Final Environmental Impact Report

Great America Theme Park Master Plan

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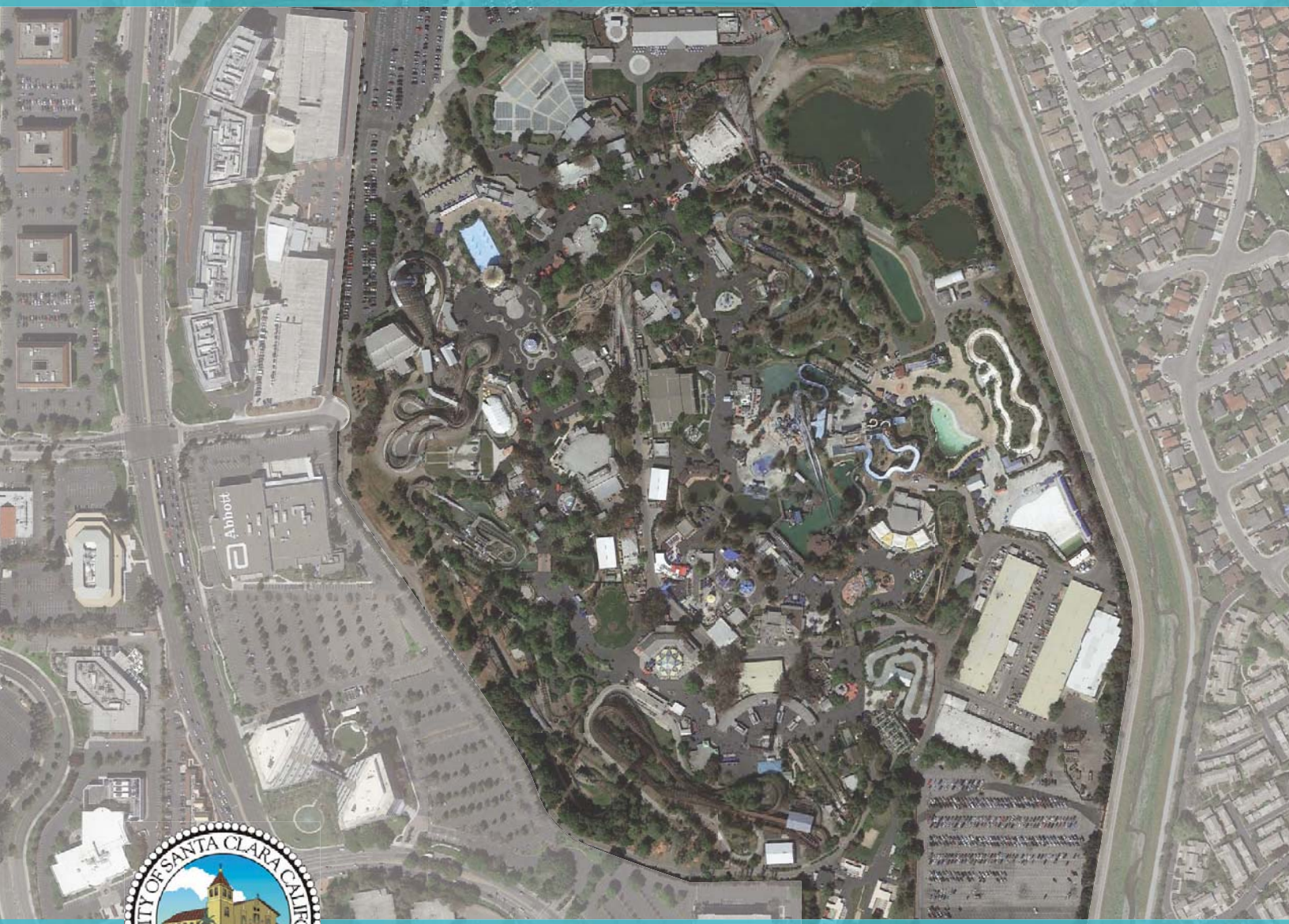

THE CITY OF SANTA CLARA CALIFORNIA
The Mission City
1852

December 2016

PREFACE

This document, together with the Draft Environmental Impact Report (Draft EIR), constitutes the Final Environmental Impact Report (FEIR) for the Great America Theme Park Master Plan Project. The Draft EIR was circulated to affected public agencies and interested parties for a 45-day review period from October 4, 2016 to November 21, 2016. This volume consists of comments received by the Lead Agency on the Draft EIR during the public review period, responses to those comments, and revisions to the text of the Draft EIR.

In conformance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, the FEIR provides objective information regarding the potential environmental consequences of the proposed project. The FEIR also examines mitigation measures and alternatives to the project intended to reduce or eliminate significant environmental impacts. The FEIR is intended to be used by the City and any Responsible Agencies in making decisions regarding the project. The CEQA Guidelines advise that, while the information in the FEIR does not control the agency's ultimate discretion on the project, the agency must address each significant effect identified in the Draft EIR by making written findings for each of those significant effects.

According to the State Public Resources Code (Section 21081), no public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless both of the following occur:

> (a) The public agency makes one or more of the following findings with respect to each significant effect:
>
> > (1) Changes or alterations have been required in, or incorporated into, the project which will mitigate or avoid the significant effect on the environment.
> >
> > (2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
> >
> > (3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities of highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.
>
> (b) With respect to significant effects which were subject to a finding under paragraph (3) of subdivision (a), the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.

ORGANIZATION OF THE FEIR

This document, which includes responses to comments and text revisions, has been prepared in accordance with Section 15088 of the CEQA Guidelines. The FEIR includes the following sections:

Section 1.0 List of Agencies and Organizations Who Received the Draft EIR
The agencies, organizations, and individuals who received copies of the Draft EIR are listed in this section.

Section 2.0 List of Comment Letters Received on the Draft EIR
This section contains a list of all parties who submitted written comments on the Draft EIR.

