain criteria pollutants have been established to protect human health. Buellton is located within the South Central Coast Air Basin (SCCAB) which includes all of San Luis Obispo, Santa Barbara, and Ventura counties and is within the jurisdiction of the Santa Barbara County Air Pollution Control District (SBCAPCD). Santa Barbara County, within which the City lies, is in non-attainment for the state eight-hour ozone standard and the state standard for Particulate Matter 10 micrometers or less in diameter (PM₁₀).

As described in the SBCAPCD *Scope and Content of Air Quality Sections in Environmental Documents* (December 2011), a project will have a significant air quality effect on the environment if operation of the project will:

- *Emit (from all sources, both stationary and mobile) more than 240 lbs/day for Reactive Organic Compounds (ROC) and Oxides of Nitrogen (NO_x) or more than 80 lbs/day for PM₁₀;*
- *Emit more than 25 lbs/day of NO_x or ROC from motor vehicle trips only;*
- *Cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone); or*
- *Exceed the APCD health risk public notification thresholds adopted by the APCD Board (10 excess cancer cases in a million for cancer risk and a Hazard Index of more than 1.0 for non-cancer risk).*

These thresholds are only for a project's operational emissions. The SBCAPCD does not have quantitative thresholds of significance for construction emissions since they are temporary in nature; however, SBCAPCD uses 25 tons per year for ROC and NO_x as a guideline for determining the significance of construction impacts.

Impact Analysis

a. The California Clean Air Act requires that air districts create a Clean Air Plan (CAP) that describes how the jurisdiction will meet air quality standards. These plans must be updated every three years. The most recent SBCAPCD CAP was adopted in 2010. According to SBCAPCD CEQA guidelines, projects would be consistent with the CAP if they are consistent with APCD rules and regulations. The proposed project would be consistent with all APCD rules and regulations, including standard dust reduction measures (see the analysis for items b. and c. below). The proposed project does not involve residential uses, so it would not increase population in the City and would therefore be consistent with the population forecasts contained in the 2010 Clean Air Plan. Impacts would be *less than significant*.

b., c. The proposed project would not generate substantial quantities of Toxic Air Contaminants (TACs). Emissions would primarily be generated by project passenger vehicles and trucks (see “Operational impacts” discussion in this section). There are no sensitive receptors within or adjacent to the project site. Therefore, health risk public notification thresholds would not apply to the proposed project. Air quality emissions associated with the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) version 2013.2.2.

Construction Emissions. Construction of the proposed project would generate temporary air pollutant emissions associated with fugitive dust (PM₁₀ and PM_{2.5}), exhaust emissions from heavy construction vehicles, and ROC that would be released during the drying phase after application of architectural coatings. These emissions would be reduced to a less than significant level through implementation of the required SBCAPCD dust and emissions control measures.

Construction would generally consist of site preparation, grading, construction of the proposed bowling alley, family entertainment center, batting cages, and warehouse, as well as paving, and architectural coating. Architectural coatings were assumed to be applied to the interiors and exteriors of all proposed buildings. PM₁₀ emitted during construction activities varies greatly, depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, and weather conditions.

Project construction was assumed to begin in 2015 and conclude in 2016, based on CalEEMod defaults for the South Central Coast Air Basin (SCCAB) and the size of the proposed buildings. The CalEEMod calculations are available in the Appendix B. Table 1 summarizes the estimated maximum daily construction emissions of ROC, NO_x, CO, PM₁₀, and PM_{2.5}. Table 2 summarizes these emissions relative to the SBCAPCD significance thresholds in tons per year.

Table 1. Estimated Construction Maximum Daily Air Pollutant Emissions (lbs/day)

Maximum Emissions (lbs/day)	ROC	NO_x	CO	PM₁₀	PM_{2.5}
	136.6	57.0	43.9	11.4	7.4

Notes: All calculations were made using CalEEMod. See Appendix B for calculations. Site Preparation, Grading, Paving, Building Construction and Architectural Coating totals include worker trips, construction vehicle emissions and fugitive dust. Site Preparation and Grading phases includes adherence to the conditions listed above that are required by SBCAPCD to reduce fugitive dust.

Table 2. Estimated Construction Maximum Daily Air Pollutant Emissions (tons/year)

Maximum Emissions (tons/year)	ROC	NO_x	CO	PM₁₀	PM_{2.5}
	17.8	7.4	5.7	1.5	1.0
Threshold	25	25	None	None	None
Threshold Exceeded?	No	No	No	No	No

Notes: All calculations were made using CalEEMod results and assuming that construction would occur for 260 days per year and daily emissions would be equal to the maximum daily emissions calculated in CalEEMod. See Appendix B for calculations. Site Preparation, Grading, Paving, Building Construction and Architectural Coating totals include worker trips, construction vehicle emissions and fugitive dust.

Site Preparation and Grading phases includes adherence to the conditions listed above that are required by SBCAPCD to reduce fugitive dust.

As shown in Table 2, construction emissions would not exceed the established thresholds for any criteria pollutant. Consequently, the project's regional air quality impacts during construction would be *less than significant*.

Maximum daily emissions of ROC and NO_x are shown in Table 2. The SBCAPCD does not have quantitative thresholds of significance for construction emissions since they are temporary in nature; however, SBCAPCD uses 25 tons per year for ROC and NO_x as a guideline for determining the significance of construction impacts. The SBCAPCD requires implementation of dust control requirements for all projects involving earthmoving activities. According to SBCAPCD, implementation of standard dust control measures would reduce temporary construction impacts to a less than significant level. SBAPCD Rule 345 regulates fugitive dust for any activity associated with construction or demolition of structures. The proposed project would be required to comply with Rule 345, as described below, which would ensure that construction emissions would be *less than significant*.

- *During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.*
- *Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.*
- *Gravel pads must be installed at all access points to prevent tracking of mud onto public roads.*
- *If importation, exportation and stockpiling of fill material are involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.*
- *After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.*
- *The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading for the structure.*

- *Prior to land use clearance, the applicant shall include, as a note on a separate informational sheet to be recorded with map, these dust control requirements. All requirements shall be shown on grading and building plans.*
- *All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.*
- *Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles. For more information, please refer to the CARB website at www.arb.ca.gov/msprog/ordiesel/ordiesel.htm.*
- *All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.*
- *Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.*
- *Diesel powered equipment should be replaced by electric equipment whenever feasible.*
- *If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California.*
- *Catalytic converters shall be installed on gasoline-powered equipment, if feasible.*
- *All construction equipment shall be maintained in tune per the manufacturer's specifications.*
- *The engine size of construction equipment shall be the minimum practical size.*
- *The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.*
- *Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.*

On-Site Operational Emissions. The majority of project-related operational emissions would be due to vehicle trips to and from the site. Potential operational emissions were estimated using CalEEMod. Table 3 summarizes the projected emissions associated with operation of the proposed project. This includes emissions generated by vehicles traveling to and from the site, as well as emissions due to energy use (natural gas), and long-term, low-level architectural coating emissions as the proposed structures are repainted over the life of the project (area sources).

Table 3. Project Operational Emissions (lbs/day)

Emission Source	ROC	NO_x	CO	PM₁₀	PM_{2.5}
Mobile	5.0	7.9	43.1	3.1	0.9
Energy (Natural Gas and electricity)	< 0.1	0.2	0.2	< 0.1	< 0.1
Area (Consumer Products and Architectural Coating)	4.2	0.0	< 0.1	0.0	0.0
Total Emissions	9.2	8.1	43.3	3.1	0.9
<i>Threshold: Total Emissions (Transportation and On-Site/Area Sources)</i>	55	55	None	80	None
Threshold Exceeded?	No	No	n/a	No	n/a
<i>Threshold: Total Emissions (Transportation Sources Only)</i>	25	25	None	None	None
Threshold Exceeded?	No	No	n/a	No	n/a

Source: See Appendix B for CalEEMod output.

As shown in Table 3, operational emissions from the project would be below applicable SBCAPCD thresholds for ROC and NO_x. The project would generate 695 average daily trips and would therefore result in a less than significant impact to localized CO concentrations based on the SBCAPCD criterion for CO impacts. PM₁₀ emissions from mobile sources and energy use would not exceed SBCAPCD thresholds.

d. Certain population groups are considered more sensitive to air pollution than others. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases. Residential uses are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Nearby sensitive receptors to the proposed project site include residences, which would be located approximately 1,000 feet north of the project site, along Park Circle, and approximately 1,500 feet east of the site in the Rancho de Maria subdivision. These sensitive receptors would not be exposed to any substantial emissions, since the project would only involve minor releases of air contaminants

during construction and operations. In addition, the proposed project would not result in an exceedance of any thresholds for operational emissions. Therefore, impacts to sensitive receptors would be *less than significant*.

e. The uses proposed for the project would not be expected to result in substantial objectionable odors. The bowling alley and family entertainment center would offer food and include a kitchen, which may result in odors related to food preparation. The nearest sensitive receptors are residences located approximately 1,000 feet north of the proposed project site. These receptors are located at a sufficient distance that they would not be expected to be impacted by any odors produced by the kitchen. Therefore, this impact would be *less than significant*.

Findings and Mitigation: All impacts would be less than significant without mitigation.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse impact 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 U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
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 wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?				X

a. - c. The project site is currently undeveloped, but is bounded by existing development to the east and north. The site is designated for urban uses under the General Plan. The project site is comprised primarily of either disturbed annual grassland habitat or ruderal (disturbed) vegetation, with small pockets of coyote brush scrub within the annual grassland. None of these are considered sensitive or projected habitats types. There is a cottonwood windrow on the site along an access lane leading southward toward the river, which may provide habitat for common reptiles, mammals and birds. Most of the southern boundary of the site is adjacent to an existing manmade drainage basin, which stands between the site and the Santa Ynez River. The southwesternmost portion of the site is directly adjacent to the Santa Ynez River. The river supports Central Coast Arroyo Willow Riparian Scrub habitat, but this does not extend onto the project site, which is disturbed, has no trees, and otherwise lacks habitat value.

Grading and development of the site will not affect riparian habitat associated with the Santa Ynez River, nor will it affect the cottonwood windrow. All ground disturbance will be limited to the site itself, and no fill will be introduced to the river. Onsite drainage will use the existing offsite basin adjacent to the river, which will minimize erosion and direct runoff to the river that may otherwise be generated by site activities.

The site is in the 100-year floodplain of the river, and the southern portion of the site is within the floodway.

Under Section 404 of the Clean Water Act, areas within the Ordinary High Water Mark of a water body could be determined to be within the jurisdiction of the U.S. Army Corps of Engineers. The Corps regulations define the term “Ordinary High Water Mark” for purposes of the Clean Water Act jurisdiction as follows:

“that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”

By that definition, the site is outside the Ordinary High Water Mark, since it is located above a “clear, natural line impressed on the bank” of the river, and it does not show vegetative characteristics similar to those within the banks of the river. Further, there are no identified federally protected wetlands or vernal pools on the site.

There are no federal or state-listed species associated with the site, as identified through a search of the California Natural Diversity Database as part of the 2005 General Plan Update EIR, and as confirmed in a biological resources assessment performed by Kevin Merk Associates in October 2014. The site is not within identified critical habitat area for the California red-legged frog (CRLF). The nearest CRLF Critical Habitat Unit, STB 5, is located about 3.5 miles south of the site, and would not be affected by the proposed project (KMA, October 2014). The site is also not within identified critical habitat areas for other federally listed species associated with the region, such as Southern California coast steelhead, California tiger salamander, or least Bells vireo. Although designated critical habitat for the southwestern willow flycatcher is located along the Santa Ynez River south of the site, the site itself is outside the critical habitat boundaries, and no impacts to this habitat would occur as a result of project site disturbance and development (KMA, October 2014).

As described in the KMA biological resources assessment, no direct impacts to California red-legged frog are anticipated. However, project construction activities (noise and vibration) could potentially indirectly disturb CRLF adjacent to work areas, since CRLF is presumed to be present offsite within the Santa Ynez River corridor, and possibility at times in the drainage basin adjacent to the project site. Noise has the potential to cause individual frogs to move away from noise, thus temporarily abandoning potential offsite habitat. The KMA report concluded this would be an adverse, but not significant, impact.

Impacts with respect to jurisdictional and habitat issues on the site would therefore be less than significant.

d. There are no wildlife movement corridors across the site, since it is bounded on two sides by existing development, and on a third by a drainage basin that acts as a barrier to the river to the south. That said, the Santa Ynez River itself is considered an important wildlife dispersal and migration corridor for a variety of wildlife species. The river is designated by the California Department of Fish and Wildlife (CDFW) as a Southern California Steelhead Stream and as such

is considered to provide habitat for steelhead during times when the river is flowing. However, as noted above, runoff from the site is not expected to impact the river or any habitat associated with the river. Impacts would be less than significant.

e. and f. The project would not conflict with any provisions of the General Plan related to biological resources. The site is not subject to any Habitat Conservation Plan. The proposed development is located outside of the 200-foot setback area of the Santa Ynez River.

Findings and Mitigation: Impacts would be less than significant, so no mitigation is required.

However, the biological resources assessment for the project recommends that several protective measures be incorporated into the project, in order to minimize the potential that indirect impacts could occur to the California red legged frog. These will be included as project conditions of approval, as shown below.

- BIO-1 Pre-Construction Survey.** A USFWS-approved biologist shall survey the work site at least seven days before the onset of ground-disturbing activities. Surveys shall consist of walking transects in areas that will be subject to vegetation clearing, grubbing, grading, cut and fill, or other ground-disturbing activities. If California red-legged frogs are found within the work site during pre-construction surveys or at any time during the project, the approved biologist shall report the time, date, location, and any other relevant information about the occurrence to USFWS in a timely manner.
- BIO-2 Training Session.** Before any ground-disturbing activities begin on the project site, a USFWS-approved biologist shall conduct a training session for construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat, and the general measures that are being implemented to conserve the California red-legged frog as they relate to the project, and the boundaries within which the project may be accomplished.
- BIO-3 On-site Monitor.** The developer shall designate a USFWS-approved biologist to monitor on-site compliance with all minimization measures. The approved biologist will be on-site during initial ground clearing activities. The approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated during review of the proposed action.
- BIO-4 Halt Work During If Rain Predicted.** If the National Weather Service predicts a rain event of ½ inch or more over a 48-hour period for the project area, construction activities will be halted for 24 hours before the

rain event is anticipated to begin. Construction activities are defined as all activities, which pose a risk of crushing dispersing amphibians, including driving construction vehicles and equipment, and activities that alter the natural land contours, such as digging, clearing and grubbing, grading and fill work. All activities described above will be halted if significant rain falls at any point during the construction process. After a rain event, a qualified biologist will conduct a pre-construction survey for amphibians dispersing through the site. Construction will resume only after the site has been sufficiently dried and the biologist determined that amphibian dispersal is unlikely.

BIO-5 **Trash Containment.** During project activities, all trash that may attract predators shall be properly contained, removed, and disposed of regularly. Following construction, trash/construction debris shall be removed from work areas.

BIO-6 **Vehicle Maintenance Location.** All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 100 feet from the adjacent stormwater basin and any storm drain inlet. At a minimum, all equipment and vehicles will be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills. All workers shall be informed of the importance of preventing spills and the appropriate measures to take should a spill occur.

BIO-7 **Exclusion Fence.** To assist in excluding California red-legged frogs from the work area, an exclusion fence should be installed between the stormwater basin and the work area prior to the commencement of ground disturbing activities. Exclusion fencing should be silt-type fencing or equivalent, and should not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Once fencing is in place, it should be maintained until all ground-disturbing work has been completed.

BIO-8 **No CRLF Handling.** Under no circumstances shall a California red-legged frog be handled, relocated, or otherwise harmed or harassed at any time without coordination and approval from USFWS.

Monitoring:

The Planning Department will verify that measures are carried out as prescribed.

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

a. There are no existing structures on the site, so no impacts to historic resources would occur.

b., c. The project site is undeveloped, but highly disturbed, both through historic flooding events and more recent activity. No known artifacts have been found on this site. Any artifacts located on this property would have been removed or destroyed through past flood events. Therefore, the potential for further discoveries is extremely unlikely due to the disturbed nature of the site. In the unlikely event that previously unidentified cultural resources are encountered during site grading activities, state laws related to the protection of cultural resources would apply, including the requirement to stop work and consult with both Native American representatives and the City. Less than significant impacts are anticipated.

d. Since no known cemetery uses or pre-historic burial sites are located on or adjacent to the site, the proposed project would result in no impacts to human remains.

Findings and Mitigation: No impacts would occur, therefore, no mitigation is required. However, in the unlikely event that unknown resources are uncovered during project construction activities, the following will be required, and is included in the City’s Standard Conditions of Approval for development projects::

CR-1 Halt Work Order for Archaeological Resources. If archaeological resources are exposed during construction, all earth disturbing work within the vicinity of the find must be temporarily suspended until an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume. A representative of the Chumash Tribe shall monitor any mitigation excavation associated with Native American materials.

Monitoring:

The Planning Department will verify that measures are carried out as prescribed.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?				X
ii) Strong seismic ground shaking?			X	
iii) Inundation by seiche, tsunami, or mudflow?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?		X		
d) Be located on expansive soil creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

The following analysis of geological resources is based on the City’s Safety Element of the General Plan.

a. Geologic Hazards:

Fault Rupture: There are no known active fault lines within the City. No impacts would occur.

Groundshaking: The San Andreas Fault, located approximately 74 kilometers east Buellton, dominates both the geologic structure and seismicity of the project area. However, faults closer to the project site also have the potential to generate earthquakes and strong groundshaking at the site. These include: (1) the offshore group, including the Hosgri and Santa Lucia (Purisima and Lompoc) faults; and (2) the Santa Ynez Fault. In addition, the Los Alamos-Baseline-Lions and Casmalia-Orcutt-Little Pine faults may be active and pose potential to generate groundshaking at the project site.

The largest upper level earthquake (ULE) in Buellton would be an approximate 7.8 moment magnitude earthquake on the San Andreas Fault. Such an event could produce peak horizontal ground acceleration on the order of 0.16g¹. Due to the relative location of the Los Alamos-Baseline (approximately 8 kilometers south), Santa Ynez (approximately 10 kilometers northeast), and North Channel Slope (approximately 25 kilometers east) faults to Buellton, higher ULE accelerations may be expected from these faults. Although higher accelerations may

¹ The force on a building during an earthquake is proportional to ground acceleration. Such forces are prescribed by the UBC. During an earthquake the ground acceleration varies with time. “g” is a common value of acceleration equal to 9.8 m/sec/sec (the acceleration due to gravity at the surface of the earth). 30% of g is the acceleration one would experience in a car that takes 9 seconds to brake from 60 miles per hour to a complete stop.

be experienced in Buellton from these faults, compared to events on the San Andreas Fault, the recurrence interval for such events is much longer than for an event on the active San Andreas Fault Zone. Seismic safety issues would be addressed through the California Building Code and implementation of the recommendations on foundation and structural design contained in the above referenced soils investigation. Less than significant impacts would result.

Seiche, Tsunami, Mudflow: The site is not located in the vicinity of any body of water that could result in a seiche or tsunami, and the project site is relatively flat and is not located adjacent to any substantial slopes. No impacts would occur.