Section 3.0 Responses to Comments Received on the Draft EIR
This section contains written comments received on the Draft EIR and the responses to those comments.

Section 4.0 Revisions to the Text of the Draft EIR
This section contains text revisions to the Draft EIR. Text revisions can be made as a result of comments received during the Draft EIR public review process, corrections or clarifications to the text, or to reflect modifications that have been made to the project to reduce impacts.

Section 5.0 Copies of Comment Letters Received on the Draft EIR
This section contains copies of the full comment letters received.

In accordance with CEQA and the CEQA Guidelines, the FEIR will be made available to the public prior to consideration of the Environmental Impact Report. All documents referenced in this FEIR are available for public review at the City of Santa Clara, Department of Planning and Inspection, 1500 Warburton Avenue, Santa Clara, CA 95050, on weekdays during normal business hours.

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SECTION 1.0 LIST OF AGENCIES, ORGANIZATIONS, AND BUSINESSES WHO RECEIVED THE DRAFT EIR

Copies of the Draft EIR and/or Notice of Availability for the Draft EIR were sent to the following agencies, organizations and individuals:

Government Agencies

Federal Agencies

U.S. Army Corps of Engineers

State Agencies

California Air Resources Board
California Public Utilities Commission
California Natural Resources Agency
Caltrans, District 4
Caltrans, Division of Environmental Analysis
Department of Fish and Wildlife, Region 3
Department of Toxic Substances Control
Native American Heritage Commission
California EPA, Office of the Secretary
Office of Historic Preservation
State Water Resources Control Board
Regional Water Quality Control Board, Region 2

Regional Agencies

Bay Area Air Quality Management District
Capitol Corridor Joint Powers Authority
County of Santa Clara Airport Land Use Commission
County of Santa Clara Department of Environmental Health
County of Santa Clara Department of Parks and Recreation
County of Santa Clara Department of Planning & Development
County of Santa Clara Division of Agriculture
County of Santa Clara Roads & Airport Department
Metropolitan Transportation Commission
San Joaquin Regional Rail Commission
Santa Clara Valley Transportation Authority
Santa Clara Valley Water District

Local Agencies

City of Cupertino Community Development Department
City of Cupertino Planning Department

City of Cupertino Public Works/Traffic Engineering Division
City of San Jose Airport Administration
City of San Jose Department of Transportation
City of San Jose Planning Services Division
City of Sunnyvale Community Development/Planning Department
City of Sunnyvale Public Works Department
City of Sunnyvale Transportation & Traffic Division
Mission College
West Valley-Mission College District

Organizations, Businesses, and Individuals

Adams, Broadwell, Joseph, & Cardozo
Amah Mutsun Tribal Band
Aruna Bodduna
Cabrillo College
California Native Plant Society
Cary Greene
Christopher Cheleden
Glen Williams
Hannah Cha
Indian Canyon Mutsun
Jean Marlowe, Broker
Michal Healy
Muwekma Ohlone Tribal Council
North Valley Yokuts Tribe
Ohlone Indian Tribe
Old Quad Residents Association
Pacific Gas & Electric Company
Patricia Maurice
Public Notice Journal
Rodney Clark
Roy Molseed
San Jose Mercury
Santa Clara Chamber of Commerce
Santa Clara Unified School District
Santa Clara Valley Audubon Society
Santa Clara Valley Weekly
Sharaya Souza
Sobrato Development
Steve R. Ritchie
Tim Ramirez
Trina Marine Ruano Family

SECTION 2.0 LIST OF COMMENT LETTERS RECEIVED ON THE DRAFT EIR

Shown below is a list of comment letters received on the Draft EIR. This list also identifies the date of the letter received. Complete copies of all the letters are included in Section 5.0 of this FEIR.

SECTION 3.0 RESPONSES TO COMMENTS RECEIVED ON THE DRAFT EIR

The following section includes all the comments on the Draft EIR that were received by the City of Santa Clara in letters and emails during the 45-day review period. The comments are organized under headings containing the source of the letter and the date submitted. The specific comments from each of the letters or emails are presented as "Comment" with each response to that specific comment directly following. Each of the letters and emails submitted to the City of Santa Clara are attached in their entirety (with any enclosed materials) in Section 5.0 of this document.

CEQA Guidelines Section 15086 requires that the lead agency consult with and request comments on the Draft EIR prepared for a project of this type from responsible agencies (government agencies that must approve or permit some aspect of the project), trustee agencies for resources affected by the project, adjacent cities and counties, and transportation planning agencies. Section 1.0 of this document lists all of the recipients of the Draft EIR.

Six of the comment letters received are from public agencies, none of whom may be Responsible Agencies under CEQA for the proposed project. The CEQA Guidelines require that:

> A responsible agency or other public agency shall only make substantive comments regarding those activities involved in the project that are within an area of expertise of the agency or which are required to be carried out or approved by the responsible agency. Those comments shall be supported by specific documentation. [§15086(c)]

Regarding mitigation measures identified by commenting public agencies, the CEQA Guidelines state that:

> Prior to the close of the public review period, a responsible agency or trustee agency which has identified what the agency considers to be significant environmental effects shall advise the lead agency of those effects. As to those effects relevant to its decisions, if any, on the project, the responsible or trustee agency shall either submit to the lead agency complete and detailed performance objectives for mitigation measures addressing those effects or refer the lead agency to appropriate, readily available guidelines or reference documents concerning mitigation measures. If the responsible or trustee agency is not aware of mitigation measures that address identified effects, the responsible or trustee agency shall so state. [§15086(d)]

The CEQA Guidelines state that the lead agency shall evaluate comments on the environmental issues received from persons who reviewed the Draft EIR and shall prepare a written response to those comments. The lead agency is also required to provide a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an Environmental Impact Report. This FEIR contains written responses to all comments made on the Draft EIR received during the advertised 45-day review period. Copies of this FEIR have been supplied to all agencies that submitted comments.