Landsliding: Slopes in the City are geologically stable and are not subject to major landslides. The project site is on a generally level property. As such, landsliding impacts would not occur.

b. Erosion: Since proposed development will not substantially change existing relatively level grade, and because it will include a drainage plan to control runoff from the site, no significant erosion impacts are anticipated. The City's adopted Grading Ordinance, requirements of the Regional Water Quality Control Board, and the City's standard conditions of approval require erosion and sediment control plans for all projects. Based on the required implementation of these requirements, the impact to erosion is considered less than significant.

c., d. Unstable/Expansive Soils: The site is not located in a known area of unstable or expansive soils and the property has been previously graded and compacted. Therefore, no impacts would occur.

Liquefaction is the phenomenon in which soil temporarily loses strength due to a buildup of excess pore-water pressure caused by seismic shaking. According to the City's Land Use and Circulation Elements EIR, there is a moderate to high potential for liquefaction in areas with sandy soils and shallow groundwater less than 50 feet from ground surface. These areas occur along the Santa Ynez River, Zaca Creek and Thumbelina Creek. The site is underlain by sandy alluvial soils, and is adjacent to the Santa Ynez River. Therefore, there is a moderate to high potential for liquefaction during a seismic event.

General Plan Safety Element Policy S-1 requires that new development (habitable structures including commercial and industrial buildings) be set back at least 200 feet from the bank of the Santa Ynez River. The nearest inhabited structure (the bowling alley) would be about 400 feet from the river. The project would be consistent with this policy in this respect, which will minimize liquefaction hazard to some extent.

Policy S-7 requires that all new development shall satisfy the requirements of the California Building Code regarding seismic safety. Conformance with this policy would normally ensure that potential impacts related to liquefaction would be reduced to a less than significant level. However, Policy S-9 requires that a geologic study shall be required as a condition of project approval for new development on sites with slopes greater than 10%, and in areas mapped by the Natural Resource Conservation Service (NRCS) as having moderate or high risk of liquefaction,

subsidence and/or expansive soils. Because the site has moderate to high liquefaction potential, impacts are potentially significant. Mitigation is required consistent with City policy.

e. Suitability for Septic Systems: All project wastewater would be discharged to the City sewer system. No septic systems have been proposed. No impacts would result.

Findings and Mitigation: All development of the site must follow standard California Building Code requirements. Compliance with these regulations and requirements would result in less than significant geology related impacts with respect to all but the issue of liquefaction. To address the potential for liquefaction, the following mitigation measure is required:

GEO-1 Geotechnical Study for Liquefaction. In accordance with Safety Element Policy S-9, as a condition of project approval, the project will be required to conduct a geological (geotechnical) study, and implement its design recommendations with respect to addressing liquefaction potential on the site.

Monitoring:

The Public Works Department/City Engineer will verify that the final project design incorporates any design recommendations from an approved project-specific geologic study prior to issuing grading permits.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS - Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Setting

Project implementation would generate greenhouse gas (GHG) emissions through the burning of fossil fuels or other emissions of GHGs, thus potentially contributing to cumulative impacts related to global climate change. The following summarizes the regulatory framework related to climate change.

In response to an increase in man-made GHG concentrations over the past 150 years, California has implemented AB 32, the “California Global Warming Solutions Act of 2006.” AB 32

codifies the Statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15% reduction below 2005 emission levels) and the adoption of regulations to require reporting and verification of statewide GHG emissions.

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the *State CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions in March 2010. These guidelines are used in evaluating the cumulative significance of GHG emissions from the proposed project. According to the adopted CEQA Guidelines, impacts related to GHG emissions from the proposed project would be significant if the project would:

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

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project’s contribution towards an impact is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

For future projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan). Neither the City of Buellton nor the SBCAPCD has developed or adopted GHG significance thresholds; however, Santa Barbara County recommends the use of San Luis Obispo Air Pollution Control District (SLOAPCD) Greenhouse Gas Thresholds, as adopted in April 2012. SLOAPCD GHG thresholds are summarized in Table 4.

Table 4. SLOAPCD GHG Significance Determination Criteria

GHG Emission Source Category	Operational Emissions
Residential and Commercial Projects	Compliance with Qualified GHG Reduction Strategy OR Bright-Line Threshold of 1,150 MT of CO ₂ e/yr OR Efficiency Threshold of 4.9 MT CO ₂ e/SP*/yr
(Industrial) Stationary Sources	10,000 MT of CO ₂ e/yr

**SP = Service Population (residents + employees)
For projects other than stationary sources, compliance with either a Qualified Greenhouse Gas Reduction Strategy, or with the Bright-Line (1,150 CO₂e/ yr.) or Efficiency Threshold (4.9 MT CO₂e/SP/yr.) would result in an insignificant determination, and in compliance with the goals of AB 32. The construction emissions of projects will be amortized over the life of a project and added to the operational emissions. Emissions from construction-only projects (e.g. roadways, pipelines, etc.) will be amortized over the life of the project and compared to an adopted GHG Reduction Strategy or the Bright-Line Threshold only.*

The SLOAPCD “bright-line threshold” was developed to help reach the AB 32 emission reduction targets by attributing an appropriate share of the GHG reductions needed from new land use development projects subject to CEQA. Land use sector projects that comply with this thresholds would not be “cumulatively considerable” because they would be helping to solve the cumulative problem as a part of the AB 32 process. Such small sources would not significantly add to global climate change and would not hinder the state’s ability to reach the AB 32 goal, even when considered cumulatively. The threshold is intended to assess small and average sized projects, whereas the per-service population guideline is intended to avoid penalizing larger projects that incorporate GHG-reduction measures such that they may have high total annual GHG emissions, but would be relatively efficient, as compared to projects of similar scale. Therefore, the bright-line threshold is the most appropriate threshold for the proposed project, and the proposed project would have a potentially significant contribution to GHG emissions if it would result in emissions in excess of 1,150 metric tons of CO₂E per year.

Calculations of CO₂, CH₄, and N₂O emissions are provided to identify the magnitude of potential project effects. The analysis focuses on CO₂, CH₄, and N₂O because these comprise 98.9% of all GHG emissions by volume (IPCC, 2007) and are the GHG emissions that the project would emit in the largest quantities. Fluorinated gases, such as HFCs, PFCs, and SF₆, were also considered for the analysis. However, because the project is a small recreational and warehouse development, the quantity of fluorinated gases would not be significant since fluorinated gases are primarily associated with industrial processes. Emissions of all GHGs are converted into their equivalent weight in CO₂ (CO₂E). Minimal amounts of other main GHGs (such as chlorofluorocarbons [CFCs]) would be emitted, but these other GHG emissions would not substantially add to the calculated CO₂E amounts. Calculations are based on the methodologies discussed in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper (January 2008) and include the use of the California Climate Action Registry (CCAR) General Reporting Protocol (January 2009).

Impact Analysis

a) GHG emissions associated with project construction and operations are discussed below.

Construction Emissions. Although construction activity is addressed in this analysis, CAPCOA does not discuss whether any of the suggested threshold approaches adequately address impacts from temporary construction activity. As stated in the *CEQA and Climate Change* white paper, “more study is needed to make this assessment or to develop separate thresholds for construction activity” (CAPCOA, 2008). Nevertheless, air pollution control districts such as the SLOAPCD have recommended amortizing construction-related emissions over a 50-year period in conjunction with the proposed project’s operational emissions.

Construction of the proposed project would generate temporary GHG emissions primarily due to the operation of construction equipment and truck trips. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. For the proposed project, site grading may involve cut and fill; however, grading volumes are assumed to be balanced at the site and no import or export of soil is anticipated to occur.

Emissions associated with the construction period were estimated using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2, based on the CalEEMod default projections for the amount of equipment that would be used onsite at one time. Complete results from CalEEMod and assumptions can be viewed in Appendix C.

Construction activity is assumed to occur over a period of approximately 14 months based on default construction phase lengths from CalEEMod. As shown in Table 5, construction activity associated with the project would generate an estimated 430.4 metric tons of CO₂E units. Amortized over a 50-year period (the assumed life of the project), construction of the proposed project would generate an estimated 8.6 metric tons of CO₂E per year.

Table 5. Estimated Construction Emissions of Greenhouse Gases

	Annual Emissions (Carbon Dioxide Equivalent (CO₂E))
Total Estimated Construction Emissions	430.4 metric tons
Amortized over 30 years	8.6 metric tons per year

See Appendix C for CalEEMod Results.

On-Site Operational Emissions. Operational emissions from energy use (electricity and natural gas use) for the proposed project were estimated using CalEEMod computer program (see Appendix C for calculations). The default values on which the CalEEMod computer program are based include the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies. CalEEMod provides operational emissions of CO₂, N₂O, and CH₄. This methodology is considered reasonable and reliable for use, as it has been subjected to peer review by numerous public and private stakeholders, and in particular by the CEC. It is also recommended by CAPCOA (January 2008).

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod based on standard emission rates from the California Air Resources Board (ARB), USEPA, and district supplied emission factor values (CalEEMod User’s Guide, 2013).

Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC’s methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CalEEMod User’s Guide, 2013). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC’s 2006 Refining Estimates of Water-Related Energy Use in California using the average values for Northern and Southern California.

CalEEMod was used to calculate operational sources of air emissions located at the project site. This includes emissions associated with consumer product use, architectural coatings, and landscape maintenance equipment. The greenhouse gas emissions calculations did not include any reductions for energy or water efficiency that may be subsequently included in the proposed project plans. A 50% reduction in waste was assumed, consistent with the requirements of AB 939. Operation of the proposed project would consume natural gas and electricity (refer to Appendix C for calculations).

Direct Emissions from Mobile Combustion. Emissions from vehicles driving to and from the site were based on the Trip Generation and Trip Distribution Analysis conducted by the Associated Transportation Engineers (2013), using the standard Institute of Transportation Engineers (ITE) vehicle trip rates. Emissions of CO₂ and CH₄ from transportation sources were quantified using CalEEMod. Because CalEEMod does not calculate N₂O emissions from mobile sources, N₂O emissions were quantified using the California Climate Action Registry General Reporting Protocol (January 2009) direct emissions factors for mobile combustion (refer to Appendix XX for calculations). Emission rates for N₂O emissions were based on the vehicle mix output generated by CalEEMod and the emission factors found in the California Climate Action Registry General Reporting Protocol.

Combined Annual Construction, Operational, and Mobile GHG Emissions. Table 6 combines the construction and operational GHG emissions associated with development for the proposed project. As described above, emissions associated with construction activity (approximately 430.4 metric tons CO₂E) are amortized over 50 years (the anticipated lifetime of the project).

**Table 6.
Combined Annual Emissions of Greenhouse Gases**

Emission Source	Annual Emissions
Construction	8.6 metric tons CO ₂ E
Operational	
Area	<0.1 metric tons CO ₂ E
Energy	160.9 metric tons CO ₂ E
Solid Waste	42.9 metric tons CO ₂ E
Water	36.9 metric tons CO ₂ E
Mobile	641.7 metric tons CO ₂ E
Total	891.2 metric tons CO₂E

Sources: See Appendix C for calculations and for GHG emission factor assumptions.

As shown in Table 6, the combined annual emissions would total approximately 891 metric tons per year of CO₂E. These emissions do not exceed the applicable threshold of 1,150 metric tons per year. Therefore, impacts resulting from GHG emissions would be *less than significant*.

b) Neither the City of Buellton nor the County of Santa Barbara has adopted a Climate Action Plan. Therefore, consistency with other greenhouse gas emissions plans, policies, and regulations are discussed here.

CalEPA's Climate Action Team (CAT) published the 2006 CAT Report which includes GHG emissions reduction strategies intended for projects emitting less than 10,000 tons CO₂E/year. In addition, the California Attorney General's Office has developed Global Warming Measures (2008) and OPR's CEQA and Climate Change (CAPCOA, 2008) document includes greenhouse gas reduction measures intended to reduce GHG emissions in order to achieve statewide emissions reduction goals. All of these measures aim to curb the GHG emissions through suggestions pertaining to land use, transportation, renewable energy, and energy efficiency. Several of these actions are already required by California regulations, such as:

- AB 1493 (Pavley) requires the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks.
- In 2004, ARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.
- The Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989) established a 50% waste diversion mandate for California.
- Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).
- California's Renewable Portfolio Standard (RPS), established in 2002, requires that all load serving entities achieve a goal of 33 percent of retail electricity sales from renewable energy sources by 2020, within certain cost constraints.
- Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels.

The proposed project would not conflict with state and local regulations intended to reduce GHG emissions from new development. Consistency with these state regulations and goals illustrates that the project would not conflict with the state's greenhouse gas-related legislation and would not contribute to the inability to meet reduction goals. Therefore, the project would not conflict with any applicable plan, policy or regulation intended to reduce GHG emissions, and impacts would be *less than significant*.

Findings and Mitigation: Impacts would be less than significant, so no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
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?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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?		X		
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 for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

a. Hazardous Substances: The project would not create reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, as the project would not involve the storage or transport of substantial quantities of such materials, or any hazardous design features since it is a restaurant project. No impacts would occur.

b. Hazardous Materials Releases: Refer to the discussion in Section a. above.

c. Hazardous Materials Near Schools: The project site is not located within one-quarter mile of an existing or proposed school. The nearest school is Zaca Pre-School and After School, which is about 0.35 miles northwest of the site. No impacts are anticipated.

d. Hazardous Materials Sites: The project site is vacant, and there is no visible evidence of past underground storage tanks or soil contamination, nor is the site on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, the potential for soil contamination from past uses in this largely industrial area cannot be discounted. Therefore, the potential for contaminated soil on the project site exists and is considered a potentially significant impact.

e., f. Public and Private Airstrip Safety Hazards: No public or private airports are in the vicinity of the project site.

g. Emergency Response/Evacuation: The project site is not subject to an emergency response or evacuation plan. No impacts would occur.

h. Wildland Fire Hazards: The site is not in a wildland fire hazard area as identified in the Safety Element of the Buellton General Plan. No impacts would occur.

Findings and Mitigation: The following mitigation measure is required to reduce potential project impacts related to hazardous materials to a less than significant level:

HAZ-1 Phase I Environmental Site Assessment. Prior to issuance of building permits, a Phase I Environmental Site Assessment shall be conducted by a qualified professional to determine the potential for onsite soil contamination, and the recommendations of that report (if any) shall be followed.

Monitoring:

The Planning Department will verify that the Phase I ESA has been completed, and that its recommendations are followed prior to issuance of building permits.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>IX. HYDROLOGY AND WATER QUALITY</i> - Would the project:				
a) Violate Regional Water Quality Control Board water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?				X

a. RWQCB Standards: The proposed project would discharge wastewater directly to the public sewer system, including passing through a grease interceptor per City ordinance for a restaurant. Therefore, the impact is considered less than significant.

b. Groundwater Supply: Water is supplied to the City of Buellton from the Buellton Uplands Groundwater Basin, the Santa Ynez River Riparian Basin, and State Water Project (SWP). Water allocation from the SWP varies based on local demand and availability. Neither groundwater basin is in a state of overdraft, as the natural recharge rates either exceed the capacity of the basin or exceed the rate of pumping from the basin. Furthermore, the Buellton Uplands Groundwater Basin has a net surplus of 800 AFY. The project would create an increased demand for water, but the City has an adequate supply to accommodate the proposed project, and development at this location is already anticipated under the General Plan. Impacts would be less than significant.

c. Runoff/Erosion and Siltation: The project proposes to collect runoff through two proposed 24-inch storm drains along the western edge of the site, and one 18-inch drain line along the eastern edge of the site, which would be discharged to an existing retardation basin between the site and the Santa Ynez River. The Public Works Department has verified that there is existing capacity in that basin to accommodate runoff from the site. In addition, several stormwater bio-filtration beds will be included in the project design throughout the parking lot and near the proposed batting cages.

The project will also be required to comply with the City’s 2013 Stormwater Ordinance.

By law, all grading of the site must conform to the erosion control requirements of the National Pollutant Discharge Elimination System (NPDES) regulations. As such, erosion and siltation during the construction period would be minimized and would result in less than significant impacts.

d. Alter Drainage Pattern: The existing drainage pattern of the site flows southerly as sheet flow to the Santa Ynez River. The drainage pattern would not change as a result of this project, and in fact may improve from an erosion perspective, since drainage will be regulated to flow into an existing retardation basin to regulate the flow to the river. Impacts are considered less than significant.

e. Runoff/Stormwater Drainage System Capacity: See items b. and d.

f. Substantially Degrade Water Quality: Increase in potential erosion and sedimentation to drainages is expected with grading activities, which could impact water quality. However, compliance with the NPDES and Regional Water Quality Control Board Resolution R3-2013-0032 (Adopted July 12, 2013, which addresses Post-Construction Stormwater Management Requirements for development projects, essentially updating previous SWPPP regulations) would result in less than significant impacts. Also see items b. and d.

g. Housing within Floodplains: Although the site is within the 100-year flood plain, it is not a housing project. No impacts to housing would occur.

h. Flood Hazards: The site is within the 100-year flood plain. The project would introduce fill on the site to raise structures above the flood plain, which could alter the extent of the floodplain upstream of the site. In all, an estimated net 13,628 cubic yards of fill would be introduced to the site, which would raise the area supporting buildings (outside the floodway) by roughly 5 to 6 feet on average over the current base elevation. As a condition of approval, the Public Works Department is requiring a hydraulic and hydrologic study from the applicant that must demonstrate there will be no adverse impact to upstream properties. Once the recommendations of this study are implemented, the project is not expected to significantly impact existing development along the river upstream.

i. Flooding and Dam Failure: The project site is located in a dam failure inundation hazard area. However, as this is a commercial project with limited patronage at any one time, the impacts are not considered significant.

j. Seiche, Tsunami, Volcano: The site is not located in the vicinity of any body of water that could result in a seiche or tsunami, and no volcanic activity occurs in the region. No impacts would result.

Findings and Mitigation: Since no significant impacts were identified, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?				X

a. Physical Division of Established Communities: The proposed project is an urban infill site, on the edge of existing development in an industrial portion of the City. As such, it does not divide an established community.

b., c. Policy Consistency/Habitat Plan: The proposed project is consistent with the applicable policies of the Buellton General Plan and meets the development standards of the Buellton Municipal Code. No habitat or conservation plans exist within the City of Buellton. A policy consistency analysis is provided below.

GENERAL PLAN POLICY CONSISTENCY

The consistency of the proposed project with the applicable General Plan policies is described in the paragraphs below.

Land Use Element

Policy L-5: New development shall not be allowed unless adequate public services are available to serve such new development.

Consistent: Adequate infrastructure exists in the area to serve the proposed project.

Policy L-11: New development shall incorporate a balanced circulation network that provides safe, multi-route access for vehicles, bicycles and pedestrians to neighborhood centers, greenbelts, other parts of the neighborhood and adjacent circulation routes.

Consistent: The project will include bike racks to encourage bicycle use, and will maintain access to an existing easement along the Santa Ynez River, which is planned to accommodate a future multi-purpose trail under the City's 2012 Bicycle and Pedestrian Master Plan.

Policy L-12: All exterior lighting in new development shall be located and designed so as to avoid creating substantial off-site glare, light spillover onto adjacent properties, or upward into the sky. The style, location, and height of the lighting fixtures shall be submitted with building plans and shall be subject to approval by the City prior to issuance of building or grading permits, as appropriate.

Consistent: Lighting fixtures consistent with this policy and the Community Design Guidelines are shown on the project plans.

Policy L-34: Industrial development shall be encouraged in the area east of McMurray Road on Easy Street and Commerce Drive, and on Industrial Way.

Consistent: The warehouse/storage facility is appropriately located in this generally industrial portion of the city.

Circulation Element

Policy C-2: Facilities that promote the use of alternate modes of transportation, including bicycle lanes and connections, pedestrian and hiking trails, park-and-ride lots and facilities for public transit shall be incorporated where feasible into new development, and shall be encouraged in existing development.

Consistent: The project will include bike racks to encourage bicycle use, and will maintain access to an existing easement along the Santa Ynez River, which is planned to accommodate a future multi-purpose trail under the City's 2012 Bicycle and Pedestrian Master Plan.

Policy C-5: Level of Service "C" or better traffic conditions shall be generally maintained on all streets and intersections, lower levels of service may be accepted during peak times or as a temporary condition, if improvements to address the problem are programmed to be developed.

Consistent: Based on the traffic study prepared for the project, all roads and intersections would operate at LOS "C" or better.

Policy C-7: The City should discourage new commercial or industrial development that allows customers, employees, or deliveries to use residential streets. The circulation system should be designed so that non-residential traffic (especially truck traffic) is confined to non-residential areas.

Consistent: No residential streets are needed to access the property.

Policy C-16: The City shall require the provision of adequate off-street parking in conjunction with all new development. Parking shall be located convenient to new development and shall be easily accessible from the street.

Consistent: The on-site parking meets Municipal Code requirements.

Policy C-20: In the process of considering development proposals the City shall use the full amount of discretion authorized in the municipal code and CEQA for setting conditions of approval to require new development to provide bicycle storage and parking facilities on-site as well as reserve an offer of dedication of right-of-way necessary for bikeway improvements.

Consistent: The project will include bike racks to encourage bicycle use, and will maintain access to an existing easement along the Santa Ynez River, which is planned to accommodate a future multi-purpose trail under the City's 2012 Bicycle and Pedestrian Master Plan.

Conservation and Open Space Element

Policy C/OS-2: Encourage implementation of Best Management Practices to eliminate/minimize the impacts of urban runoff and improve water quality.

Consistent: Development must follow all applicable regulations set forth by the Regional Water Quality Control Board.

Noise Element

Policy N-4: New commercial and industrial development should incorporate design elements to minimize the noise impact on surrounding residential neighborhoods.

Consistent: The project is in an industrial area with no nearby residents. Although the project includes certain uses that may produce noise (outdoor music, batting cages), the buildings themselves would act as barriers that would screen noise from distant residential areas to some extent. Additional noise mitigation required as part of this CEQA document would ensure that impacts would be less than significant.

Policy N-7: Noise generated by construction activities should be limited to daytime hours to reduce nuisances at nearby noise receptors in accordance with the hours and days set in the adopted Standard Conditions of Approval.

Consistent: The project is subject to the construction restrictions outlined in the Standard Conditions of Approval.

Public Facilities and Services Element

Policy PF-3: New development shall pay its fair share to provide additional facilities and services needed to serve such development.

Consistent: The project is required to pay all development impact fees.

Policy PF-6: All new development shall connect to City water and sewer systems.

Consistent: The project proposes to connect to the City's water and sewer systems.

Policy PF-9: Engineered drainage plans may be required for development projects which: (a) involve greater than one acre, (b) incorporate construction or industrial activities or have paved surfaces which may affect the quality of stormwater runoff, (c) affect the existing drainage pattern, and/or (d) has an existing drainage problem which requires correction. Engineered drainage plans shall incorporate a collection and treatment system for stormwater runoff consistent with applicable federal and State laws.

Consistent: The project is within the 100-year floodplain of the Santa Ynez River. The project's grading and drainage plan shows how runoff from the site will be directed to an existing retardation basin. The project also includes substantial stormwater infiltration areas on the project site, which will encourage direct infiltration and discourage runoff. Onsite improvements will be constructed under the direction of the Public Works Department, and will be required to comply with all applicable regulations of the Regional Water Quality Control Board.

Safety Element

Policy S-1: New development (habitable structures including commercial and industrial buildings) shall be set back at least 200 feet from the bank of the Santa Ynez River. A lesser setback may be allowed if a hydro-geologic study by a qualified professional can certify that a lesser setback will provide an adequate margin of safety from erosion and flooding due to the composition of the underlying geologic unit, to the satisfaction of the County Flood Control District, and a lesser setback will not adversely impact sensitive riparian corridors or associated plant and animal habitats, as determined by a qualified biologist, or planned trail corridors. Passive use trails may be allowed within setback areas.

Consistent: Buildings within the project area will be setback at least 400 feet from the river bank. A small portion of the parking lot will be about 340 feet from the river bank. No other uses will be closer than that to the river.

Policy S-4: As a condition of approval, continue to require any new development to minimize flooding problems identified by the National Flood Insurance Rate Program.

Consistent: Onsite grading and fill will ensure that buildings will be located at least 2 feet above the elevation of the 100-year flood zone.

Policy S-7: All new development shall satisfy the requirements of the California Building Code regarding seismic safety.

Policy S-9: Geologic studies shall be required as a condition of project approval for new development on sites with slopes greater than 10%, and in areas mapped by the Natural Resource Conservation Service (NRCS) as having moderate or high risk of liquefaction, subsidence and/or expansive soils.

Policy S-10: Require that adequate soils, geologic and structural evaluation reports be prepared by registered soils engineers, engineering geologists, and/or structural engineers, as appropriate, for all new development proposals for subdivisions or structures for human occupancy.

Consistent: A soils report will be prepared for the project (which must address the liquefaction issue in particular) and the project is subject to the California Building Code.

Policy S-12: New development should minimize erosion hazards by incorporating features into site drainage plans that would reduce impermeable surface area, increase surface water infiltration, and/or minimize surface water runoff during storm events. Such features may include:

- *Additional landscape areas,*
- *Parking lots with bio-infiltration systems,*
- *Permeable paving designs, and*
- *Storm water detention basins.*

Generally Consistent: The project incorporates many of the features called for in this policy, including permeable parking areas and landscaping. Runoff will drain to an offsite retardation basin, which will minimize erosion potential. However, the 10% area landscaping requirement is not met. As a condition of approval, the landscaping coverage area will need to be modified to ensure consistency.

Table 7. Project Consistency With M Zoning District Standards

Development Feature	City Requirement	Proposed	Project Consistency
Minimum Lot Area	No minimum	5.08 acres	Consistent
Front Setback	20 feet	22.5 feet	Consistent
Side Setback	None	32 feet	Consistent
Rear Setback	None	73 feet	Consistent
Landscaping	10%; 5 feet along side and back, 10 feet along front	9.7%	Inconsistent
Site Coverage	50% maximum	20.4%	Consistent
Height Limits	45 feet	41 Feet	Consistent (an architectural feature will extend to 49 feet, but has been determined to be consistent with building height policies because it not considered a building)
Parking	Storage: 1 per 1,000 sf gross floor area; 1 per 4 employees (20 spaces) Bowling Alley: 8 per lane (128 spaces for 16 lanes) 1 loading space per building (2 spaces) = 148 total, plus 2 loading	178 spaces (including 6 accessible and 3 for RV/bus) plus 2 loading bays Reciprocal parking agreement between onsite uses	Consistent
<i>Source: City of Buellton Municipal Code, Title 19, Zoning.</i>			

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

a, b. Mineral Resources: The site does not support significant mineral resources, nor have any been identified in local plans or resource inventories. The proposed project would not result in impacts to mineral resources.

Findings and Mitigation: No impacts would occur, therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XII. NOISE - Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
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 expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip would the project expose people residing or working in the project area to excessive noise levels?				X

Setting

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (such as industrial machinery). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed (approximately 30 years old or older) generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units and office buildings is generally 30 dBA or more (Harris Miller, Miller & Hanson Inc., 2006).

In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period. Lmax is the highest RMS (root mean squared) sound pressure level within the measurement period, and Lmin is the lowest RMS sound pressure level within the measurement period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the day. Community noise is usually measured using Day-Night Average Level (Ldn), which is the 24-hour average noise level with a 10-dBA penalty for noise occurring during nighttime (10 p.m. to 7 a.m.) hours, or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a 5 dBA penalty for noise occurring from 7 p.m. to 10 p.m. and a 10 dBA penalty for noise occurring from 10 p.m. to 7 a.m. Noise levels described by Ldn and CNEL usually do not differ by more than 1 dB.

Sensitive Receptors. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with each of these uses. The City of Buellton 2025 General Plan Noise Element identifies a variety of land use and development types as noise sensitive. These include residences, hospitals, schools, guest lodging, libraries, and parks. Sensitive

receptors near the project site include residences located approximately 1,000 feet north of the project site along Park Circle, and residences located approximately 1,500 feet east of the site in the Rancho de Maria subdivision.

Regulatory Setting. The Noise Element of the Buellton 2025 General Plan includes exterior and interior noise level guidelines for a range of land uses. These guidelines include “clearly acceptable,” “normally acceptable,” “normally unacceptable,” and “clearly unacceptable” exterior noise ranges for uses that may be proposed in the City. For single- and multi-family residential use developments, exterior noise up to 60 dBA CNEL is normally acceptable, noise between 61-75 dBA CNEL is normally unacceptable, and noise above 76 dBA is clearly unacceptable. Policy N-1 of the Noise Element states that new development producing stationary noise levels that exceed 65 dBA will not be permitted in areas containing residential or other noise sensitive land uses.

Buellton’s Municipal Code Noise Chapter establishes exterior noise limits for specific property types. It is unlawful to cause noise that exceeds the one-hour average level of 65 dB between the hours of 7:00 a.m. and 10:00 p.m. and 45 dB between 10:00 p.m. and 7:00 a.m. for residential uses. Consistent with Policy N-1 of the Noise Element, and the City Municipal Code, noise impacts would be considered significant if they would exceed either a one-hour average (Leq) of 65 dBA, or would reasonably be expected to result in a 24-hour average sound level that would exceed 60 dBA CNEL.

The Municipal Code also identifies excessive noises, which includes noise from the use and operation of stereos, surround sound systems, amplifiers, musical instruments, and similar devices. Use of these devices in such a manner as to disturb the peace, quiet, and comfort of any reasonable person of normal sensitivity in any residential public area is prohibited by the Code without authorization by the City of Buellton. The operation of any such device between the hours of 10:00 p.m. and 8:00 a.m. in such a manner as to be plainly audible at a distance of 50 feet from where the device is located is prohibited.

The acceptable interior noise level for residential uses is 45 dBA. The manner in which older homes in California were constructed (approximately 30 years old or older) generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units and office buildings is generally 30 dBA or more (FTA, May 2006). Based on this assumed reduction, compliance with the City’s exterior noise standard would result in compliance with the interior noise standard of 45 dBA.

Impact Analysis

a., c. The proposed project would introduce a new bowling alley and family entertainment center, including five batting cages, on the project site, as well as outdoor events, which would include acoustic (non-amplified) music. Operational noise concerns associated with the proposed project would be limited to noise generated during use of the batting cages and noise generated during outdoor events at the bowling alley and family entertainment center. In addition, the potential for noise from traffic is also addressed below.

Batting Cages. The project includes five batting cages, which would be located on the southwest quadrant of the proposed project site, approximately 1,000 feet south of the nearest sensitive receptors, which are residences located along Park Circle, and approximately 1,500 feet west of residences in the Rancho de Maria subdivision. Operational hours for the batting cages would be 11:00 a.m. to 8:00 p.m. Monday through Thursday and 10:00 a.m. to 10:00 p.m. Friday through Sunday. The batting cages would be outdoors and would not be surrounded by any solid barriers.

Operational noise estimates for the proposed batting cages were based on noise levels measured at the East Beach Batting Cages in Santa Barbara in March 2014 and on noise levels associated with batting cages at the Scandia Family Fun Center in the County of Sacramento reported in the County of Sacramento General Plan Noise Element. The batting cages at the proposed project would be located outdoors and unshielded, similar to the batting cages at both the East Beach Batting Cages and the Scandia Family Fun Center. Two five-minute noise measurements were conducted at a distance of approximately 20 feet from the batting cages using an ANSI Type II integrating sound level meter on March 9, 2014. The first measurement was conducted closest to the associated mechanical pitching equipment, and recorded maximum noise levels of 70 dBA. A second noise measurement was taken approximately ten feet from the perimeter of the batting cages, which recorded maximum noise levels of 80 dBA, including noise from bats striking balls, as well as music and conversation. Noise measurements reported in the County of Sacramento General Plan Noise Element conducted at a distance of ten feet from the Scandia batting cages recorded maximum noise levels of 72 to 78 dBA resulting from the impact of the bat and the ball. In order to provide the most conservative evaluation of noise impacts, a noise level of 80 dBA at a distance of 20 feet was used. These reference noise levels were used to estimate the noise levels at nearby sensitive receptors based on a standard noise attenuation rate of 6 dBA per doubling of distance. In addition to this standard attenuation calculation, the presence of intervening topography or structures between the noise source and a receptor would reduce sound levels at the receptor. This report provides estimates of operational noise on nearby residences with and without accounting for the presence of intervening structures (the proposed bowling alley and warehouse). To estimate the noise reduction that would result from the intervening structures, noise levels were calculated using a barrier of 18 feet in height (a conservative/low estimate for the height of a one-story building) located 20 feet from the proposed noise sources and 1,000 feet from the nearest residence. Other intervening structures or topography may further reduce the impacts and the height of the bowling alley would be approximately 24 feet, while the height of the storage building would be approximately 35 feet; therefore, the noise levels presented herein represent a conservative estimate of actual operational noise.

The batting cages would be outdoors and would not be surrounded by any solid barriers. However, the bowling alley and family entertainment center, as well as the storage facilities, would be located to the north and east of the batting cages between the batting cages and the sensitive receptors.

As described above, the sound created during the operation of batting cages is estimated at 80 dBA at a distance of 20 feet. At 1,000 feet the sound level would be approximately 46 dBA, and at 1,500 feet it would be approximately 43 dBA, both of which are below the City's maximum allowable noise level for residential land uses. These estimates do not include attenuation associated with the proposed new structures, which would act as a physical barriers located between the batting cages and the nearest residences. The attenuation provided by a physical barrier between the batting cages and the nearest residences would be expected to reduce noise levels by approximately 9 dBA. Therefore, resulting noise levels at the nearest residences (located 1,000 feet to the north) from the batting cages would be approximately 37 dBA and noise levels at the residences approximately 1,500 feet east would be approximately 35 dBA. These estimated sound levels would be similar to ambient sound levels in a quiet residential community (commonly 45-55 dBA). When two noise sources of a similar volume occur simultaneously, the additive noise level is approximately 3 dBA. Therefore, the maximum sound level that would be expected to result from the proposed batting cages, combined with ambient noise in the vicinity of the existing residential receptors, would be approximately 40 dBA at the residences to the north, and 38 dBA at the residences to the east. Therefore, sound from the proposed batting cages would not exceed either the 65 dBA one-hour standard or the 60 dBA 24-hour standard. Noise impacts from the batting cages would be *less than significant*.

Outdoor Non-Amplified Music. Outdoor music events, which would not include amplified sound systems, are proposed to occur at the project site on Friday and Saturday evenings. Pursuant to the Buellton Municipal Code, outdoor music events would not be permitted between the hours of 10:00 p.m. and 8:00 a.m. The project proponent would also be required to receive a permit from the City of Buellton in order to hold outdoor events between 8:00 a.m. and 10:00 p.m.

Operational noise estimates for the outdoor events at the family entertainment center were based upon data from the Health and Safety Authority's The Noise of Music guidance document. The Health and Safety Authority states that onstage sound levels created by acoustic jazz and folk concerts onstage sound levels are generally between 90 to 98 dBA. Peak sound levels associated with non-amplified music are assumed to occur at approximately 15-20 feet from the instruments. In order to provide a conservative estimate of attenuation from this noise source, a noise level of 90 to 98 dBA at a distance of 20 feet was used. These reference noise levels were used to estimate the noise levels at nearby sensitive receptors based on a standard noise attenuation rate of 6 dBA per doubling of distance. In addition to this standard attenuation calculation, the presence of intervening topography or structures between the noise source and a receptor would reduce sound levels at the receptor. To estimate the noise reduction that would result from the intervening structures, noise levels were calculated using a barrier of 18 feet in height (a conservative/low estimate for the height of a one-story building) located 20 feet from the proposed noise sources and 1,000 feet from the nearest residence. Other intervening structures or topography may further reduce the impacts and the height of the bowling alley would be approximately 24 feet, while the height of the warehouse building would be approximately 40 feet; therefore, the noise levels presented herein represent a conservative estimate of actual operational noise.

Events would take place on the southern side of the proposed project site; therefore, the proposed family entertainment center/bowling alley structure and warehouse facilities would create a physical barrier between the events and nearby residences to the north and east, reducing the sound level at these receptors.

The events would be located approximately 1,000 feet south of the nearest sensitive receptors, which are residences located along Park Circle, and approximately 1,500 feet west of residences in the Rancho de Maria subdivision. At a distance of 1,000 feet, the sound would attenuate to 46 to 54 dBA, and at 1,500 feet it would attenuate to 43 to 51 dBA. These noise estimates do not account for additional sound attenuation that would result from the physical barrier created by the bowling alley and family entertainment center, which would be located between the outdoor events and the residences located to the north of the project site. The presence of the proposed structures between the sound source and receptors located along Park Circle would reduce noise levels by approximately 10 dBA, based on modeling that assumes a conservative height of 18 feet for the surrounding buildings. Therefore, resulting noise levels at the nearest residences (located 1,000 feet to the north) from outdoor events would be between 39 and 47 dBA. As described above, the structures associated with the project would not necessarily be constructed between the outdoor event performance area and the residences to the east of the site, which would be periodically exposed to noise levels up to 54 dBA.

As described above, noise impacts would be considered significant if they would exceed either a one-hour average (Leq) of 65 dBA, or would reasonably be expected to result in a 24-hour average sound level that would exceed 60 dBA CNEL. Therefore, sensitive receptors will not be exposed to normally unacceptable noise levels during the proposed events, and no mitigation is required.

Traffic Noise. The City of Buellton 2025 General Plan Noise Element provides noise contours derived from monitoring major sources of noise in the region, including noise traffic from Highways 101 and 246, as well as from the Avenue of the Flags. Noise contours define areas of equal noise exposure and have been estimated using information about both current and projected future land uses and traffic volumes. The contours assist in setting land use policy and establishing development standards. The proposed project site is not located within an existing or future noise contour depicted on the City of Buellton 2025 General Plan Noise Element maps for 2005 and 2025. The lowest contour level depicted is 60 dB; therefore, the existing exposure from Highways 101 and 246, as well as the Avenue of the Flags is less than 60 dB at the proposed project site.