A. RESPONSES TO COMMENTS FROM THE COUNTY OF SANTA CLARA – DEPARTMENT OF PARKS AND RECREATION, DATED OCTOBER 18, 2016

COMMENT A – 1: The County of Santa Clara Parks and Recreation Department (the Department) has reviewed the Draft Environmental Impact Report to rezone Great America Theme Park from Thoroughfare Commercial (CT) to Planned Development (PD). The Great America Theme Park Master Plan Project including the rezoning would continue to allow existing attractions and operating practices and would provide flexibility to allow: the installation of new rides, replacement of aging rides and attractions, extension of the operating season, modified operating practices, and additional hours of operation of the Great America theme park and amphitheater.

On April 8th 2016, the Department submitted comments in reference to subject: Notice of Preparation of an Environmental Impact Report to rezone the Great America Theme Park from Thoroughfare Commercial to Planned Development for a Park Master Plan. Those Department comments still stand.

The Trails Element of the Parks and Recreation Chapter of the 1995 County of Santa Clara General Plan indicates two planned trail routes within the immediate vicinity of the project area. Per the Countywide Trails Master Plan Update, Connector Trail Route C4 (Hetch - Hetchy Trail) intersects and runs adjacent to APN 104-42-014, while and Connector Trail Route CS (San Tomas Aquino Trail) runs adjacent to APN 104-42-019.

The Great America Theme Park Master Plan (GAMP) categorizes the property into four zones, with proposed new development primarily occurring in Zone 1. The Hetch-Hetchy (C4) and San Tomas Aquino (C5) Trails bound Zones 1, 3, and 4. While both trails exist within a highly developed area, there is a potential for adversely negative impacts to the current visual and aesthetic views from the trails, specifically the San Tomas Aquino Trail. "At the street level, existing views of Great America and its rides and attractions are intermittent and obscured by trees, landscape berms, and the built environment." The Department recommends that any large mature trees removed during construction be replaced in accordance with City of Santa Clara 2010 - 2035 General Plan policies and guidance.

> **RESPONSE A – 1:** As required by mitigation measures, MM BIO-4.1 and MM BIO-4.2, the project will replace trees removed from the site at a 2:1 ratio when specific development is proposed, consistent with General Plan policies. In the event space for replacement trees is not available on the site an off-site location may be considered in coordination with the City.

COMMENT A – 2: The DEIR also identifies that noise generated by construction activities at the project site will have a significant impact to the environment (Impact NV-6). The Department suggests placing signage at the entrance of the San Tomas Aquino Trail notifying users of the construction activity.

> **RESPONSE A – 2:** Future development on the site requires preparation of a construction mitigation plan which includes notification of adjacent land uses of the construction schedule in writing and designation of a disturbance coordinator to address any local complaints about construction noise. The construction mitigation plan will also include placement of signage at the nearest entrances to the San Tomas Aquino Trail when construction activity on the site

will occur in the vicinity of the trail. Refer to *Section 4.0 Revisions to the Text of the Draft EIR.*

COMMENT A – 3: Per County of Santa Clara General Plan policies adopted by the County Board of Supervisors, on lands lying along a trail route designated in the Countrywide Trails Master Plan where a proposal is made that would result in a change in land use, including a subdivision, a request for a trail easement can be made. In determining whether a dedication is appropriate, the Department must consider the "nexus" or connection between the proposed project and the nature and extent of a trails dedication on a case by case basis. The dedication of an easement for public trail purposes needs to show a logical connection between or service to the trail from the development.

The Hetch-Hetchy Connector Trail (C4) current alignment and right-of-way corridor runs through the parking lots and along the north side of the Great America Theme Park (APN 104-42-014). Countywide trails offer opportunities for non-motorized connections to nearby parks, trails, open space areas, and other recreational opportunities such as the Levi's Stadium and Great America Theme Park. Implementation of the GAMP will directly influence the alignment of this trail. The Department recommends that the Applicant consider a voluntary trail easement for the Hetch-Hetchy Connector Trail that would provide for safe, public recreation use and an alternate transportation mode for emergency/utility access that would be a value-added amenity. A voluntary dedication of an easement within the property during the planning and permitting phase would also represent a step towards the completion of a long-term vision in the completion of a Countywide trails system. The Department would be happy to work with the Applicant and the County Planning Office to identify the ideal location for the voluntary trail easement to be dedicated by the Applicant.

> **RESPONSE A – 3:** The proposed Master Plan would not modify the existing uses on the San Francisco Public Utilities Commission property north of the Great America Theme Park that is the planned alignment of the Hetch Hetchy Connector Trail. No voluntary easement dedication is currently proposed for the Hetch Hetchy Connector Trail. This comment does not raise any concern regarding the adequacy of the Draft EIR.

COMMENT A – 4: Defensible space is an area around a structure where vegetation is treated, cleared or reduced to slow the spread of wildfires towards the structure and to provide room for emergency services to safely fight fires and protect homes. Currently, the San Tomas Aquino Trail maintains a defensible space from adjacent properties, including Great America Theme Park. Construction ground disturbance may adversely impact this space. The Department recommends the Applicant consider encroachment of defensible space between the trail and park when planning for new development, specifically in Zone 1, 3, and 4.

> **RESPONSE A – 4:** This comment is acknowledged. Development on the project site would be subject to Fire Department review at the time of application for City building permits to ensure consistency with the City's Fire Code and provision of adequate defensible space.

COMMENT A – 5: The Department also recommends that the San Tomas Aquino trail be included in the Stormwater Pollution Prevention Plan (SWPPP) and any mitigation activities related to construction ground disturbance.

RESPONSE A – 5: Construction activity on the project site would be required to prepare a SWPPP to address any discharges of stormwater off-site, including to San Tomas Aquino Creek.