The primary source of noise in the project site vicinity is motor vehicle traffic (e.g., automobiles, buses, trucks, and motorcycles) on nearby roadways, including State Highway 246 (SR 246) and U.S. Highway 101. Motor vehicle noise is characterized by a high number of individual events, which create a sustained noise level. There are no sensitive noise receptors located on Industrial Way, the access road to the proposed project site. There are residential receptors located on SR 246, which has a peak annual average daily traffic (AADT) of over 20,000 vehicles. The project would generate approximately 695 ADT (ATE, 2014), all of which would spill onto SR 246. 695 ADT is less than 5% of the total trips on SR 246 west of Industrial Way and less than 3% of the

total trips east of Industrial Way (City of Buellton General Plan 2005); therefore, the project would result in a *less than significant* impact on area receptors from traffic noise.

b., d. Construction noise is not expected to significantly impact noise sensitive receptors. Assuming onsite construction equipment may temporarily generate noise levels up to 88 dBA at 50 feet from the equipment, and assuming that point source noise attenuates at a rate of 6dB per doubling of distance, it is anticipated that the maximum noise levels experienced would be about 64 dB within 800 feet, and 58 dBA at 1,600 feet from the noise source. This does not account any barrier attenuation from intervening buildings. The nearest homes are roughly 1,000 feet away along Park Circle, but are partially blocked by intervening development. Even without attenuation, noise levels from this source would not exceed the City’s one-hour standard of 65 dBA. Impacts would be less than significant.

e., f. The project is not located within an airport land use plan, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip. *No impacts* would occur.

Findings and Mitigation: No mitigation measures are required.

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

a. Population Growth: The site is planned for and zoned for industrial development.

b, c. Displacement: The site is vacant and as such would not displace any residents.

Findings and Mitigation: No impacts would occur, therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>XIV. PUBLIC SERVICES</i> - 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 service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

a. Fire Services: The project area is served by Station 31 of the Santa Barbara County Fire Department located at 168 West Highway 246. The station is located within 0.5 miles of the project site and is within the 5-minute response time of the station. Fire protection impacts are considered less than significant.

b. Police Services: The project area is served by the City of Buellton Police Department which is contracted through the Santa Barbara County Sheriff's Department. One patrol officer is on duty at all times. No significant impacts have been identified with respect to Police services.

c. School Services: The proposed project is commercial/industrial and would not generate students and thereby impact school services. No impacts would occur.

d. Parks: The project is commercial/industrial and is not expected to impact parks or park services. No impacts would occur.

e. Other Public Facilities: No other impacts to public services have been identified.

Findings and Mitigation: Impacts are considered less than significant, therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>XV. RECREATION</i> -				
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?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				X

a. Demand for Parks and Recreation: The project is commercial/industrial and is not expected to impact parks or park services. No impacts would occur.

b. Construction of Recreational Facilities: The project includes a bowling alley and batting cages, which would provide commercial recreational opportunities to serve the community. No adverse impacts would occur.

Findings and Mitigation: Impacts are considered less than significant, so no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?			X	
f) Result in inadequate parking capacity?			X	
g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

a, b. Traffic Congestion: A traffic study (March 19, 2014) has been prepared by Associated Transportation Engineers (ATE) for the project. The analysis focuses on the peak hour operations of the intersections located adjacent to the project site. An analysis of the site access and circulation system is also provided. The traffic study is summarized below and is hereby incorporated by reference into this initial study. The complete traffic study is available for review at the Buellton Planning Department, 107 West Highway 246, Buellton.

Project Generated Traffic

Trip generation estimates were calculated for the project using rates presented in the Institute of Transportation Engineers (ITE), *Trip Generation* (9th Edition, 2013), for Bowling Alley (Land Use Code #437), Batting Cages (Land Use Code #433), and Warehouse (Land Use Code #150). Table 8 summarizes the average daily trips (ADT) and P.M. peak hour generation estimates for the project.

Table 8. Project Trip Generation

Land Use	Size	ADT		P.M. Peak	
		Rate	Trips	Rate	Trips
Bowling Alley	16 lanes	33.33	533	1.51	24 (15/9)
Batting Cages	5 Cages	22.00	110	2.22	11 (6/5)
Warehouse	14,500 SF	3.56	52	0.32	5 (1/4)
Total Trip Generation			695		40 (22/18)
<i>Note: ADT rate for Batting Cages based on the fact that typically peak hour volumes represent 10% of the ADT. Figures in parentheses indicate inbound versus outbound trips.</i>					

Table 8 shows that the proposed project would generate 695 average daily trips (ADT), with 130 ADT and 40 P.M. peak hour trips. The peak hour trips are 22 inbound and 18 outbound. The project will serve the local Buellton area, so the distribution is expected to be 50% eastbound and 50% westbound on Highway 246. At the Route 346/Industrial Way intersection, the projected P.M. peak hour trips would be:

- 11 EB right
- 11 WB left
- 9 NB left
- 9 NB right

The project would add 695 average daily trips to Industrial Way south of Highway 246 and approximately 300 in each direction on Highway 246.

Potential Traffic Impacts

The volume of traffic on Route 246 (less than 2% of the 2012 volume) would not have a significant impact. The intersection operation is not significantly impacted, so the project does not have a project-specific impact on the local street network of Buellton. No significant impacts would occur.

The project will be required to pay the City’s traffic fee to address the project’s proportionate share of any cumulative impacts to the Citywide roadway and intersection network.

c. Air Traffic: No airports are located in the vicinity of the project.

d. Traffic Hazards: Please see discussion in sections a. and b. above.

e. Emergency Access: The proposed project does not block any identified emergency access routes, nor would it generate traffic that could impair such routes.

f. Parking: The project is providing the Municipal Code required parking. No impacts would occur.

g. Alternative Transportation: The project design does not inhibit the use of bicycles, and in fact provides bike racks and onsite walkways.

Findings and Mitigation: The proposed project would not create significant project related traffic impacts. The following required mitigation measure would reduce cumulative traffic impacts to a level of insignificance:

T-1 Traffic Impact Fee. Payment of the Buellton Traffic Impact Fee shall be paid prior to issuance of the occupancy permit. Said fee shall be in the rate that is in effect at the time building permits are issued.

Monitoring:

Planning Department will verify payment of the fee prior to issuing occupancy permits.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>XVII. UTILITIES AND SERVICE SYSTEMS -</i> Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

a. Wastewater Treatment Requirements: The anticipated use of the site is not anticipated to generate waste of increased or concentrated strengths. All elements of the project will be directly connected to the public sewer for ultimate treatment at the City's wastewater treatment plant. A grease interceptor is required by City ordinance. Impacts would be less than significant.

b., e. Water and Wastewater Facility Construction: The General Plan already accounts for development of the intensity proposed as part of the project. Therefore, its water consumption and wastewater generation characteristics are already accounted for in the General Plan and associated Environmental Impact Report. There would be no residents at the site, and water use would be limited to serving patrons and food preparation. Based on standard duty factors for retail establishments (100 gallons per 1,000 sf per day—Source: Laguna County Sanitation District. Sewer Collection System Master Plan, June 2009), it is estimated that the 30,630-foot entertainment center could generate about 3,063 gallons of wastewater per day. The City’s wastewater treatment plant has a total capacity of 650,000 gallons per day, and has a current average daily flow of approximately 450,000 gallons per day. The project generation will increase the current average daily flow by less than 1 percent. The existing wastewater treatment plant and sewer mains have sufficient capacity to accommodate the project’s flows. Impacts would be less than significant.

c. Storm Drain Construction: The project would convey drainage to an offsite retardation basin with sufficient capacity between the site and the Santa Ynez River. No additional impacts are anticipated.

d. Water Supplies: This project would increase the demand for domestic water from the City’s supplies; however, the City has adequate supply to service the project without obtaining new or expanded water entitlements. Impacts would be less than significant.

f., g. Solid Waste: No significant solid waste impacts have been identified with respect to the proposed project.

Findings and Mitigation: No significant impacts would occur, so no mitigation is required.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
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)?			X	
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		X		

a. Impacts related to drainage, water quality, biological resources and cultural resources were determined to be less than significant. The project is required to comply with federal, state and local laws that address these resources. Standard conditions of approval would also apply.

b. Cumulative impacts were determined to be less than significant, since all project-related impacts are either less than significant, or can be mitigated to ensure that cumulative conditions are not affected.

c. The incorporation of required mitigation measures and adherence to General Plan policies would reduce all impacts that have the potential to affect human beings to a less than significant level. Mitigation measures are required for the following issues: biological resources, cultural resources, hazards and hazardous materials, geology/soils and transportation/traffic.

Appendix A

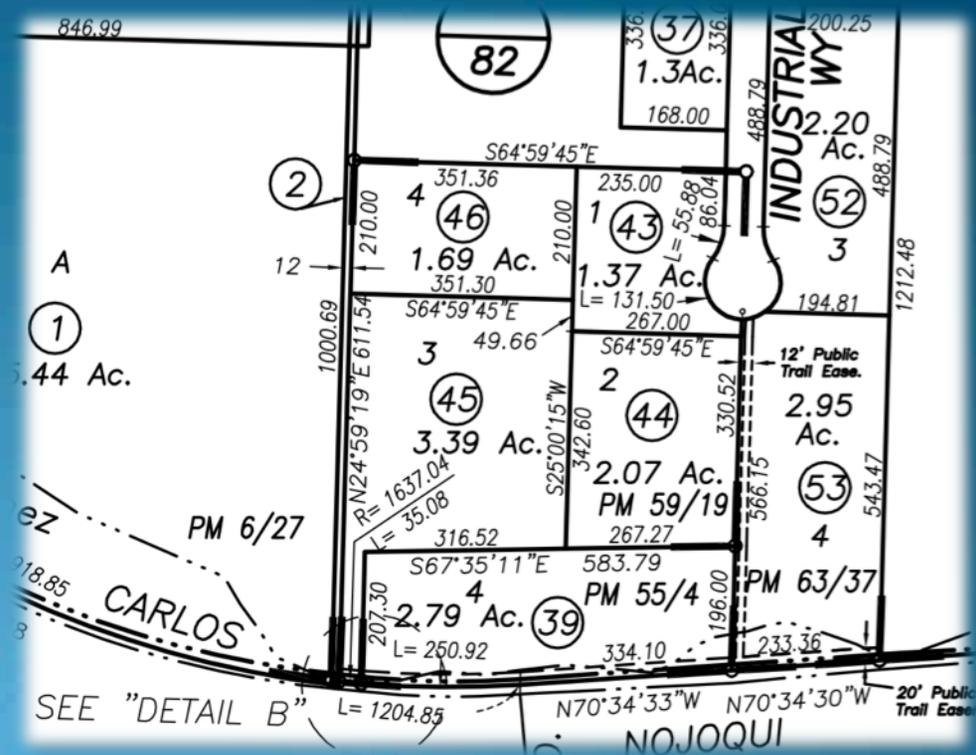
Project Plans

Vicinity Map



Project Location

- Two parcels, 5.08 acres total
 - APN 099-690-045 (3.39 acres)
 - APN 099-690-046 (1.69 acres)



Aerial Overview of Site (looking north)

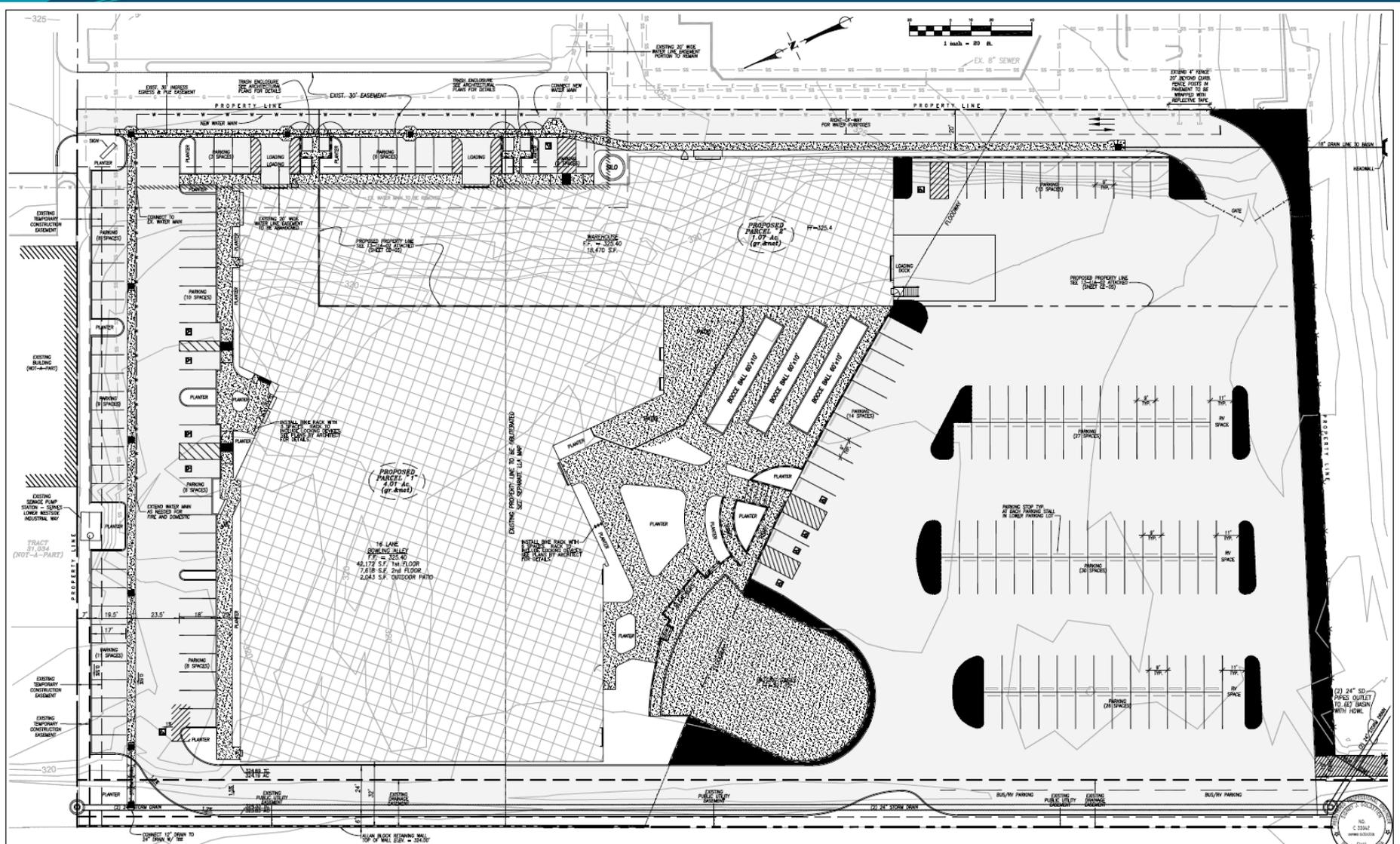


Aerial Overview of Site (looking east)



Project Site

Updated Site Plan



CAUTION:
UNDERGROUND UTILITIES EXIST; CONTACT UNDERGROUND SERVICE ALERT (U.S.A.) 1-800-422-4133 TWO (2) WORKING DAYS PRIOR TO BEGINNING ANY EXCAVATION OR CONSTRUCTION.

DATE	REVISIONS

REVIEWED BY: _____

SID GOLDSTIEN-CIVIL ENGINEER, INC.
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DRAWN BY: AMP
DATE: 20 MAY 2015
DESIGNER: SID GOLDSTIEN
R.C.E. 33,042
(expires 6-30-16)
SJC

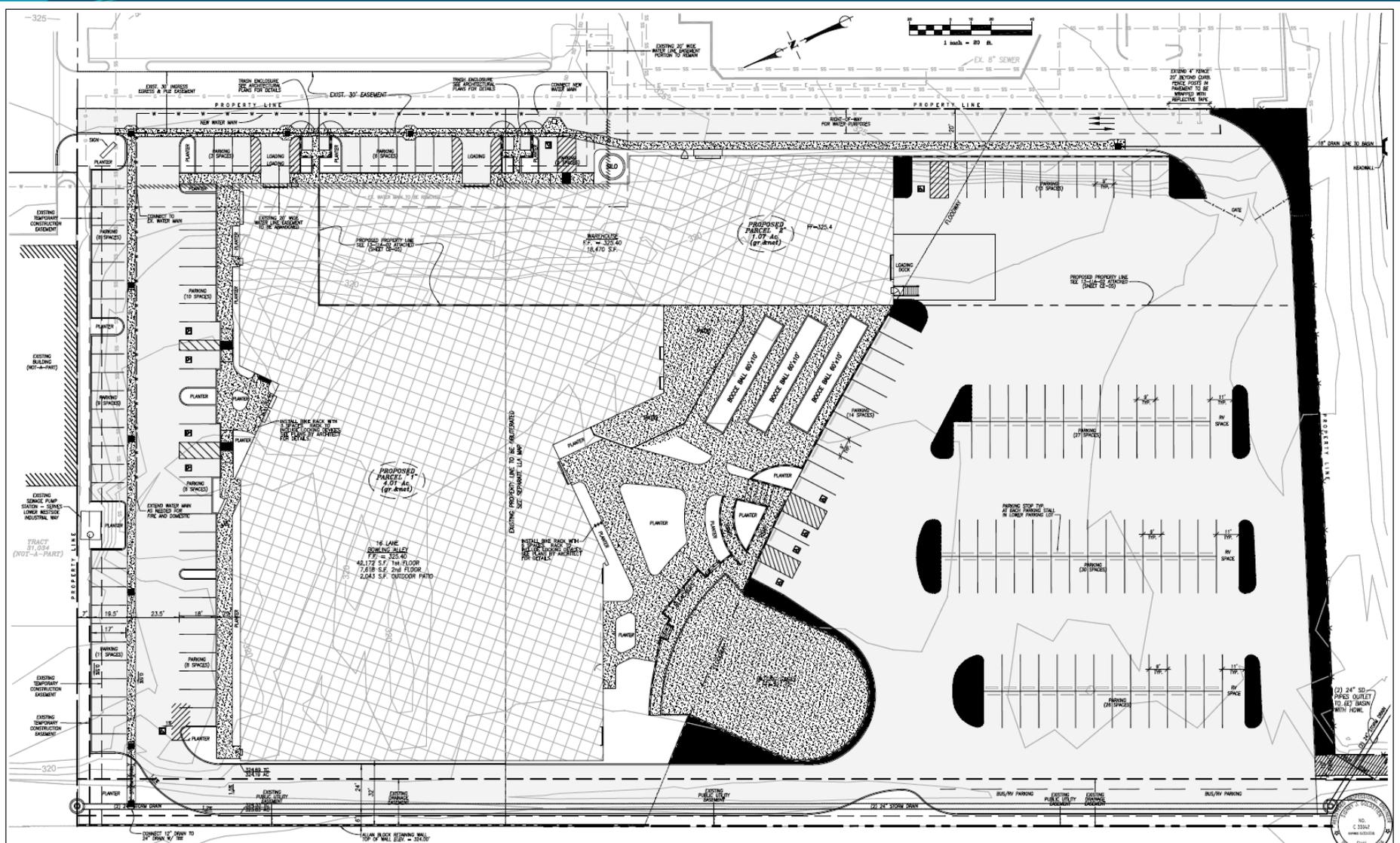
SCALE: 1" = 20'
SITE PLAN for LIVE OAK LANES & INDUSTRIAL CENTER BUELLTON, CA. 93427

SHEET NO. CE-04
FILE NO. 14-10-100

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Grading Plan



CAUTION:
 UNDERGROUND UTILITIES EXIST. CONTACT UNDERGROUND SERVICE ALERT (U.S.A.) 1-800-422-4133 TWO (2) WORKING DAYS PRIOR TO BEGINNING ANY EXCAVATION OR CONSTRUCTION.

DATE	REVISIONS

REVIEWED BY: _____

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DRAWN BY: AMP
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 DESIGNER: SID GOLDSTIEN
 R.C.E. 33,042 (EXPIRES 6-30-16)
 SJC

SCALE: 1" = 20'
 SITE PLAN for LIVE OAK LANES & INDUSTRIAL CENTER BUELLTON, CA. 93427
 SHEET NO. CE-04
 FILE NO. 14-10-100

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Photometric Plan (Batting Cage detail)

Symbol	Label	QTY	Listing Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Footage
⊗	FL1	8	50575 LED 8 ASSD40K	BATTING CAGE FLOOD LIGHT D-SERIES FLOOD SIZE 3 WITH 8-000 POOR BAY DISTRIBUTION, NEAR TYPE 800K	LED	1	5000	0.85	107.8



**D-Series Size 3
LED Flood Luminaire**

BATTING CAGE LIGHT

Part No. **FL1**

Introduction

The D-Series Size 3 Flood features precision optics to beautifully illuminate a variety of applications as its sleek, compact styling blends seamlessly with its environment.

The D-Series Flood reflector systems and cutting-edge chip-on-board LED technology produce low beam-to-beam ratios for minimal spill light and incredible photometric performance. Its the ideal long-life replacement for 250-400W metal halide floods, with typical energy savings of 67% and expected service life of over 100,000 hours.

Specifications

ETC: 1.4 FT
Depth: 18.12 FT
Width: 12.5 FT
Height: 12.5 FT
Overall Height: 12.5 FT
Weight: 25 lbs

Ordering Information

EXAMPLE: DSXF3 LED 8 ASSD40K FL MVOLT THK DDEXX

Stock Item	QTY	Item Code	Item Description	Item Code	Item Description	Item Code	Item Description
50575	8	DSXF3	D-Series Size 3 Flood	8-000	8-000 Flood	ASSD40K	40,000 Lumens
		FL	Flood Luminaire	MVOLT	120V	THK	Thick Lens
		DDEXX	D-Series Flood				

Stock configurations are offered for shorter lead times:

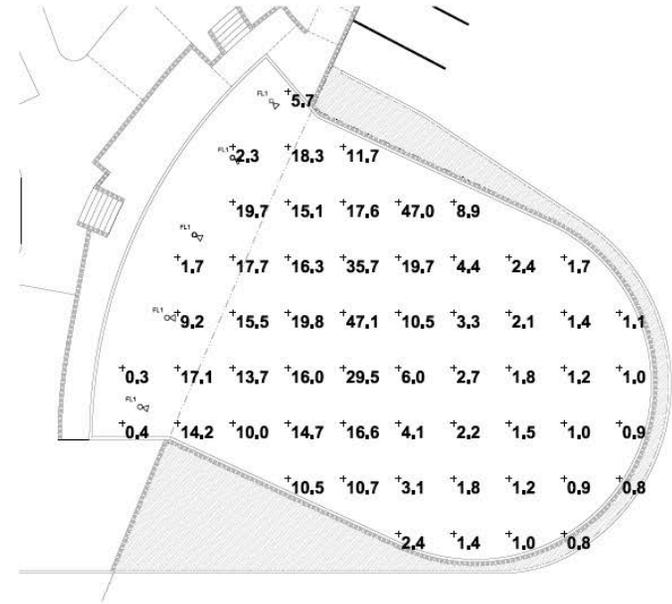
50575 LED 8 ASSD40K FL MVOLT THK DDEXX	50575 LED 8 ASSD40K FL MVOLT THK DDEXX
50575 LED 8 ASSD40K FL MVOLT THK DDEXX	50575 LED 8 ASSD40K FL MVOLT THK DDEXX

ACCESSORIES

50575 LED 8 ASSD40K FL MVOLT THK DDEXX	50575 LED 8 ASSD40K FL MVOLT THK DDEXX
--	--

NOTES

1. Flood luminaire is not to be used for general lighting.
2. Flood luminaire is not to be used for general lighting.
3. Flood luminaire is not to be used for general lighting.
4. Flood luminaire is not to be used for general lighting.
5. Flood luminaire is not to be used for general lighting.



PHOTOMETRIC AT BATTING CAGE
SCALE: 1" = 10'-0"

DAVID GOLDSTIEN ARCHITECT
INC. - AIA
650 Alamo Plaza
Suite 300
Sunnyvale, CA 94085
950-448-1370

dga

PROJECT
LIVE OAK LANES & LIVE OAK INDUSTRIAL CENTER
BUELLTON, CA

CONSULTANT
Thomas
ARCHITECTS
P.C.
1000 N. G Street
Sunnyvale, CA 94089
408-261-1000

CONSULT. JOB NO.
14-BO1701

STAMP & SIGN


REVISIONS

PRINTED
PLOTTED 05.21.15
DRAWN C.J.
ARCH. JOB NO. 1402
SHEET NO.
EP3

Appendix B

*CalEEMod Air Quality Model Worksheets –
Annual, Summer, and Winter*

Live Oak Bowling Alley
Santa Barbara County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	14.50	1000sqft	0.33	14,500.00	0
Parking Lot	154.00	Space	1.39	61,600.00	0
City Park	1.35	Acre	1.35	58,806.00	0
Movie Theater (No Matinee)	30.64	1000sqft	0.70	30,636.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.9	Precipitation Freq (Days)	37
Climate Zone	4			Operational Year	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park = landscaped area
 Movie Theatre = Bowling Alley

Trips and VMT -

Vehicle Trips - Traffic Study trip generation rates. City park represents batting cages. Movie theatre represents the bowling alley and entertainment center.

Construction Off-road Equipment Mitigation - Santa Barbara County Construction Dust Control Requirements

Waste Mitigation - AB 939

Construction Phase -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	30,640.00	30,636.00
tblVehicleTrips	ST_TR	1.59	22.00
tblVehicleTrips	ST_TR	80.00	33.33
tblVehicleTrips	ST_TR	2.59	3.56
tblVehicleTrips	SU_TR	1.59	22.00
tblVehicleTrips	SU_TR	80.00	33.33
tblVehicleTrips	SU_TR	2.59	3.56
tblVehicleTrips	WD_TR	1.59	22.00
tblVehicleTrips	WD_TR	80.00	33.33
tblVehicleTrips	WD_TR	2.59	3.56

2.0 Emissions Summary

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	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003
Energy	4.8100e-003	0.0438	0.0368	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	160.1241	160.1241	6.0000e-003	1.9300e-003	160.8471
Mobile	0.8375	1.4313	7.3079	7.3500e-003	0.5277	0.0166	0.5443	0.1413	0.0152	0.1565	0.0000	610.3700	610.3700	0.0400	0.0000	611.2097
Waste						0.0000	0.0000		0.0000	0.0000	38.2435	0.0000	38.2435	2.2601	0.0000	85.7061
Water						0.0000	0.0000		0.0000	0.0000	5.5399	27.0854	32.6253	0.0203	0.0123	36.8647
Total	1.6116	1.4751	7.3466	7.6100e-003	0.5277	0.0200	0.5476	0.1413	0.0186	0.1599	43.7834	797.5831	841.3665	2.3264	0.0142	894.6314

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	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003
Energy	4.8100e-003	0.0438	0.0368	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	160.1241	160.1241	6.0000e-003	1.9300e-003	160.8471
Mobile	0.8375	1.4313	7.3079	7.3500e-003	0.5277	0.0166	0.5443	0.1413	0.0152	0.1565	0.0000	610.3700	610.3700	0.0400	0.0000	611.2097
Waste						0.0000	0.0000		0.0000	0.0000	19.1218	0.0000	19.1218	1.1301	0.0000	42.8531
Water						0.0000	0.0000		0.0000	0.0000	5.5399	27.0854	32.6253	0.0202	0.0123	36.8558
Total	1.6116	1.4751	7.3466	7.6100e-003	0.5277	0.0200	0.5476	0.1413	0.0186	0.1599	24.6616	797.5831	822.2447	1.1963	0.0142	851.7695

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.67	0.00	2.27	48.58	0.14	4.79

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	1/29/2015	2/4/2015	5	5	
2	Grading	Grading	2/5/2015	2/16/2015	5	8	
3	Building Construction	Building Construction	2/17/2015	1/4/2016	5	230	
4	Paving	Paving	1/5/2016	1/28/2016	5	18	
5	Architectural Coating	Architectural Coating	1/29/2016	2/23/2016	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 158,685; Non-Residential Outdoor: 52,895 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Site Preparation	7	18.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	70.00	27.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

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					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1422	0.1066	1.0000e-004		7.7200e-003	7.7200e-003		7.1000e-003	7.1000e-003	0.0000	9.3253	9.3253	2.7800e-003	0.0000	9.3837
Total	0.0132	0.1422	0.1066	1.0000e-004	0.0452	7.7200e-003	0.0529	0.0248	7.1000e-003	0.0319	0.0000	9.3253	9.3253	2.7800e-003	0.0000	9.3837

3.2 Site Preparation - 2015

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	2.2000e-004	3.7000e-004	3.2200e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3505	0.3505	2.0000e-005	0.0000	0.3510
Total	2.2000e-004	3.7000e-004	3.2200e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3505	0.3505	2.0000e-005	0.0000	0.3510

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					0.0203	0.0000	0.0203	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1422	0.1066	1.0000e-004		7.7200e-003	7.7200e-003		7.1000e-003	7.1000e-003	0.0000	9.3253	9.3253	2.7800e-003	0.0000	9.3837
Total	0.0132	0.1422	0.1066	1.0000e-004	0.0203	7.7200e-003	0.0280	0.0112	7.1000e-003	0.0183	0.0000	9.3253	9.3253	2.7800e-003	0.0000	9.3837

3.2 Site Preparation - 2015

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	2.2000e-004	3.7000e-004	3.2200e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3505	0.3505	2.0000e-005	0.0000	0.3510
Total	2.2000e-004	3.7000e-004	3.2200e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3505	0.3505	2.0000e-005	0.0000	0.3510

3.3 Grading - 2015

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					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1617	0.1067	1.2000e-004		9.3100e-003	9.3100e-003		8.5700e-003	8.5700e-003	0.0000	11.3544	11.3544	3.3900e-003	0.0000	11.4256
Total	0.0153	0.1617	0.1067	1.2000e-004	0.0262	9.3100e-003	0.0355	0.0135	8.5700e-003	0.0220	0.0000	11.3544	11.3544	3.3900e-003	0.0000	11.4256

3.3 Grading - 2015

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	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	0.0000
Worker	3.0000e-004	5.0000e-004	4.2900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4673	0.4673	3.0000e-005	0.0000	0.4680	
Total	3.0000e-004	5.0000e-004	4.2900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4673	0.4673	3.0000e-005	0.0000	0.4680	

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					0.0118	0.0000	0.0118	6.0600e-003	0.0000	6.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1617	0.1067	1.2000e-004		9.3100e-003	9.3100e-003		8.5700e-003	8.5700e-003	0.0000	11.3544	11.3544	3.3900e-003	0.0000	11.4256	
Total	0.0153	0.1617	0.1067	1.2000e-004	0.0118	9.3100e-003	0.0211	6.0600e-003	8.5700e-003	0.0146	0.0000	11.3544	11.3544	3.3900e-003	0.0000	11.4256	

3.3 Grading - 2015

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	3.0000e-004	5.0000e-004	4.2900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4673	0.4673	3.0000e-005	0.0000	0.4680
Total	3.0000e-004	5.0000e-004	4.2900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4673	0.4673	3.0000e-005	0.0000	0.4680

3.4 Building Construction - 2015

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	0.4171	3.4234	2.1369	3.0600e-003		0.2413	0.2413		0.2269	0.2269	0.0000	278.1535	278.1535	0.0698	0.0000	279.6191
Total	0.4171	3.4234	2.1369	3.0600e-003		0.2413	0.2413		0.2269	0.2269	0.0000	278.1535	278.1535	0.0698	0.0000	279.6191

3.4 Building Construction - 2015

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	0.0409	0.2642	0.5286	4.8000e-004	0.0126	3.9200e-003	0.0165	3.5800e-003	3.6000e-003	7.1800e-003	0.0000	43.2973	43.2973	4.2000e-004	0.0000	43.3061
Worker	0.0396	0.0662	0.5706	8.0000e-004	0.0730	6.1000e-004	0.0736	0.0194	5.6000e-004	0.0200	0.0000	62.1557	62.1557	4.2200e-003	0.0000	62.2443
Total	0.0804	0.3304	1.0992	1.2800e-003	0.0856	4.5300e-003	0.0901	0.0230	4.1600e-003	0.0271	0.0000	105.4530	105.4530	4.6400e-003	0.0000	105.5504

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	0.4171	3.4234	2.1369	3.0600e-003		0.2413	0.2413		0.2269	0.2269	0.0000	278.1532	278.1532	0.0698	0.0000	279.6188
Total	0.4171	3.4234	2.1369	3.0600e-003		0.2413	0.2413		0.2269	0.2269	0.0000	278.1532	278.1532	0.0698	0.0000	279.6188

3.4 Building Construction - 2015

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	0.0409	0.2642	0.5286	4.8000e-004	0.0126	3.9200e-003	0.0165	3.5800e-003	3.6000e-003	7.1800e-003	0.0000	43.2973	43.2973	4.2000e-004	0.0000	43.3061
Worker	0.0396	0.0662	0.5706	8.0000e-004	0.0730	6.1000e-004	0.0736	0.0194	5.6000e-004	0.0200	0.0000	62.1557	62.1557	4.2200e-003	0.0000	62.2443
Total	0.0804	0.3304	1.0992	1.2800e-003	0.0856	4.5300e-003	0.0901	0.0230	4.1600e-003	0.0271	0.0000	105.4530	105.4530	4.6400e-003	0.0000	105.5504

3.4 Building Construction - 2016

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	3.4100e-003	0.0285	0.0185	3.0000e-005		1.9700e-003	1.9700e-003		1.8500e-003	1.8500e-003	0.0000	2.4215	2.4215	6.0000e-004	0.0000	2.4342
Total	3.4100e-003	0.0285	0.0185	3.0000e-005		1.9700e-003	1.9700e-003		1.8500e-003	1.8500e-003	0.0000	2.4215	2.4215	6.0000e-004	0.0000	2.4342

3.4 Building Construction - 2016

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	0.0000
Vendor	3.1000e-004	2.0400e-003	4.2700e-003	0.0000	1.1000e-004	3.0000e-005	1.4000e-004	3.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.3757	0.3757	0.0000	0.0000	0.3758	
Worker	3.0000e-004	5.1000e-004	4.3400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5258	0.5258	3.0000e-005	0.0000	0.5265	
Total	6.1000e-004	2.5500e-003	8.6100e-003	1.0000e-005	7.5000e-004	3.0000e-005	7.9000e-004	2.0000e-004	2.0000e-005	2.3000e-004	0.0000	0.9016	0.9016	3.0000e-005	0.0000	0.9023	

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	3.4100e-003	0.0285	0.0185	3.0000e-005		1.9700e-003	1.9700e-003		1.8500e-003	1.8500e-003	0.0000	2.4215	2.4215	6.0000e-004	0.0000	2.4342
Total	3.4100e-003	0.0285	0.0185	3.0000e-005		1.9700e-003	1.9700e-003		1.8500e-003	1.8500e-003	0.0000	2.4215	2.4215	6.0000e-004	0.0000	2.4342

3.4 Building Construction - 2016**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	3.1000e-004	2.0400e-003	4.2700e-003	0.0000	1.1000e-004	3.0000e-005	1.4000e-004	3.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.3757	0.3757	0.0000	0.0000	0.3758
Worker	3.0000e-004	5.1000e-004	4.3400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5258	0.5258	3.0000e-005	0.0000	0.5265
Total	6.1000e-004	2.5500e-003	8.6100e-003	1.0000e-005	7.5000e-004	3.0000e-005	7.9000e-004	2.0000e-004	2.0000e-005	2.3000e-004	0.0000	0.9016	0.9016	3.0000e-005	0.0000	0.9023

3.5 Paving - 2016**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	0.0162	0.1651	0.1131	1.7000e-004		9.9600e-003	9.9600e-003		9.1800e-003	9.1800e-003	0.0000	15.5310	15.5310	4.5600e-003	0.0000	15.6268
Paving	1.8200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0180	0.1651	0.1131	1.7000e-004		9.9600e-003	9.9600e-003		9.1800e-003	9.1800e-003	0.0000	15.5310	15.5310	4.5600e-003	0.0000	15.6268

3.5 Paving - 2016

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	7.6000e-004	1.3100e-003	0.0112	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3522	1.3522	8.0000e-005	0.0000	1.3540
Total	7.6000e-004	1.3100e-003	0.0112	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3522	1.3522	8.0000e-005	0.0000	1.3540

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	0.0162	0.1651	0.1131	1.7000e-004		9.9600e-003	9.9600e-003		9.1800e-003	9.1800e-003	0.0000	15.5310	15.5310	4.5600e-003	0.0000	15.6268
Paving	1.8200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0180	0.1651	0.1131	1.7000e-004		9.9600e-003	9.9600e-003		9.1800e-003	9.1800e-003	0.0000	15.5310	15.5310	4.5600e-003	0.0000	15.6268

3.5 Paving - 2016

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	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	0.0000
Worker	7.6000e-004	1.3100e-003	0.0112	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3522	1.3522	8.0000e-005	0.0000	1.3540	
Total	7.6000e-004	1.3100e-003	0.0112	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3522	1.3522	8.0000e-005	0.0000	1.3540	

3.6 Architectural Coating - 2016

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	1.2258					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0214	0.0170	3.0000e-005		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	2.2979	2.2979	2.7000e-004	0.0000	2.3036	
Total	1.2292	0.0214	0.0170	3.0000e-005		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	2.2979	2.2979	2.7000e-004	0.0000	2.3036	

3.6 Architectural Coating - 2016

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	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	0.0000
Worker	5.3000e-004	9.2000e-004	7.8200e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9465	0.9465	6.0000e-005	0.0000	0.9478	
Total	5.3000e-004	9.2000e-004	7.8200e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9465	0.9465	6.0000e-005	0.0000	0.9478	

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	1.2258					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0214	0.0170	3.0000e-005		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	2.2979	2.2979	2.7000e-004	0.0000	2.3036	
Total	1.2292	0.0214	0.0170	3.0000e-005		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	2.2979	2.2979	2.7000e-004	0.0000	2.3036	

3.6 Architectural Coating - 2016

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	5.3000e-004	9.2000e-004	7.8200e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9465	0.9465	6.0000e-005	0.0000	0.9478
Total	5.3000e-004	9.2000e-004	7.8200e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9465	0.9465	6.0000e-005	0.0000	0.9478

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.8375	1.4313	7.3079	7.3500e-003	0.5277	0.0166	0.5443	0.1413	0.0152	0.1565	0.0000	610.3700	610.3700	0.0400	0.0000	611.2097
Unmitigated	0.8375	1.4313	7.3079	7.3500e-003	0.5277	0.0166	0.5443	0.1413	0.0152	0.1565	0.0000	610.3700	610.3700	0.0400	0.0000	611.2097

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	29.70	29.70	29.70	47,306	47,306
Movie Theater (No Matinee)	1,021.23	1,021.23	1,021.23	1,227,301	1,227,301
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	51.62	51.62	51.62	124,073	124,073
Total	1,102.55	1,102.55	1,102.55	1,398,679	1,398,679

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
City Park	8.80	4.60	4.60	33.00	48.00	19.00	66	28	6
Movie Theater (No Matinee)	8.80	4.60	4.60	1.80	79.20	19.00	66	17	17
Parking Lot	8.80	4.60	4.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	8.80	4.60	4.60	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488075	0.036412	0.211835	0.156683	0.050322	0.007577	0.018890	0.013241	0.001898	0.002223	0.008073	0.001639	0.003134