COMMENT A – 6: The land use designation change and the GAMP will impact the Trails Element of the Parks and Recreation Chapter of the 1995 General Plan. Please use the County of Santa Clara Parks and Recreation Planning Team as a resource to ensure compliance with Trails Element of the Parks and Recreation Chapter of the 1995 County of Santa Clara General Plan.

RESPONSE A – 6: This comment is acknowledged.

B. RESPONSE TO COMMENTS FROM THE NORMAN Y. MINETA SAN JOSE INTERNATIONAL AIRPORT, DATED NOVEMBER 1, 2016.

COMMENT B – 1: The City of San Jose Airport Department has reviewed the aviation-related sections of the subject Draft EIR and has no major concerns with the analyses presented. However, we recommend several specific text revisions to improve the accuracy of the information.

1. Page 43 - Subsection 2.1.4 (CLUP for San Jose International Airport): The "Consistency" paragraph should be updated to cite the ALUC's 9/28/16 hearing and action on the project (as partially presented on Page 56).

RESPONSE B – 1: The consistency discussion for the CLUP has been updated to reflect the ALUC hearing and action on the project in September 2016. Refer to *Section 4.0 Revisions to the Text of the Draft EIR*.

COMMENT B – 2: 2. Page 56 - Subsection 3.1.2.2 (Consistency with Land Use Plans): The 2nd paragraph under "Airport Land Use Compatibility" is not fully correct. In the 1st sentence, the FAR Part 77 notification surface actually goes over the project site at an elevation ranging from approximately 135-175 feet above mean sea level (or, depending on actual ground elevation, roughly 110 feet above ground at the southerly end of the site to 160 feet above ground at the northerly end of the site). The 2nd & 3rd sentences should add the ALUC standard condition that an avigation easement over the project site be granted to the City of San José (as Airport operator).

RESPONSE B – 2: The City of San José Airport Department identified a number of clarifying text edits that should be made to the FEIR. The Master Plan and PD Zoning identifies the allowed development envelope and uses but does not include any specific building or structure design at this time. As shown in *Section 4.0 Revisions to the Text of the Draft EIR*, the requested revisions have been made to the text of the Draft EIR to reflect the City's understanding of the FAR Part 77 notification surfaces for the site. Consistent with City policy, the proposed PD Zoning was referred to the ALUC for review and found to be consistent with the CLUP. When specific building and structure plans for the project site are proposed, they will be submitted to the FAA for review and issuance of a no hazard determination. The City's Architectural Review Committee would ensure any building height restrictions identified in the FAA's no hazard determination are incorporated in the specific development plans for the site.

COMMENT B – 3: 3. Page 168 - Subsection 3.10.1.3 (Other Hazards):

The 3rd & 4th sentences of the paragraph are incorrect and should be deleted (There is no existing avigation easement over the project site).

RESPONSE B – 3: This comment is acknowledged and the text of the Draft EIR has been revised accordingly. Refer to *Section 4.0 Revisions to the Text of the Draft EIR.*

COMMENT B – 4: 4. Page 171 - Subsection 3.10.2.4 (Airport Safety Hazards): In the 2nd paragraph, the 1st sentence is incorrect. See Comment 2 above.

RESPONSE B – 4: Refer to Response B – 2, above and *Section 4.0 Revisions to the Text of the Draft EIR.*

C. RESPONSES TO COMMENTS FROM THE COUNTY OF SANTA CLARA ROADS AND AIRPORTS DEPARTMENT, DATED NOVEMBER 17, 2016.

COMMENT C – 1: The County of Santa Clara Roads and Airports Department appreciates the opportunity to review to the Draft Environmental Impact Report (DEIR) for the subject project and is submitting the following comments.

- The intersection level of service (LOS) analysis for Montague Expressway at Mission Boulevard does not reflect appropriate signal timing settings leading to better LOS. As indicated in our comment letter dated April 1, 2016 on the NOP, the traffic analysis should be conducted using County signal timing for County study intersections. Please contact Ananth Prasad at (408) 494-1342 or Ananth.Prasad@rda.sccgov.org for this information.

  RESPONSE C – 1: The Traffic Impact Analysis utilized the Santa Clara County CMP signal timing and phasing settings for all CMP designated intersections during the PM peak hour. Signal timing and phasing settings for the AM peak hour were obtained from the City of Santa Clara TRAFFIX database. The level of service results presented in the TIA show that the addition of project traffic is not projected to have an adverse impact on the Montague Expressway/Mission College Boulevard intersection. Utilizing the County's signal timing and phasing settings as suggested in the comment would result in an increase in projected delay (LOS F under existing and project conditions); however, the addition of project traffic would still not result in an impact at the Montague Expressway/Mission College Boulevard intersection. A summary table of the revised LOS is included as Appendix A-2 of the Final EIR. Refer to *Section 4.0 Revisions to the Text of the Draft EIR.*

COMMENT C – 2: Analysis should be revised to reflect the correct information and if it results in impacts, mitigation measures should be identified. The preliminary Comprehensive County Expressway Planning Study – 2040 project list should be consulted for a list of mitigation measures for significant impacts to the expressways. Should the preliminary Expressway Plan 2040 project list not include an improvement that would mitigate a significant impact, the TIA should identify mitigation measures that would address the significant impact. Mitigation measures listed in the TIA should be incorporated into the EIR document.

RESPONSE C – 2: As described in Response C – 1, the proposed project would not result in any impact to the Montague Expressway/Mission College Boulevard intersection nor would it result in impacts at any other County roadway facility.

COMMENT C – 3: Santa Clara County Roads and Airports Encroachment Permit is required prior to any work performed in the County Maintained Road Right of Way.

RESPONSE C – 3: This comment is acknowledged. The project does not propose any work in the County's road right of way.

D. RESPONSES TO COMMENTS FROM THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION, DATED NOVEMBER 17, 2016.

COMMENT D – 1: Thank you for the Notice of Availability and for this opportunity to comment on the Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR). The San Francisco Public Utilities Commission (SFPUC) provides the following general comments below and specific comments in the attached table to be addressed in the final EIR.