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	112.4885	112.4885	5.0900e-003	1.0500e-003	112.9216
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	112.4885	112.4885	5.0900e-003	1.0500e-003	112.9216
NaturalGas Mitigated	4.8100e-003	0.0438	0.0368	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	47.6356	47.6356	9.1000e-004	8.7000e-004	47.9255
NaturalGas Unmitigated	4.8100e-003	0.0438	0.0368	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	47.6356	47.6356	9.1000e-004	8.7000e-004	47.9255

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					
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
Unrefrigerated Warehouse-No Pail	52925	2.9000e-004	2.5900e-003	2.1800e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8243	2.8243	5.0000e-005	5.0000e-005	2.8415
City Park	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
Movie Theater (No Matinee)	839733	4.5300e-003	0.0412	0.0346	2.5000e-004		3.1300e-003	3.1300e-003		3.1300e-003	3.1300e-003	0.0000	44.8113	44.8113	8.6000e-004	8.2000e-004	45.0841
Total		4.8200e-003	0.0438	0.0368	2.7000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	47.6356	47.6356	9.1000e-004	8.7000e-004	47.9255

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						
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	0.0000
Unrefrigerated Warehouse-No Pail	52925	2.9000e-004	2.5900e-003	2.1800e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8243	2.8243	5.0000e-005	5.0000e-005	2.8415	
City Park	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	0.0000
Movie Theater (No Matinee)	839733	4.5300e-003	0.0412	0.0346	2.5000e-004		3.1300e-003	3.1300e-003		3.1300e-003	3.1300e-003	0.0000	44.8113	44.8113	8.6000e-004	8.2000e-004	45.0841	
Total		4.8200e-003	0.0438	0.0368	2.7000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	47.6356	47.6356	9.1000e-004	8.7000e-004	47.9255	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	276643	80.4786	3.6400e-003	7.5000e-004	80.7885
Parking Lot	54208	15.7697	7.1000e-004	1.5000e-004	15.8304
Unrefrigerated Warehouse-No Rail	55825	16.2401	7.3000e-004	1.5000e-004	16.3027
Total		112.4885	5.0800e-003	1.0500e-003	112.9216

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	276643	80.4786	3.6400e-003	7.5000e-004	80.7885
Parking Lot	54208	15.7697	7.1000e-004	1.5000e-004	15.8304
Unrefrigerated Warehouse-No Rail	55825	16.2401	7.3000e-004	1.5000e-004	16.3027
Total		112.4885	5.0800e-003	1.0500e-003	112.9216

6.0 Area Detail

6.1 Mitigation Measures Area

	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	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003
Unmitigated	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003

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	0.1226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6465					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9000e-004	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003
Total	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003

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	0.1226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6465					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9000e-004	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003
Total	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	32.6253	0.0202	0.0123	36.8558
Unmitigated	32.6253	0.0203	0.0123	36.8647

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.6085	1.6378	7.0000e-005	2.0000e-005	1.6441
Movie Theater (No Matinee)	12.3051 / 0.78543	24.5230	0.0159	9.6600e-003	27.8502
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Cool	3.35312 / 0	6.4646	4.3200e-003	2.6300e-003	7.3704
Total		32.6253	0.0203	0.0123	36.8647

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.6085	1.6378	7.0000e-005	2.0000e-005	1.6441
Movie Theater (No Matinee)	12.3051 / 0.78543	24.5230	0.0158	9.6400e-003	27.8433
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.35312 / 0	6.4646	4.3000e-003	2.6200e-003	7.3685
Total		32.6253	0.0202	0.0123	36.8558

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.1218	1.1301	0.0000	42.8531
Unmitigated	38.2435	2.2601	0.0000	85.7061

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.12	0.0244	1.4400e-003	0.0000	0.0546
Movie Theater (No Matinee)	174.65	35.4524	2.0952	0.0000	79.4511
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	13.63	2.7668	0.1635	0.0000	6.2005
Total		38.2435	2.2601	0.0000	85.7061

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0273
Movie Theater (No Matinee)	87.325	17.7262	1.0476	0.0000	39.7255
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	6.815	1.3834	0.0818	0.0000	3.1003
Total		19.1218	1.1301	0.0000	42.8531

9.0 Operational Offroad

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

Live Oak Bowling Alley
Santa Barbara County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	14.50	1000sqft	0.33	14,500.00	0
Parking Lot	154.00	Space	1.39	61,600.00	0
City Park	1.35	Acre	1.35	58,806.00	0
Movie Theater (No Matinee)	30.64	1000sqft	0.70	30,636.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.9	Precipitation Freq (Days)	37
Climate Zone	4			Operational Year	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park = landscaped area
 Movie Theatre = Bowling Alley

Trips and VMT -

Vehicle Trips - Traffic Study trip generation rates. City park represents batting cages. Movie theatre represents the bowling alley and entertainment center.

Construction Off-road Equipment Mitigation - Santa Barbara County Construction Dust Control Requirements

Waste Mitigation - AB 939

Construction Phase -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	30,640.00	30,636.00
tblVehicleTrips	ST_TR	1.59	22.00
tblVehicleTrips	ST_TR	80.00	33.33
tblVehicleTrips	ST_TR	2.59	3.56
tblVehicleTrips	SU_TR	1.59	22.00
tblVehicleTrips	SU_TR	80.00	33.33
tblVehicleTrips	SU_TR	2.59	3.56
tblVehicleTrips	WD_TR	1.59	22.00
tblVehicleTrips	WD_TR	80.00	33.33
tblVehicleTrips	WD_TR	2.59	3.56

2.0 Emissions Summary

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	lb/day										lb/day					
Area	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466
Energy	0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5100e-003	5.2700e-003	289.4731
Mobile	4.3906	7.3765	36.2721	0.0410	2.9637	0.0907	3.0544	0.7922	0.0831	0.8753		3,763.5568	3,763.5568	0.2424		3,768.6472
Total	8.6334	7.6165	36.4949	0.0425	2.9637	0.1090	3.0727	0.7922	0.1014	0.8936		4,051.3227	4,051.3227	0.2480	5.2700e-003	4,058.1669

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	lb/day										lb/day					
Area	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466
Energy	0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5100e-003	5.2700e-003	289.4731
Mobile	4.3906	7.3765	36.2721	0.0410	2.9637	0.0907	3.0544	0.7922	0.0831	0.8753		3,763.5568	3,763.5568	0.2424		3,768.6472
Total	8.6334	7.6165	36.4949	0.0425	2.9637	0.1090	3.0727	0.7922	0.1014	0.8936		4,051.3227	4,051.3227	0.2480	5.2700e-003	4,058.1669

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	1/29/2015	2/4/2015	5	5	
2	Grading	Grading	2/5/2015	2/16/2015	5	8	
3	Building Construction	Building Construction	2/17/2015	1/4/2016	5	230	
4	Paving	Paving	1/5/2016	1/28/2016	5	18	
5	Architectural Coating	Architectural Coating	1/29/2016	2/23/2016	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 158,685; Non-Residential Outdoor: 52,895 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Site Preparation	7	18.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	70.00	27.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.744 4	4,111.744 4	1.2275		4,137.522 5
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.744 4	4,111.744 4	1.2275		4,137.522 5

3.2 Site Preparation - 2015

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	lb/day										lb/day						
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
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
Worker	0.0864	0.1332	1.2510	1.8300e-003	0.1684	1.3900e-003	0.1698	0.0447	1.2500e-003	0.0459		157.9671	157.9671	0.0105			158.1876
Total	0.0864	0.1332	1.2510	1.8300e-003	0.1684	1.3900e-003	0.1698	0.0447	1.2500e-003	0.0459		157.9671	157.9671	0.0105			158.1876

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	lb/day										lb/day						
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000				0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.744 4	4,111.744 4	1.2275			4,137.522 4
Total	5.2609	56.8897	42.6318	0.0391	8.1298	3.0883	11.2181	4.4688	2.8412	7.3100	0.0000	4,111.744 4	4,111.744 4	1.2275			4,137.522 4

3.2 Site Preparation - 2015

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	lb/day										lb/day						
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
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
Worker	0.0864	0.1332	1.2510	1.8300e-003	0.1684	1.3900e-003	0.1698	0.0447	1.2500e-003	0.0459		157.9671	157.9671	0.0105			158.1876
Total	0.0864	0.1332	1.2510	1.8300e-003	0.1684	1.3900e-003	0.1698	0.0447	1.2500e-003	0.0459		157.9671	157.9671	0.0105			158.1876

3.3 Grading - 2015

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	lb/day										lb/day						
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000				0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341			3,148.6328
Total	3.8327	40.4161	26.6731	0.0298	6.5523	2.3284	8.8807	3.3675	2.1421	5.5096		3,129.0158	3,129.0158	0.9341			3,148.6328

3.3 Grading - 2015

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	lb/day										lb/day					
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
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
Worker	0.0720	0.1110	1.0425	1.5300e-003	0.1403	1.1500e-003	0.1415	0.0372	1.0400e-003	0.0383		131.6393	131.6393	8.7500e-003		131.8230
Total	0.0720	0.1110	1.0425	1.5300e-003	0.1403	1.1500e-003	0.1415	0.0372	1.0400e-003	0.0383		131.6393	131.6393	8.7500e-003		131.8230

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	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	3.8327	40.4161	26.6731	0.0298	2.9486	2.3284	5.2769	1.5154	2.1421	3.6575	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328

3.3 Grading - 2015

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	lb/day										lb/day						
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
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
Worker	0.0720	0.1110	1.0425	1.5300e-003	0.1403	1.1500e-003	0.1415	0.0372	1.0400e-003	0.0383		131.6393	131.6393	8.7500e-003			131.8230
Total	0.0720	0.1110	1.0425	1.5300e-003	0.1403	1.1500e-003	0.1415	0.0372	1.0400e-003	0.0383		131.6393	131.6393	8.7500e-003			131.8230

3.4 Building Construction - 2015

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	lb/day										lb/day						
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748			2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748			2,703.7483

3.4 Building Construction - 2015

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	lb/day										lb/day						
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
Vendor	0.3148	2.2502	3.7682	4.1900e-003	0.1122	0.0340	0.1463	0.0320	0.0313	0.0632		420.7379	420.7379	3.9900e-003			420.8218
Worker	0.3360	0.5179	4.8650	7.1300e-003	0.6548	5.3900e-003	0.6602	0.1737	4.8700e-003	0.1785		614.3166	614.3166	0.0408			615.1738
Total	0.6508	2.7682	8.6332	0.0113	0.7670	0.0394	0.8065	0.2056	0.0362	0.2418		1,035.0545	1,035.0545	0.0448			1,035.9956

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	lb/day										lb/day						
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483

3.4 Building Construction - 2015

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	lb/day										lb/day						
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
Vendor	0.3148	2.2502	3.7682	4.1900e-003	0.1122	0.0340	0.1463	0.0320	0.0313	0.0632		420.7379	420.7379	3.9900e-003			420.8218
Worker	0.3360	0.5179	4.8650	7.1300e-003	0.6548	5.3900e-003	0.6602	0.1737	4.8700e-003	0.1785		614.3166	614.3166	0.0408			615.1738
Total	0.6508	2.7682	8.6332	0.0113	0.7670	0.0394	0.8065	0.2056	0.0362	0.2418		1,035.0545	1,035.0545	0.0448			1,035.9956

3.4 Building Construction - 2016

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	lb/day										lb/day						
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890

3.4 Building Construction - 2016

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	lb/day										lb/day						
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
Vendor	0.2739	1.9865	3.4343	4.1800e-003	0.1122	0.0269	0.1392	0.0320	0.0248	0.0567		416.2315	416.2315	3.4700e-003			416.3044
Worker	0.2887	0.4543	4.2438	7.1200e-003	0.6548	4.9600e-003	0.6598	0.1737	4.5200e-003	0.1782		592.5142	592.5142	0.0363			593.2770
Total	0.5626	2.4408	7.6781	0.0113	0.7670	0.0319	0.7990	0.2056	0.0293	0.2349		1,008.7456	1,008.7456	0.0398			1,009.5813

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	lb/day										lb/day						
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890

3.4 Building Construction - 2016

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	lb/day										lb/day						
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
Vendor	0.2739	1.9865	3.4343	4.1800e-003	0.1122	0.0269	0.1392	0.0320	0.0248	0.0567		416.2315	416.2315	3.4700e-003			416.3044
Worker	0.2887	0.4543	4.2438	7.1200e-003	0.6548	4.9600e-003	0.6598	0.1737	4.5200e-003	0.1782		592.5142	592.5142	0.0363			593.2770
Total	0.5626	2.4408	7.6781	0.0113	0.7670	0.0319	0.7990	0.2056	0.0293	0.2349		1,008.7456	1,008.7456	0.0398			1,009.5813

3.5 Paving - 2016

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	lb/day										lb/day						
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588			1,913.9557
Paving	0.2023					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.9979	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588			1,913.9557

3.5 Paving - 2016

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	lb/day										lb/day						
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
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
Worker	0.0825	0.1298	1.2125	2.0300e-003	0.1871	1.4200e-003	0.1885	0.0496	1.2900e-003	0.0509		169.2898	169.2898	0.0104			169.5077
Total	0.0825	0.1298	1.2125	2.0300e-003	0.1871	1.4200e-003	0.1885	0.0496	1.2900e-003	0.0509		169.2898	169.2898	0.0104			169.5077

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	lb/day										lb/day						
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588			1,913.955 7
Paving	0.2023					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.9979	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588			1,913.955 7

3.5 Paving - 2016

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	lb/day										lb/day						
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
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
Worker	0.0825	0.1298	1.2125	2.0300e-003	0.1871	1.4200e-003	0.1885	0.0496	1.2900e-003	0.0509		169.2898	169.2898	0.0104			169.5077
Total	0.0825	0.1298	1.2125	2.0300e-003	0.1871	1.4200e-003	0.1885	0.0496	1.2900e-003	0.0509		169.2898	169.2898	0.0104			169.5077

3.6 Architectural Coating - 2016

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	lb/day										lb/day						
Archit. Coating	136.2046					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449
Total	136.5731	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449

3.6 Architectural Coating - 2016

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	lb/day										lb/day					
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
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
Worker	0.0578	0.0909	0.8488	1.4200e-003	0.1310	9.9000e-004	0.1320	0.0347	9.0000e-004	0.0356		118.5028	118.5028	7.2600e-003		118.6554
Total	0.0578	0.0909	0.8488	1.4200e-003	0.1310	9.9000e-004	0.1320	0.0347	9.0000e-004	0.0356		118.5028	118.5028	7.2600e-003		118.6554

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	lb/day										lb/day					
Archit. Coating	136.2046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	136.5731	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449

3.6 Architectural Coating - 2016

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	lb/day										lb/day						
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
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
Worker	0.0578	0.0909	0.8488	1.4200e-003	0.1310	9.9000e-004	0.1320	0.0347	9.0000e-004	0.0356		118.5028	118.5028	7.2600e-003			118.6554
Total	0.0578	0.0909	0.8488	1.4200e-003	0.1310	9.9000e-004	0.1320	0.0347	9.0000e-004	0.0356		118.5028	118.5028	7.2600e-003			118.6554

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	lb/day										lb/day						
Mitigated	4.3906	7.3765	36.2721	0.0410	2.9637	0.0907	3.0544	0.7922	0.0831	0.8753		3,763.5568	3,763.5568	0.2424			3,768.6472
Unmitigated	4.3906	7.3765	36.2721	0.0410	2.9637	0.0907	3.0544	0.7922	0.0831	0.8753		3,763.5568	3,763.5568	0.2424			3,768.6472

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	29.70	29.70	29.70	47,306	47,306
Movie Theater (No Matinee)	1,021.23	1,021.23	1,021.23	1,227,301	1,227,301
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	51.62	51.62	51.62	124,073	124,073
Total	1,102.55	1,102.55	1,102.55	1,398,679	1,398,679

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
City Park	8.80	4.60	4.60	33.00	48.00	19.00	66	28	6
Movie Theater (No Matinee)	8.80	4.60	4.60	1.80	79.20	19.00	66	17	17
Parking Lot	8.80	4.60	4.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	8.80	4.60	4.60	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488075	0.036412	0.211835	0.156683	0.050322	0.007577	0.018890	0.013241	0.001898	0.002223	0.008073	0.001639	0.003134

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

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	lb/day										lb/day					
NaturalGas Mitigated	0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5100e-003	5.2700e-003	289.4731
NaturalGas Unmitigated	0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5100e-003	5.2700e-003	289.4731

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	lb/day										lb/day					
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
Unrefrigerated Warehouse-No Pail	145	1.5600e-003	0.0142	0.0119	9.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		17.0588	17.0588	3.3000e-004	3.1000e-004	17.1626
City Park	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
Movie Theater (No Matinee)	2300.64	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171		270.6633	270.6633	5.1900e-003	4.9600e-003	272.3105
Total		0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5200e-003	5.2700e-003	289.4731

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	lb/day										lb/day					
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
Unrefrigerated Warehouse-No Pail	0.145	1.5600e-003	0.0142	0.0119	9.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		17.0588	17.0588	3.3000e-004	3.1000e-004	17.1626
City Park	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
Movie Theater (No Matinee)	2.30064	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171		270.6633	270.6633	5.1900e-003	4.9600e-003	272.3105
Total		0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5200e-003	5.2700e-003	289.4731

6.0 Area Detail

6.1 Mitigation Measures Area

	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	lb/day										lb/day					
Mitigated	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466
Unmitigated	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466

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	lb/day										lb/day					
Architectural Coating	0.6717					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1600e-003	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466
Total	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466

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	lb/day										lb/day					
Architectural Coating	0.6717					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1600e-003	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466
Total	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Live Oak Bowling Alley
Santa Barbara County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	14.50	1000sqft	0.33	14,500.00	0
Parking Lot	154.00	Space	1.39	61,600.00	0
City Park	1.35	Acre	1.35	58,806.00	0
Movie Theater (No Matinee)	30.64	1000sqft	0.70	30,636.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.9	Precipitation Freq (Days)	37
Climate Zone	4			Operational Year	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park = landscaped area

Movie Theatre = Bowling Alley

Construction Phase -

Trips and VMT -

Vehicle Trips - Traffic Study trip generation rates. City park represents batting cages. Movie theatre represents the bowling alley and entertainment center.