General DEIR Comments

The SFPUC previously sent a letter on April 18, 2016 providing comments as requested in the Notice of Preparation for the proposed project DEIR. For your reference, I am attaching that letter.

That letter included a general description of SFPUC land ownership for utility operations within the project area. The SFPUC requests that the lead agency accurately reflect the City and County of San Francisco's land ownership (San Francisco Property) throughout the final EIR. Currently, the DEIR mentions the right-of-way but it does not describe the ownership accurately. The DEIR "Project Location" section describes the entire project location ownership as follows: "The entire site, including the parking lot, is owned by the Successor Agency to the Redevelopment Agency ..." This is incorrect and the final EIR should be updated to indicate that the strip of land separating the Great America Theme Park from the surface parking lot is owned by the City and County of San Francisco and not by the Successor Agency to the Redevelopment Agency.

RESPONSE D – 1: This comment is acknowledged and the text of the Draft EIR has been revised accordingly. Refer to *Section 4.0 Revisions to the Text of the Draft EIR.*

COMMENT D – 2: The EIR should also clarify that the San Francisco Property's primary use is for utility purposes to provide water throughout the SFPUC's Hetch Hetchy Regional Water System. This information should be included in the DEIR "Existing Land Use" discussion in Section 3.1 (Land Uses).

RESPONSE D – 2: This comment is acknowledged and the text of the Draft EIR has been revised accordingly. Refer to *Section 4.0 Revisions to the Text of the Draft EIR.*

COMMENT D – 3: In addition, the SFPUC has policies that limit third-party uses and improvements on San Francisco Property. Please see the attached Interim Water Pipeline ROW Use

Policy and Integrated Vegetation Management Policy for more information about restrictions on the ROW. The SFPUC would like to underscore that the San Francisco Property may not be used to "*...fulfill another jurisdiction's open space, setback, parking, or third-party development requirements…*" This prohibition also includes emergency access or other requirements. Any proposed use or improvement on the SFPUC ROW must: 1) comply with current SFPUC policies; 2) be vetted through the SFPUC's Project Review process (see below for more information); and 3) be formally authorized by the SFPUC.

RESPONSE D – 3: This comment is acknowledged. The proposed Master Plan would not make any modifications to the SFPUC's property, which is located directly north of the Theme Park boundary.

COMMENT D – 4: Please see the attached table for specific SFPUC comments about the DEIR.

RESPONSE D – 4: This comment is acknowledged and the text of the Draft EIR has been revised to address the comments listed in the table. Refer to *Section 4.0 Revisions to the Text of the Draft EIR* and *Section 5.0 Copies of the Comment Letters Received on the Draft EIR* for the specific revisions requested. Comment numbers 6, 8, 9, and 13 from the attached table are addressed below in Response D-5, since they require some explanation in addition to text revisions.

COMMENT D – 5: SFPUC Project Review Process
Proposed projects and other activities on any San Francisco Property must undergo the Project Review Process if the project will include: construction; digging or earth moving; clearing; installation; the use of hazardous materials; other disturbance to watershed and ROW resources; or the issuance of new or revised leases, licenses and permits. This review is done by the SFPUC's Project Review Committee (Committee).

The Project Review Committee is a multidisciplinary team with expertise in natural resources management, environmental regulatory compliance, engineering, water quality and real estate. Projects and activities are reviewed by the Committee for:

1. Conformity with the Alameda and Peninsula Watershed Management Plans;
2. Consistency with our Environmental Stewardship Policy, Rea Estate Guidelines, Interim ROW Use Policy and other policies and best management practices; and
3. Compliance with the California Environmental Quality Act (CEQA) and environmental regulations including mitigation, monitoring and reporting plans.

In reviewing a proposed project, the Project Review Committee may conclude that modifications or avoidance and minimization measures are necessary. Large and/or complex projects may require several project review sessions to review the project at significant planning and design stages. Please notify all property owners and/or developers that, to the extent their proposals will involve the development or use of the San Francisco Property, such proposals are first subject to the SFPUC's Project Review Process. The proposal must first be vetted in Project Review, and then the project sponsor must receive authorization from the SFPUC pursuant to a final executed lease or revocable license before they can use or make any changes to the SFPUC ROW. To initiate the Project Review process, a project sponsor must download and fill out a Project Review application at

http://www.sfwater.org/ProjectReview and return the completed application to Jonathan S. Mendoza at JSMENDOZA@SFWATER.ORG.

> **RESPONSE D – 5:** The SFPUC project review process is acknowledged. The Great America Theme Park Master Plan does not propose any changes to the SFPUC property located directly north of the Theme Park.

COMMENT D – 6: Please clarify how the "Zone 1" northern edge of zone differs from the San Francisco Property (APN 104-43-004) southern boundary. Does this increase the setback to more than 10 feet? The SFPUC recommends that the minimum setback be increased from the San Francisco Property boundary to reduce the potential for undermining the structural integrity of the proposed Zone 1 developments in the event of a large pipeline leak or breach. In the event of a planned or emergency pipeline repair, the SFPUC may need additional space for heavy equipment (e.g. cranes).

> **RESPONSE D – 6:** Zone 1 of the Master Plan abuts the southern boundary of the SFPUC's parcel/right-of-way. Buildings within Zone 1 will be set back at least 10 feet from the property line consistent with SFPUC's right-of-way requirements. Areas north of the SFPUC property would continue to operate as a surface parking lot which should accommodate access for any equipment necessary for planned or emergency pipeline repairs.

COMMENT D – 7: Clarify where the additional 327 parking spaces are located. The San Francisco Property cannot be used to satisfy parking requirements. Any proposed use of the SF PUC right-of-way must: 1) comply with current SFPUC policies; 2) be vetted through the SFPUC's Project Review process; and 3) be formally authorized by the SFPUC.