Construction Off-road Equipment Mitigation - Santa Barbara County Construction Dust Control Requirements

Waste Mitigation - AB 939

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	30,640.00	30,636.00
tblVehicleTrips	ST_TR	1.59	22.00
tblVehicleTrips	ST_TR	80.00	33.33
tblVehicleTrips	ST_TR	2.59	3.56
tblVehicleTrips	SU_TR	1.59	22.00
tblVehicleTrips	SU_TR	80.00	33.33
tblVehicleTrips	SU_TR	2.59	3.56
tblVehicleTrips	WD_TR	1.59	22.00
tblVehicleTrips	WD_TR	80.00	33.33
tblVehicleTrips	WD_TR	2.59	3.56

2.0 Emissions Summary

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	lb/day										lb/day					
Area	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466
Energy	0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5100e-003	5.2700e-003	289.4731
Mobile	4.9609	7.9004	43.0607	0.0404	2.9637	0.0923	3.0560	0.7922	0.0846	0.8768		3,693.3446	3,693.3446	0.2426		3,698.4392
Total	9.2037	8.1404	43.2835	0.0418	2.9637	0.1106	3.0743	0.7922	0.1029	0.8951		3,981.1106	3,981.1106	0.2482	5.2700e-003	3,987.9589

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	lb/day										lb/day					
Area	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466
Energy	0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5100e-003	5.2700e-003	289.4731
Mobile	4.9609	7.9004	43.0607	0.0404	2.9637	0.0923	3.0560	0.7922	0.0846	0.8768		3,693.3446	3,693.3446	0.2426		3,698.4392
Total	9.2037	8.1404	43.2835	0.0418	2.9637	0.1106	3.0743	0.7922	0.1029	0.8951		3,981.1106	3,981.1106	0.2482	5.2700e-003	3,987.9589

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	1/29/2015	2/4/2015	5	5	
2	Grading	Grading	2/5/2015	2/16/2015	5	8	
3	Building Construction	Building Construction	2/17/2015	1/4/2016	5	230	
4	Paving	Paving	1/5/2016	1/28/2016	5	18	
5	Architectural Coating	Architectural Coating	1/29/2016	2/23/2016	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 158,685; Non-Residential Outdoor: 52,895 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Site Preparation	7	18.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	70.00	27.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2015

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.744 4	4,111.744 4	1.2275		4,137.522 5
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.744 4	4,111.744 4	1.2275		4,137.522 5

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	lb/day										lb/day					
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
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
Worker	0.0951	0.1519	1.3305	1.7900e-003	0.1684	1.3900e-003	0.1698	0.0447	1.2500e-003	0.0459		154.3334	154.3334	0.0105		154.5538
Total	0.0951	0.1519	1.3305	1.7900e-003	0.1684	1.3900e-003	0.1698	0.0447	1.2500e-003	0.0459		154.3334	154.3334	0.0105		154.5538

3.2 Site Preparation - 2015

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	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.744 4	4,111.744 4	1.2275		4,137.522 4
Total	5.2609	56.8897	42.6318	0.0391	8.1298	3.0883	11.2181	4.4688	2.8412	7.3100	0.0000	4,111.744 4	4,111.744 4	1.2275		4,137.522 4

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	lb/day										lb/day					
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
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
Worker	0.0951	0.1519	1.3305	1.7900e-003	0.1684	1.3900e-003	0.1698	0.0447	1.2500e-003	0.0459		154.3334	154.3334	0.0105		154.5538
Total	0.0951	0.1519	1.3305	1.7900e-003	0.1684	1.3900e-003	0.1698	0.0447	1.2500e-003	0.0459		154.3334	154.3334	0.0105		154.5538

3.3 Grading - 2015

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	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	3.8327	40.4161	26.6731	0.0298	6.5523	2.3284	8.8807	3.3675	2.1421	5.5096		3,129.0158	3,129.0158	0.9341		3,148.6328

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	lb/day										lb/day					
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
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
Worker	0.0793	0.1266	1.1088	1.4900e-003	0.1403	1.1500e-003	0.1415	0.0372	1.0400e-003	0.0383		128.6112	128.6112	8.7500e-003		128.7948
Total	0.0793	0.1266	1.1088	1.4900e-003	0.1403	1.1500e-003	0.1415	0.0372	1.0400e-003	0.0383		128.6112	128.6112	8.7500e-003		128.7948

3.3 Grading - 2015

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	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	3.8327	40.4161	26.6731	0.0298	2.9486	2.3284	5.2769	1.5154	2.1421	3.6575	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328

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	lb/day										lb/day					
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
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
Worker	0.0793	0.1266	1.1088	1.4900e-003	0.1403	1.1500e-003	0.1415	0.0372	1.0400e-003	0.0383		128.6112	128.6112	8.7500e-003		128.7948
Total	0.0793	0.1266	1.1088	1.4900e-003	0.1403	1.1500e-003	0.1415	0.0372	1.0400e-003	0.0383		128.6112	128.6112	8.7500e-003		128.7948

3.4 Building Construction - 2015**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	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.577 1	2,689.577 1	0.6748		2,703.748 3
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.577 1	2,689.577 1	0.6748		2,703.748 3

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	lb/day										lb/day					
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
Vendor	0.3933	2.2851	5.2389	4.1600e-003	0.1122	0.0348	0.1470	0.0320	0.0320	0.0639		415.7885	415.7885	4.1300e-003		415.8752
Worker	0.3700	0.5909	5.1743	6.9800e-003	0.6548	5.3900e-003	0.6602	0.1737	4.8700e-003	0.1785		600.1854	600.1854	0.0408		601.0426
Total	0.7633	2.8759	10.4132	0.0111	0.7670	0.0402	0.8072	0.2056	0.0368	0.2425		1,015.973 8	1,015.973 8	0.0450		1,016.917 8

3.4 Building Construction - 2015

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	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.577 1	2,689.577 1	0.6748		2,703.748 3
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.577 1	2,689.577 1	0.6748		2,703.748 3

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	lb/day										lb/day					
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
Vendor	0.3933	2.2851	5.2389	4.1600e-003	0.1122	0.0348	0.1470	0.0320	0.0320	0.0639		415.7885	415.7885	4.1300e-003		415.8752
Worker	0.3700	0.5909	5.1743	6.9800e-003	0.6548	5.3900e-003	0.6602	0.1737	4.8700e-003	0.1785		600.1854	600.1854	0.0408		601.0426
Total	0.7633	2.8759	10.4132	0.0111	0.7670	0.0402	0.8072	0.2056	0.0368	0.2425		1,015.973 8	1,015.973 8	0.0450		1,016.917 8

3.4 Building Construction - 2016

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	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890

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	lb/day										lb/day					
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
Vendor	0.3413	2.0165	4.8528	4.1500e-003	0.1122	0.0275	0.1397	0.0320	0.0253	0.0572		411.3090	411.3090	3.6000e-003		411.3845
Worker	0.3165	0.5186	4.4824	6.9600e-003	0.6548	4.9600e-003	0.6598	0.1737	4.5200e-003	0.1782		578.8471	578.8471	0.0363		579.6099
Total	0.6577	2.5351	9.3352	0.0111	0.7670	0.0324	0.7995	0.2056	0.0298	0.2354		990.1561	990.1561	0.0399		990.9945

3.4 Building Construction - 2016**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	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890

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	lb/day										lb/day					
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
Vendor	0.3413	2.0165	4.8528	4.1500e-003	0.1122	0.0275	0.1397	0.0320	0.0253	0.0572		411.3090	411.3090	3.6000e-003		411.3845
Worker	0.3165	0.5186	4.4824	6.9600e-003	0.6548	4.9600e-003	0.6598	0.1737	4.5200e-003	0.1782		578.8471	578.8471	0.0363		579.6099
Total	0.6577	2.5351	9.3352	0.0111	0.7670	0.0324	0.7995	0.2056	0.0298	0.2354		990.1561	990.1561	0.0399		990.9945

3.5 Paving - 2016**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	lb/day										lb/day					
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.221 2	1,902.221 2	0.5588		1,913.955 7
Paving	0.2023					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9979	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.221 2	1,902.221 2	0.5588		1,913.955 7

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	lb/day										lb/day					
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
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
Worker	0.0904	0.1482	1.2807	1.9900e-003	0.1871	1.4200e-003	0.1885	0.0496	1.2900e-003	0.0509		165.3849	165.3849	0.0104		165.6028
Total	0.0904	0.1482	1.2807	1.9900e-003	0.1871	1.4200e-003	0.1885	0.0496	1.2900e-003	0.0509		165.3849	165.3849	0.0104		165.6028

3.5 Paving - 2016**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	lb/day										lb/day					
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588		1,913.955 7
Paving	0.2023					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9979	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.221 2	1,902.221 2	0.5588		1,913.955 7

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	lb/day										lb/day					
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
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
Worker	0.0904	0.1482	1.2807	1.9900e-003	0.1871	1.4200e-003	0.1885	0.0496	1.2900e-003	0.0509		165.3849	165.3849	0.0104		165.6028
Total	0.0904	0.1482	1.2807	1.9900e-003	0.1871	1.4200e-003	0.1885	0.0496	1.2900e-003	0.0509		165.3849	165.3849	0.0104		165.6028

3.6 Architectural Coating - 2016

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	lb/day										lb/day					
Archit. Coating	136.2046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	136.5731	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449

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	lb/day										lb/day					
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
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
Worker	0.0633	0.1037	0.8965	1.3900e-003	0.1310	9.9000e-004	0.1320	0.0347	9.0000e-004	0.0356		115.7694	115.7694	7.2600e-003		115.9220
Total	0.0633	0.1037	0.8965	1.3900e-003	0.1310	9.9000e-004	0.1320	0.0347	9.0000e-004	0.0356		115.7694	115.7694	7.2600e-003		115.9220

3.6 Architectural Coating - 2016

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	lb/day										lb/day					
Archit. Coating	136.2046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	136.5731	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449

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	lb/day										lb/day					
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
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
Worker	0.0633	0.1037	0.8965	1.3900e-003	0.1310	9.9000e-004	0.1320	0.0347	9.0000e-004	0.0356		115.7694	115.7694	7.2600e-003		115.9220
Total	0.0633	0.1037	0.8965	1.3900e-003	0.1310	9.9000e-004	0.1320	0.0347	9.0000e-004	0.0356		115.7694	115.7694	7.2600e-003		115.9220

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	lb/day										lb/day					
Mitigated	4.9609	7.9004	43.0607	0.0404	2.9637	0.0923	3.0560	0.7922	0.0846	0.8768		3,693.3446	3,693.3446	0.2426		3,698.4392
Unmitigated	4.9609	7.9004	43.0607	0.0404	2.9637	0.0923	3.0560	0.7922	0.0846	0.8768		3,693.3446	3,693.3446	0.2426		3,698.4392

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	29.70	29.70	29.70	47,306	47,306
Movie Theater (No Matinee)	1,021.23	1,021.23	1,021.23	1,227,301	1,227,301
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	51.62	51.62	51.62	124,073	124,073
Total	1,102.55	1,102.55	1,102.55	1,398,679	1,398,679

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
City Park	8.80	4.60	4.60	33.00	48.00	19.00	66	28	6
Movie Theater (No Matinee)	8.80	4.60	4.60	1.80	79.20	19.00	66	17	17
Parking Lot	8.80	4.60	4.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	8.80	4.60	4.60	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488075	0.036412	0.211835	0.156683	0.050322	0.007577	0.018890	0.013241	0.001898	0.002223	0.008073	0.001639	0.003134

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

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	lb/day										lb/day					
NaturalGas Mitigated	0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5100e-003	5.2700e-003	289.4731
NaturalGas Unmitigated	0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5100e-003	5.2700e-003	289.4731

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	lb/day										lb/day					
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
Unrefrigerated Warehouse-No Fuel	145	1.5600e-003	0.0142	0.0119	9.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		17.0588	17.0588	3.3000e-004	3.1000e-004	17.1626
City Park	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
Movie Theater (No Matinee)	2300.64	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171		270.6633	270.6633	5.1900e-003	4.9600e-003	272.3105
Total		0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5200e-003	5.2700e-003	289.4731

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	lb/day										lb/day					
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
Unrefrigerated Warehouse-No Pail	0.145	1.5600e-003	0.0142	0.0119	9.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003		17.0588	17.0588	3.3000e-004	3.1000e-004	17.1626
City Park	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
Movie Theater (No Matinee)	2.30064	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171		270.6633	270.6633	5.1900e-003	4.9600e-003	272.3105
Total		0.0264	0.2398	0.2014	1.4400e-003		0.0182	0.0182		0.0182	0.0182		287.7221	287.7221	5.5200e-003	5.2700e-003	289.4731

6.0 Area Detail

6.1 Mitigation Measures Area

	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	lb/day										lb/day					
Mitigated	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466
Unmitigated	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466

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	lb/day										lb/day					
Architectural Coating	0.6717					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1600e-003	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466
Total	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466

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	lb/day										lb/day					
Architectural Coating	0.6717					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.1600e-003	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466
Total	4.2165	2.1000e-004	0.0214	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0439	0.0439	1.3000e-004		0.0466

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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



ASSOCIATED TRANSPORTATION ENGINEERS

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Since 1978

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February 14, 2014

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TRIP GENERATION AND TRIP DISTRIBUTION ANALYSIS FOR THE LIVE OAK LANES PROJECT, CITY OF BUELLTON, CALIFORNIA

The following letter outlines the trip generation analysis completed by Associated Transportation Engineers (ATE) for the Live Oak Lanes Project located in the City of Buellton.

PROJECT DESCRIPTION

The project is proposing the construction of entertainment center consisting of a 16 lane bowling alley, 5,234 square foot restaurant, 5 batting cages and arcade. A second building for a 14,500 square foot warehouse will also be constructed on the project site. The project site is located on the west side of Industrial Way south of State Route 246. Figure 1 (attached) illustrates the project site plan.

PROJECT TRIP GENERATION

Trip generation estimates were calculated for the Live Oak Lanes Project based on the rates presented in the Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition for Bowling Alley (Land-Use Code #437), Batting Cages (Land-Use Code #433) and Warehouse (Land-Use Code #150).¹ Table 1 summarizes the average daily (ADT), and P.M. peak hour trip generation estimates for the project.

¹ Trip Generation, Institute of Transportation Engineers, 9th Edition, 2013.

**Table 1
Project Trip Generation**

Land Use	Size	ADT		P.M. Peak Hour	
		Rate	Trips	Rate	Trips
Bowling Alley	16 Lanes	33.33	533	1.51	24 (15/9)
Batting Cages	5 Cages	22.00	110	2.22	11 (6/5)
Warehouse	14,500 SF	3.56	52	0.32	5 (1/4)
Total Trip Generation:			695		40 (22/18)

Note: ADT rate for Batting Cages based the fact that typically peak hour volume represents 10% of the ADT.

The data presented in Table 1 show that the Live Oak Lanes Project would generate 695 average daily trips and 40 P.M. peak hour trips.

The project would add 695 average daily trips to Industrial Way south of State Route 246. The project would add 40 P.M. peak hour trips to the State Route 126/Industrial Way intersection.

POTENTIAL TRAFFIC IMPACTS

The project generates less than 50 P.M. peak hour trips which would not result in a project-specific impact on the local street network in the City of Buellton. The project would be required to pay the traffic fee for cumulative impacts to local street network in the City.

City Traffic Section
Associated Transportation Engineers

Richard L. Pool
By: Richard L. Pool, P.E.
President



attachments: Project Site Plan

Fugitive PM10 on unpaved parking areas

Equation: $E = 1.5 (S/12)^{0.9} (W/3)^{0.45}$

E = PM10 emission factor

S = Surface Material Silt Content (%)

W = Mean Vehicle Weight (tons)

Silt Content on Public Unpaved Roads/Parking Lots (Dirt) = 11%

Silt Content on Public Unpaved Roads/Parking Lots (Gravel/Crushed Limestone) = 6.4%

lbs PM10/VMT (dirt)	1.16	equation 2, page 7	http://server.cocef.org/Final_Reports_B2012/20014/20014_Final_Report_EN.pdf
lbs PM10/VMT (gravel)	0.71	equation 3, page 7	http://server.cocef.org/Final_Reports_B2012/20014/20014_Final_Report_EN.pdf
mean vehicle weight	2	tons	
distance traveled on site per vehicle	0.10	mile	
vehicles per day (ADT)	695		

80.32 lbs/day (dirt)

49.33 lbs/day (gravel)

Appendix C

*GHG Quantitative Analysis; CalEEMod Air Quality
Model Worksheets – Annual; N₂O from Mobile Emissions*

Live Oak Bowling Alley
Santa Barbara County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	14.50	1000sqft	0.33	14,500.00	0
Parking Lot	154.00	Space	1.39	61,600.00	0
City Park	1.35	Acre	1.35	58,806.00	0
Movie Theater (No Matinee)	30.64	1000sqft	0.70	30,636.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.9	Precipitation Freq (Days)	37
Climate Zone	4			Operational Year	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park = landscaped area
 Movie Theatre = Bowling Alley

Trips and VMT -

Vehicle Trips - Traffic Study trip generation rates. City park represents batting cages. Movie theatre represents the bowling alley and entertainment center.

Construction Off-road Equipment Mitigation - Santa Barbara County Construction Dust Control Requirements

Waste Mitigation - AB 939

Construction Phase -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	30,640.00	30,636.00
tblVehicleTrips	ST_TR	1.59	22.00
tblVehicleTrips	ST_TR	80.00	33.33
tblVehicleTrips	ST_TR	2.59	3.56
tblVehicleTrips	SU_TR	1.59	22.00
tblVehicleTrips	SU_TR	80.00	33.33
tblVehicleTrips	SU_TR	2.59	3.56
tblVehicleTrips	WD_TR	1.59	22.00
tblVehicleTrips	WD_TR	80.00	33.33
tblVehicleTrips	WD_TR	2.59	3.56

2.0 Emissions Summary

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	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003
Energy	4.8100e-003	0.0438	0.0368	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	160.1241	160.1241	6.0000e-003	1.9300e-003	160.8471
Mobile	0.8375	1.4313	7.3079	7.3500e-003	0.5277	0.0166	0.5443	0.1413	0.0152	0.1565	0.0000	610.3700	610.3700	0.0400	0.0000	611.2097
Waste						0.0000	0.0000		0.0000	0.0000	38.2435	0.0000	38.2435	2.2601	0.0000	85.7061
Water						0.0000	0.0000		0.0000	0.0000	5.5399	27.0854	32.6253	0.0203	0.0123	36.8647
Total	1.6116	1.4751	7.3466	7.6100e-003	0.5277	0.0200	0.5476	0.1413	0.0186	0.1599	43.7834	797.5831	841.3665	2.3264	0.0142	894.6314

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	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003
Energy	4.8100e-003	0.0438	0.0368	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	160.1241	160.1241	6.0000e-003	1.9300e-003	160.8471
Mobile	0.8375	1.4313	7.3079	7.3500e-003	0.5277	0.0166	0.5443	0.1413	0.0152	0.1565	0.0000	610.3700	610.3700	0.0400	0.0000	611.2097
Waste						0.0000	0.0000		0.0000	0.0000	19.1218	0.0000	19.1218	1.1301	0.0000	42.8531
Water						0.0000	0.0000		0.0000	0.0000	5.5399	27.0854	32.6253	0.0202	0.0123	36.8558
Total	1.6116	1.4751	7.3466	7.6100e-003	0.5277	0.0200	0.5476	0.1413	0.0186	0.1599	24.6616	797.5831	822.2447	1.1963	0.0142	851.7695

	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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.67	0.00	2.27	48.58	0.14	4.79

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	1/29/2015	2/4/2015	5	5	
2	Grading	Grading	2/5/2015	2/16/2015	5	8	
3	Building Construction	Building Construction	2/17/2015	1/4/2016	5	230	
4	Paving	Paving	1/5/2016	1/28/2016	5	18	
5	Architectural Coating	Architectural Coating	1/29/2016	2/23/2016	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 158,685; Non-Residential Outdoor: 52,895 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Site Preparation	7	18.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	70.00	27.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

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					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1422	0.1066	1.0000e-004		7.7200e-003	7.7200e-003		7.1000e-003	7.1000e-003	0.0000	9.3253	9.3253	2.7800e-003	0.0000	9.3837
Total	0.0132	0.1422	0.1066	1.0000e-004	0.0452	7.7200e-003	0.0529	0.0248	7.1000e-003	0.0319	0.0000	9.3253	9.3253	2.7800e-003	0.0000	9.3837