> **RESPONSE D – 7:** The 327 parking spaces noted in the project description and Master Plan are located within the SFPUC's right-of-way. The Master Plan proposes no modifications to the existing surface parking lots north of the Theme Park entrance. Refer to *Section 4.0 Revisions to the Text of the Draft EIR*.

COMMENT D – 8: The SFPUC has adopted land use policies for its ROW. One of the DEIR thresholds includes analyzing the project for any "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 ..." The SFPUC policies are in place to avoid any potential impacts to SFPUC infrastructure and/or water customers. The proposal may potentially conflict with SFPUC land use policies so the proposal should be analyzed in the DEIR with relation to the SFPUC's existing ROW policies. A project proposal may not use the SFPUC ROW to fulfill another jurisdiction's open space, setback, parking, emergency access or other development requirements.

> **RESPONSE D – 8:** The project would not make any changes to the SFPUC property. The project; however, does adhere to the SFPUC's recommended setbacks from its property.

COMMENT D – 9: The DEIR briefly references the SFPUC as a wholesale water supplier. The City of Santa Clara receives wholesale water service from the SFPUC, but is considered a temporary, interruptible customer. By the end of 2018, the SFPUC will decide whether or not to make the City

of Santa Clara a permanent customer. Thus, although the increased demands associated with the proposed project are relatively small, it is recommended that the EIR acknowledge this uncertainty with the City of Santa Clara's water supply.

RESPONSE D – 9: This comment is acknowledged. The project's impacts to water supply would not be affected by the current status of the City's contract with SFPUC. Refer to *Section 4.0 Revisions to the Text of the Draft EIR.*

E. RESPONSE TO COMMENTS FROM THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION REAL ESTATE SERVICES DIVISION, DATED NOVEMBER 18, 2016.

COMMENT E – 1: With respect, please understand that the City and County of San Francisco, through the SFPUC, owns the property in FEE where Cedar Fair is planning some of its improvements. We have raised this comment before, but sometimes it seems to be overlooked. We keep encountering references in public documents to our "easement," which is not correct.

We have water transmission lines in our property that serve millions of water customers, so our first mission is to protect the utility use of our property, as you can appreciate. Cedar Fair has a long-expired lease with the SFPUC for use of our property. The SFPUC will not consider granting approval to any of the proposed improvements on our property unless and until Cedar Fair enters into a market-rate lease with the SFPUC. We have been in lease negotiations for some time with Cedar Fair, so it is surprising that Cedar Fair did not bring these planned improvements to our attention before commencing the master plan process.

RESPONSE E – 1: As stated previously, the proposed Master Plan would not make any improvements SFPUC property. The requested revisions to the description of the SFPUC property adjacent to the Theme Park are shown in *Section 4.0 Revisions to the Text of the Draft EIR.*

F. RESPONSE TO COMMENTS FROM CALTRANS, DATED NOVEMBER 18, 2016.

COMMENT F – 1: Multimodal Transportation Impacts

1. Montague Expressway/Mission College Boulevard Intersection: Please provide a queuing analysis and mitigation, if the analysis shows queuing onto US 101. The northbound (NB) left-turn traffic queue from Montague Expressway is blocking the through traffic, which could potentially block the NB US 101 diagonal off-ramp to Montague Expressway. During the PM peak hour, this blockage can extend the off-ramp queue onto the freeway, causing a potential safety issue at this location due to the speed differential.

RESPONSE F – 1: The proposed project will result in the addition of only two (2) trips to the subject intersection during the AM peak hour and eight (8) trips during the PM peak hour which equate to no more than four (4) peak hour trips per lane at the intersection. Based on queue estimates provided by TRAFFIX (included in Appendix C of the TIA), the additional project trips will not result in the extension of the projected queue for the northbound left-turn queue on Montague Expressway at its intersection with Mission College Boulevard during the AM peak hour. The additional PM peak hour trips will result in the extension of

the projected queue by only one vehicle during the PM peak hour. In addition, the level of service results show that the addition of project traffic is not projected to have an adverse impact on Montague Expressway/Mission College Boulevard intersection or the northbound off-ramp to Montague Expressway (increase in critical V/C is less than 0.01). Refer to Appendix A-2 and *Section 4.0 Revisions to the Text of the Draft EIR.*

COMMENT F – 2: Mitigation for increasing VMT should be identified and mitigated in a manner that does not further raise VMT. Mitigation may include contributions to the Santa Clara Valley Transportation Authority's (VTA) voluntary contribution program, and should support the use of transit and active transportation modes. Potential mitigation measures that include the requirements of other agencies such as Caltrans are fully enforceable through permit conditions, agreements, or other legally-binding instruments under the control of the City.

RESPONSE F – 2: The traffic analysis indicated that the addition of project traffic would not result in an adverse impact on intersections or freeway segments in the project area based on adopted City of Santa Clara and Santa Clara County CMP impact criteria. The City of Santa Clara does not have adopted policies for the evaluation of impacts due to VMT increases. As discussed in the Draft EIR, the City is requiring the project implement a TDM program to reduce employee trips by five percent. The TDM program would serve to reduce VMT related to the project and the City would not require the project to make any voluntary contributions to VTA.

COMMENT F – 3: Please consider contributing to the following regional projects to mitigate this project's impacts:

- RTP ID 240481 - Convert SR 237 High-Occupancy Vehicle (HOV) Lanes to Express Lanes from N. 1st Street to Mathilda Avenue.
- RTP ID 240466 - Convert US 101 HOV Lanes to Express Lanes from the San Mateo/Santa Clara County Line to Morgan Hill.

RESPONSE F – 3: Refer to Response F-2.

COMMENT F – 4: "Regional Access" SR 237 HOV and High-Occupancy Toll (HOT) Lanes (DEIR p. 59): The description of these State facilities are confusing and should be clarified. It is correct to state there are 2 HOV lanes between Zanker Road and US 101; however, what is not clear is the statement that follows of 2 toll lanes between Zanker Road and US 101. If it was the intent to disclose the HOV to Express Lanes conversion in the near future, then the DEIR should state that the existing Express Lanes limits are from Interstate (I-) 880 to Zanker Road, not US 101 to Zanker Road.

RESPONSE F – 4: This comment is acknowledged and the text of the Draft EIR has been revised accordingly. Refer to *Section 4.0 Revisions to the Text of the Draft EIR.*

COMMENT F – 5: Vehicle Trip Reduction
Caltrans recommends that the project set a more ambitious VMT reduction goal. The DEIR (p.187) states that the project will be required to implement a Transportation Demand Management (TDM) program with a goal to decrease VMT by five percent. Given the project's proximity to light rail

transit, Class I and II bicycle facilities, and a complete sidewalk network, a greater reduction in VMT for the project is achievable.

To reduce VMT the project should also include:

- Membership in a transportation management association.
- Transit subsidies and/or Eco Passes on a permanent basis to all employees.
- Ten percent vehicle parking reduction.
- Transit and trip planning resources.
- Carpool and vanpool ride-matching support.
- Carpool and clean-fuel parking spaces.
- Secured bicycle storage facilities.
- Bicycles for employee uses to access nearby destinations.
- Showers, changing rooms and clothing lockers.
- Fix-it bicycle repair station(s).
- Transportation and commute information kiosk.
- Outdoor patios, outdoor areas, furniture, pedestrian pathways, picnic and recreational areas.
- Nearby walkable amenities.
- Kick-off commuter event at full occupancy.
- Employee transportation coordinator.
- Emergency Ride Home program.
- Bicycle route mapping resources and bicycle parking incentives.

The TDM program should be documented with annual monitoring reports by an onsite TDM coordinator to demonstrate effectiveness. These smart growth approaches are consistent with the MTC's Regional Transportation Plan (RTP)/SCS goals and would meet Caltrans Strategic Management Plan. Reducing parking supply can encourage active forms of transportation, reduce regional VMT, and lessen future transportation impacts on SR 237, US 101, and other nearby State facilities.

> **RESPONSE F – 6:** As stated in the Draft EIR, the project would be required to achieve a five percent reduction in VMT from the TDM program. The applicant would review the measures outlined in the comment for feasibility and incorporate the measures necessary to achieve the five percent reduction in VMT. Based on the City's Climate Action Plan, regional commercial uses in this area of Santa Clara are not subject to a specific VMT reduction requirement; however, City staff retains the discretion to require a TDM program and regional commercial uses in other areas of the City are required to reduce VMT by five percent which will be a condition of approval for the project.

COMMENT F – 7: Transportation Impact Fees

We request that an analysis of the plan's impacts and mitigation include information regarding the City's local and/or regional impact fee program. The analysis should identify if those programs include improvements to pedestrian, bicycle and transit infrastructure or that could be considered representative of the project's likely TDM mitigation measures. If no such fee exists, we would appreciate exploring with you the establishment of (local or regional) VMT-based transportation impact fee programs.

RESPONSE F – 7: The proposed Master Plan did not result in any significant transportation impacts and, therefore, no mitigation is required. As discussed above, the City is requiring the applicant to prepare a TDM program to reduce VMT resulting from the project.

G. RESPONSES TO COMMENTS FROM CHARLES T.C. COMPTON, DATED OCTOBER 24, 2016.

COMMENT G – 1: I write in opposition to Cedar Fair's proposal to add new rides and expand operating hours, to the extent that these would have "significant unavoidable cumulative impacts with regard to noise."

The Great America Theme Park ("Great America") is bordered by a large, high-density residential area, such that hundreds of townhomes and single family homes will be negatively affected by additional noise impacts. Those homes, including my own, are already impacted by the noise of Great America under its current operations. Expanding that noise will both harm the lifestyle of residents and their families, and also lessen the value of their properties.

The Planning Commission and City Council will, I trust, take note that the impacted homes already suffer from two major sources of noise pollution other than Great America: The new Levi's Stadium to the north, with a full and increasing schedule of games and concerts; and the San José International Airport, with its growing number of flights that cross directly over our community as they take off. Adding a greater noise impact from Great America can only result in an intolerable burden on the enjoyment and value of our homes.

Santa Clara needs more housing, and must act to protect the modest-cost housing reflected in the community bordering Great America. At some point, the cumulative impact of the Theme Park, the Stadium and the Airport will drive residents out of the area, impacting property taxes and the availability of housing for the tens of thousands of employees working at nearby tech companies like Intel, Cisco, Brocade, Siemens, Palo Alto Networks and many dozens of others. Having our residential community in the center of these businesses lessens traffic and air pollution-benefits threatened by "piling on" high-noise activities such as that proposed by Cedar Fair.

Please do not permit this harmful increase in the noise burden for nearby residents.

RESPONSE G – 1: The commenter's opposition to the project is acknowledged. The noise impacts of the project are analyzed in *Section 3.4 Noise and Vibration* of the EIR. As the commenter does not raise any concerns regarding the adequacy of the analysis of these impacts, no further response is required.

SECTION 4.0 REVISIONS TO THE TEXT OF THE DRAFT EIR

This section contains revisions to the text of the Draft Environmental Impact Report for the Great America Theme Park Master Plan, dated October 2016. Revised or new language is underlined. All deletions are shown with a ~~line through the text~~.

Page 3 Table of Contents, Appendices; **REVISE** Appendix D title as follows:

Appendix D ~~CalEEMod Results~~ Air Pollutant and Greenhouse Gas Emissions Memo

Page 5 Summary; **REVISE** the second sentence of the first paragraph as follows:

An additional approximately 55 acres of surface parking (167-acre total site) would continue to be provided north of the park entrance from the ~~Hetch Hetchy~~ SFPUC right-of-way north to Tasman Drive.