3.2 Site Preparation - 2015

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	2.2000e-004	3.7000e-004	3.2200e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3505	0.3505	2.0000e-005	0.0000	0.3510
Total	2.2000e-004	3.7000e-004	3.2200e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3505	0.3505	2.0000e-005	0.0000	0.3510

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					0.0203	0.0000	0.0203	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1422	0.1066	1.0000e-004		7.7200e-003	7.7200e-003		7.1000e-003	7.1000e-003	0.0000	9.3253	9.3253	2.7800e-003	0.0000	9.3837
Total	0.0132	0.1422	0.1066	1.0000e-004	0.0203	7.7200e-003	0.0280	0.0112	7.1000e-003	0.0183	0.0000	9.3253	9.3253	2.7800e-003	0.0000	9.3837

3.2 Site Preparation - 2015

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	2.2000e-004	3.7000e-004	3.2200e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3505	0.3505	2.0000e-005	0.0000	0.3510
Total	2.2000e-004	3.7000e-004	3.2200e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3505	0.3505	2.0000e-005	0.0000	0.3510

3.3 Grading - 2015

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					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1617	0.1067	1.2000e-004		9.3100e-003	9.3100e-003		8.5700e-003	8.5700e-003	0.0000	11.3544	11.3544	3.3900e-003	0.0000	11.4256
Total	0.0153	0.1617	0.1067	1.2000e-004	0.0262	9.3100e-003	0.0355	0.0135	8.5700e-003	0.0220	0.0000	11.3544	11.3544	3.3900e-003	0.0000	11.4256

3.3 Grading - 2015

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	3.0000e-004	5.0000e-004	4.2900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4673	0.4673	3.0000e-005	0.0000	0.4680
Total	3.0000e-004	5.0000e-004	4.2900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4673	0.4673	3.0000e-005	0.0000	0.4680

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					0.0118	0.0000	0.0118	6.0600e-003	0.0000	6.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1617	0.1067	1.2000e-004		9.3100e-003	9.3100e-003		8.5700e-003	8.5700e-003	0.0000	11.3544	11.3544	3.3900e-003	0.0000	11.4256
Total	0.0153	0.1617	0.1067	1.2000e-004	0.0118	9.3100e-003	0.0211	6.0600e-003	8.5700e-003	0.0146	0.0000	11.3544	11.3544	3.3900e-003	0.0000	11.4256

3.3 Grading - 2015

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	3.0000e-004	5.0000e-004	4.2900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4673	0.4673	3.0000e-005	0.0000	0.4680
Total	3.0000e-004	5.0000e-004	4.2900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4673	0.4673	3.0000e-005	0.0000	0.4680

3.4 Building Construction - 2015

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	0.4171	3.4234	2.1369	3.0600e-003		0.2413	0.2413		0.2269	0.2269	0.0000	278.1535	278.1535	0.0698	0.0000	279.6191
Total	0.4171	3.4234	2.1369	3.0600e-003		0.2413	0.2413		0.2269	0.2269	0.0000	278.1535	278.1535	0.0698	0.0000	279.6191

3.4 Building Construction - 2015

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	0.0000
Vendor	0.0409	0.2642	0.5286	4.8000e-004	0.0126	3.9200e-003	0.0165	3.5800e-003	3.6000e-003	7.1800e-003	0.0000	43.2973	43.2973	4.2000e-004	0.0000	43.3061	
Worker	0.0396	0.0662	0.5706	8.0000e-004	0.0730	6.1000e-004	0.0736	0.0194	5.6000e-004	0.0200	0.0000	62.1557	62.1557	4.2200e-003	0.0000	62.2443	
Total	0.0804	0.3304	1.0992	1.2800e-003	0.0856	4.5300e-003	0.0901	0.0230	4.1600e-003	0.0271	0.0000	105.4530	105.4530	4.6400e-003	0.0000	105.5504	

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	0.4171	3.4234	2.1369	3.0600e-003		0.2413	0.2413		0.2269	0.2269	0.0000	278.1532	278.1532	0.0698	0.0000	279.6188	
Total	0.4171	3.4234	2.1369	3.0600e-003		0.2413	0.2413		0.2269	0.2269	0.0000	278.1532	278.1532	0.0698	0.0000	279.6188	

3.4 Building Construction - 2015

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	0.0409	0.2642	0.5286	4.8000e-004	0.0126	3.9200e-003	0.0165	3.5800e-003	3.6000e-003	7.1800e-003	0.0000	43.2973	43.2973	4.2000e-004	0.0000	43.3061
Worker	0.0396	0.0662	0.5706	8.0000e-004	0.0730	6.1000e-004	0.0736	0.0194	5.6000e-004	0.0200	0.0000	62.1557	62.1557	4.2200e-003	0.0000	62.2443
Total	0.0804	0.3304	1.0992	1.2800e-003	0.0856	4.5300e-003	0.0901	0.0230	4.1600e-003	0.0271	0.0000	105.4530	105.4530	4.6400e-003	0.0000	105.5504

3.4 Building Construction - 2016

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	3.4100e-003	0.0285	0.0185	3.0000e-005		1.9700e-003	1.9700e-003		1.8500e-003	1.8500e-003	0.0000	2.4215	2.4215	6.0000e-004	0.0000	2.4342
Total	3.4100e-003	0.0285	0.0185	3.0000e-005		1.9700e-003	1.9700e-003		1.8500e-003	1.8500e-003	0.0000	2.4215	2.4215	6.0000e-004	0.0000	2.4342

3.4 Building Construction - 2016

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	3.1000e-004	2.0400e-003	4.2700e-003	0.0000	1.1000e-004	3.0000e-005	1.4000e-004	3.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.3757	0.3757	0.0000	0.0000	0.3758
Worker	3.0000e-004	5.1000e-004	4.3400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5258	0.5258	3.0000e-005	0.0000	0.5265
Total	6.1000e-004	2.5500e-003	8.6100e-003	1.0000e-005	7.5000e-004	3.0000e-005	7.9000e-004	2.0000e-004	2.0000e-005	2.3000e-004	0.0000	0.9016	0.9016	3.0000e-005	0.0000	0.9023

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	3.4100e-003	0.0285	0.0185	3.0000e-005		1.9700e-003	1.9700e-003		1.8500e-003	1.8500e-003	0.0000	2.4215	2.4215	6.0000e-004	0.0000	2.4342
Total	3.4100e-003	0.0285	0.0185	3.0000e-005		1.9700e-003	1.9700e-003		1.8500e-003	1.8500e-003	0.0000	2.4215	2.4215	6.0000e-004	0.0000	2.4342

3.4 Building Construction - 2016**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	3.1000e-004	2.0400e-003	4.2700e-003	0.0000	1.1000e-004	3.0000e-005	1.4000e-004	3.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.3757	0.3757	0.0000	0.0000	0.3758
Worker	3.0000e-004	5.1000e-004	4.3400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5258	0.5258	3.0000e-005	0.0000	0.5265
Total	6.1000e-004	2.5500e-003	8.6100e-003	1.0000e-005	7.5000e-004	3.0000e-005	7.9000e-004	2.0000e-004	2.0000e-005	2.3000e-004	0.0000	0.9016	0.9016	3.0000e-005	0.0000	0.9023

3.5 Paving - 2016**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	0.0162	0.1651	0.1131	1.7000e-004		9.9600e-003	9.9600e-003		9.1800e-003	9.1800e-003	0.0000	15.5310	15.5310	4.5600e-003	0.0000	15.6268
Paving	1.8200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0180	0.1651	0.1131	1.7000e-004		9.9600e-003	9.9600e-003		9.1800e-003	9.1800e-003	0.0000	15.5310	15.5310	4.5600e-003	0.0000	15.6268

3.5 Paving - 2016

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	7.6000e-004	1.3100e-003	0.0112	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3522	1.3522	8.0000e-005	0.0000	1.3540
Total	7.6000e-004	1.3100e-003	0.0112	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3522	1.3522	8.0000e-005	0.0000	1.3540

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	0.0162	0.1651	0.1131	1.7000e-004		9.9600e-003	9.9600e-003		9.1800e-003	9.1800e-003	0.0000	15.5310	15.5310	4.5600e-003	0.0000	15.6268
Paving	1.8200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0180	0.1651	0.1131	1.7000e-004		9.9600e-003	9.9600e-003		9.1800e-003	9.1800e-003	0.0000	15.5310	15.5310	4.5600e-003	0.0000	15.6268

3.5 Paving - 2016

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	7.6000e-004	1.3100e-003	0.0112	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3522	1.3522	8.0000e-005	0.0000	1.3540
Total	7.6000e-004	1.3100e-003	0.0112	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3522	1.3522	8.0000e-005	0.0000	1.3540

3.6 Architectural Coating - 2016

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	1.2258					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0214	0.0170	3.0000e-005		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	2.2979	2.2979	2.7000e-004	0.0000	2.3036
Total	1.2292	0.0214	0.0170	3.0000e-005		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	2.2979	2.2979	2.7000e-004	0.0000	2.3036

3.6 Architectural Coating - 2016

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	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	0.0000
Worker	5.3000e-004	9.2000e-004	7.8200e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9465	0.9465	6.0000e-005	0.0000	0.9478	
Total	5.3000e-004	9.2000e-004	7.8200e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9465	0.9465	6.0000e-005	0.0000	0.9478	

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	1.2258					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0214	0.0170	3.0000e-005		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	2.2979	2.2979	2.7000e-004	0.0000	2.3036
Total	1.2292	0.0214	0.0170	3.0000e-005		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	2.2979	2.2979	2.7000e-004	0.0000	2.3036

3.6 Architectural Coating - 2016

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	5.3000e-004	9.2000e-004	7.8200e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9465	0.9465	6.0000e-005	0.0000	0.9478
Total	5.3000e-004	9.2000e-004	7.8200e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9465	0.9465	6.0000e-005	0.0000	0.9478

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.8375	1.4313	7.3079	7.3500e-003	0.5277	0.0166	0.5443	0.1413	0.0152	0.1565	0.0000	610.3700	610.3700	0.0400	0.0000	611.2097
Unmitigated	0.8375	1.4313	7.3079	7.3500e-003	0.5277	0.0166	0.5443	0.1413	0.0152	0.1565	0.0000	610.3700	610.3700	0.0400	0.0000	611.2097

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	29.70	29.70	29.70	47,306	47,306
Movie Theater (No Matinee)	1,021.23	1,021.23	1,021.23	1,227,301	1,227,301
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	51.62	51.62	51.62	124,073	124,073
Total	1,102.55	1,102.55	1,102.55	1,398,679	1,398,679

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
City Park	8.80	4.60	4.60	33.00	48.00	19.00	66	28	6
Movie Theater (No Matinee)	8.80	4.60	4.60	1.80	79.20	19.00	66	17	17
Parking Lot	8.80	4.60	4.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	8.80	4.60	4.60	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488075	0.036412	0.211835	0.156683	0.050322	0.007577	0.018890	0.013241	0.001898	0.002223	0.008073	0.001639	0.003134

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	112.4885	112.4885	5.0900e-003	1.0500e-003	112.9216
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	112.4885	112.4885	5.0900e-003	1.0500e-003	112.9216
NaturalGas Mitigated	4.8100e-003	0.0438	0.0368	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	47.6356	47.6356	9.1000e-004	8.7000e-004	47.9255
NaturalGas Unmitigated	4.8100e-003	0.0438	0.0368	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	47.6356	47.6356	9.1000e-004	8.7000e-004	47.9255

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					
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
Unrefrigerated Warehouse-No Pail	52925	2.9000e-004	2.5900e-003	2.1800e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8243	2.8243	5.0000e-005	5.0000e-005	2.8415
City Park	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
Movie Theater (No Matinee)	839733	4.5300e-003	0.0412	0.0346	2.5000e-004		3.1300e-003	3.1300e-003		3.1300e-003	3.1300e-003	0.0000	44.8113	44.8113	8.6000e-004	8.2000e-004	45.0841
Total		4.8200e-003	0.0438	0.0368	2.7000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	47.6356	47.6356	9.1000e-004	8.7000e-004	47.9255

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					
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
Unrefrigerated Warehouse-No Fuel	52925	2.9000e-004	2.5900e-003	2.1800e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8243	2.8243	5.0000e-005	5.0000e-005	2.8415
City Park	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
Movie Theater (No Matinee)	839733	4.5300e-003	0.0412	0.0346	2.5000e-004		3.1300e-003	3.1300e-003		3.1300e-003	3.1300e-003	0.0000	44.8113	44.8113	8.6000e-004	8.2000e-004	45.0841
Total		4.8200e-003	0.0438	0.0368	2.7000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	47.6356	47.6356	9.1000e-004	8.7000e-004	47.9255

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	276643	80.4786	3.6400e-003	7.5000e-004	80.7885
Parking Lot	54208	15.7697	7.1000e-004	1.5000e-004	15.8304
Unrefrigerated Warehouse-No Rail	55825	16.2401	7.3000e-004	1.5000e-004	16.3027
Total		112.4885	5.0800e-003	1.0500e-003	112.9216

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	276643	80.4786	3.6400e-003	7.5000e-004	80.7885
Parking Lot	54208	15.7697	7.1000e-004	1.5000e-004	15.8304
Unrefrigerated Warehouse-No Rail	55825	16.2401	7.3000e-004	1.5000e-004	16.3027
Total		112.4885	5.0800e-003	1.0500e-003	112.9216

6.0 Area Detail

6.1 Mitigation Measures Area

	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	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003
Unmitigated	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003

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	0.1226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6465					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9000e-004	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003
Total	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003

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	0.1226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6465					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.9000e-004	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003
Total	0.7693	2.0000e-005	1.9300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5800e-003	3.5800e-003	1.0000e-005	0.0000	3.8100e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	32.6253	0.0202	0.0123	36.8558
Unmitigated	32.6253	0.0203	0.0123	36.8647

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.6085	1.6378	7.0000e-005	2.0000e-005	1.6441
Movie Theater (No Matinee)	12.3051 / 0.78543	24.5230	0.0159	9.6600e-003	27.8502
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Cool	3.35312 / 0	6.4646	4.3200e-003	2.6300e-003	7.3704
Total		32.6253	0.0203	0.0123	36.8647

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.6085	1.6378	7.0000e-005	2.0000e-005	1.6441
Movie Theater (No Matinee)	12.3051 / 0.78543	24.5230	0.0158	9.6400e-003	27.8433
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.35312 / 0	6.4646	4.3000e-003	2.6200e-003	7.3685
Total		32.6253	0.0202	0.0123	36.8558

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.1218	1.1301	0.0000	42.8531
Unmitigated	38.2435	2.2601	0.0000	85.7061

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.12	0.0244	1.4400e-003	0.0000	0.0546
Movie Theater (No Matinee)	174.65	35.4524	2.0952	0.0000	79.4511
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	13.63	2.7668	0.1635	0.0000	6.2005
Total		38.2435	2.2601	0.0000	85.7061

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0273
Movie Theater (No Matinee)	87.325	17.7262	1.0476	0.0000	39.7255
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	6.815	1.3834	0.0818	0.0000	3.1003
Total		19.1218	1.1301	0.0000	42.8531

9.0 Operational Offroad

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

Greenhouse Gas Emission Worksheet
N2O Mobile Emissions

Live Oak Bowling Alley Project Operations

From URBEMIS 2007 Vehicle Fleet Mix Output:

Annual VMT: 1,398,679

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	46.0%	0.04	0.0184	0.04	0.0184
Light Truck < 3750 lbs	10.3%	0.05	0.00515	0.06	0.00618
Light Truck 3751-5750 lbs	23.2%	0.05	0.0116	0.06	0.01392
Med Truck 5751-8500 lbs	12.2%	0.12	0.01464	0.2	0.0244
Lite-Heavy Truck 8501-10,000 lbs	2.1%	0.12	0.00252	0.2	0.0042
Lite-Heavy Truck 10,001-14,000 lbs	0.5%	0.09	0.00045	0.125	0.000625
Med-Heavy Truck 14,001-33,000 lbs	1.0%	0.06	0.0006	0.05	0.0005
Heavy-Heavy Truck 33,001-60,000 lbs	2.9%	0.06	0.00174	0.05	0.00145
Other Bus	0.1%	0.06	0.00006	0.05	0.00005
Urban Bus	0.1%	0.06	0.00006	0.05	0.00005
Motorcycle	1.1%	0.09	0.00099	0.01	0.00011
School Bus	0.1%	0.06	0.00006	0.05	0.00005
Motor Home	0.4%	0.09	0.00036	0.125	0.0005
Total	100.0%		0.05663		0.070435

Total Emissions (metric tons) =

Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4 21 GWP
 N2O 310 GWP
 1 ton (short, US) = 0.90718474 metric ton

Annual Mobile Emissions:

	Total Emissions	Total CO2e units
N2O Emissions:	0.0985 metric tons N2O	30.54 metric tons CO2e

Project Total:	30.54 metric tons CO2e
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References

* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).

in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

Assume Model year 2000-present, gasoline fueled.

** Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

*** From URBEMIS 2007 results for mobile sources



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TRIP GENERATION AND TRIP DISTRIBUTION ANALYSIS FOR THE LIVE OAK LANES PROJECT, CITY OF BUELLTON, CALIFORNIA

The following letter outlines the trip generation analysis completed by Associated Transportation Engineers (ATE) for the Live Oak Lanes Project located in the City of Buellton.

PROJECT DESCRIPTION

The project is proposing the construction of entertainment center consisting of a 16 lane bowling alley, 5,234 square foot restaurant, 5 batting cages and arcade. A second building for a 14,500 square foot warehouse will also be constructed on the project site. The project site is located on the west side of Industrial Way south of State Route 246. Figure 1 (attached) illustrates the project site plan.

PROJECT TRIP GENERATION

Trip generation estimates were calculated for the Live Oak Lanes Project based on the rates presented in the Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition for Bowling Alley (Land-Use Code #437), Batting Cages (Land-Use Code #433) and Warehouse (Land-Use Code #150).¹ Table 1 summarizes the average daily (ADT), and P.M. peak hour trip generation estimates for the project.

¹ Trip Generation, Institute of Transportation Engineers, 9th Edition, 2013.

**Table 1
Project Trip Generation**

Land Use	Size	ADT		P.M. Peak Hour	
		Rate	Trips	Rate	Trips
Bowling Alley	16 Lanes	33.33	533	1.51	24 (15/9)
Batting Cages	5 Cages	22.00	110	2.22	11 (6/5)
Warehouse	14,500 SF	3.56	52	0.32	5 (1/4)
Total Trip Generation:			695		40 (22/18)

Note: ADT rate for Batting Cages based the fact that typically peak hour volume represents 10% of the ADT.

The data presented in Table 1 show that the Live Oak Lanes Project would generate 695 average daily trips and 40 P.M. peak hour trips.

The project would add 695 average daily trips to Industrial Way south of State Route 246. The project would add 40 P.M. peak hour trips to the State Route 126/Industrial Way intersection.

POTENTIAL TRAFFIC IMPACTS

The project generates less than 50 P.M. peak hour trips which would not result in a project-specific impact on the local street network in the City of Buellton. The project would be required to pay the traffic fee for cumulative impacts to local street network in the City.

City Traffic Section
Associated Transportation Engineers

Richard L. Pool
By: Richard L. Pool, P.E.
President



attachments: Project Site Plan