Page 5 Summary; **INSERT** the following text after the second sentence of the first paragraph:

The City and County of San Francisco (San Francisco), through the San Francisco Public Utilities Commission (SFPUC), owns approximately four (4) acres of real property in fee in Santa Clara (San Francisco Property) that crosses the project location as an 80-foot wide right-of-way (ROW). The SFPUC ROW traverses the project location in an east-to-west alignment directly north of the park entrance in the existing parking lot. The San Francisco Property's primary purpose is to serve as a utility corridor which is improved by two large subsurface transmission lines and other appurtenances.

Page 10 Summary, mitigation measure MM NV-6.1; **INSERT** the following text as the seventh bullet in the mitigation measure:

- Post signs at the nearest entrances to the San Tomas Aquino Trail notifying users when construction activity on the site will occur in the vicinity of the trail.

Page 27 Section 1.2 Project Location; **REVISE** the text of the first paragraph as shown below:

The proposed project is located at 1 Great America Parkway and 4701 Great America Parkway in Santa Clara. The project site includes ~~two~~ three parcels, APNs 104-42-008, -014, and -019, with a combined area of approximately 112 acres. An additional 55 acres of parking lots serving the Great America Theme Park are located north of the park entrance (APNs 104-43-004, -051, and -052). With the exception of the San Francisco Public Utilities Commission (SFPUC) property (APN 104-43-004) which runs east to west north of the Theme Park boundary, t~~T~~he ~~entire~~ site, including the majority of the parking lot, is owned by the Successor Agency to the Redevelopment

Agency of the City of Santa Clara and Cedar Fair operates Great America under a ground lease that extends through 2074. Surrounding development in the project area includes Levi's Stadium, the Santa Clara Convention Center, office parks, hotels, a strip commercial center, single-family residences, and City of Santa Clara Water Utility facilities.

Page 29 Section 1.4 Project Description; **REVISE** the second sentence of the first paragraph as follows:

An additional approximately 55 acres of surface parking (167-acre total site) would continue to be provided north of the park entrance from the ~~Hetch Hetchy~~ SFPUC right-of-way north to Tasman Drive.

Page 29 Section 1.4 Project Description; **INSERT** the following text after the second sentence of the first paragraph:

The City and County of San Francisco (San Francisco), through the San Francisco Public Utilities Commission (SFPUC), owns approximately four (4) acres of real property in fee in Santa Clara (San Francisco Property) that crosses the project location as an 80-foot-wide right-of-way (ROW). The SFPUC ROW traverses the project location in an east-to-west alignment directly north of the park entrance in the existing parking lot. The San Francisco Property's primary purpose is to serve as a utility corridor which is improved by two large subsurface transmission lines and other appurtenances.

Page 31 Section 1.4.3 Site Access and Parking; **REVISE** the first sentence as follows:

Vehicle access to the project site will continue to be provided from the three existing driveways serving the site on Great America Parkway, Tasman Drive, and Agnew Road (refer to Figure ~~1.3-3~~ 1.2-3).

Page 31 Section 1.4.3 Site Access and Parking; **REVISE** the third sentence of the third paragraph as follows:

An additional 327 parking spaces are provided ~~on the site~~ in the existing surface parking lot under a separate lease with the SFPUC.

Page 43 Section 2.1.4 Comprehensive Land Use Plan (CLUP) for Norman Y. Mineta San José International Airport; **REVISE** the Consistency discussion as follows:

The project site is located within the referral boundary for the Norman Y. Mineta San José International Airport. The proposed project would be subject to review by the Federal Aviation Administration (FAA) and ALUC and is located within the 65 dBA CNEL noise contour. The maximum heights proposed under the Master Plan would be subject to the height restrictions of the FAA (refer to *Section 3.1 Land Use* and *Section 3.4 Noise and Vibration*). The project was referred to the ALUC and found to be consistent with the CLUP at the September 28, 2016 hearing. The Commission

found the project consistent with the CLUP in view of the proponent's commitment to include the Part 77 surface height limitation in the development standards of the PD zoning, and requested that staff record the dedication of an avigation easement to the City of San José on behalf of the airport prior to the issuance of a discretionary permit. With adoption of these measures the project will be consistent with the CLUP.

Page 54 Section 3.1.1.1 Existing Land Use; **REVISE** the first paragraph sentence as follows:

The approximately 112-acre project site is comprised of ~~two~~ three parcels located on the east side of Great America Parkway, between Mission College Boulevard and Tasman Drive, in the northern portion of the City of Santa Clara.

Page 54 Section 3.1.1.1 Existing Land Use; **INSERT** the following discussion as the fourth paragraph:

The City and County of San Francisco (San Francisco), through the San Francisco Public Utilities Commission (SFPUC), owns approximately four (4) acres of real property in fee in Santa Clara (San Francisco Property) that crosses the project location as an 80-foot-wide right-of-way (ROW). The SFPUC ROW traverses the project location in an east-to-west alignment directly north of the park entrance in the existing parking lot. The San Francisco Property's primary purpose is to serve as a utility corridor which is improved by two large subsurface water transmission lines and other appurtenances.

Page 56 Section 3.1.2.2 Consistency with Land Use Plans, Airport and Land Use Compatibility; **REVISE** the second paragraph of the discussion as shown below:

The FAR Part 77 airspace notification surface over the project site ranges from approximately ~~225~~ 110 feet to ~~300~~ 160 feet above ground level from the southerly end to the northerly end of the site, respectively. The project was reviewed by the Airport Land Use Commission (ALUC) on September 28, 2016 and was found to be consistent with the CLUP under the condition that proposed structures on the site not exceed the Part 77 airspace obstruction surfaces across the site which are generally shown as ranging from 239 feet above mean sea level (AMSL) to 270 feet AMSL in the CLUP. Any structure exceeding the notification surface over the project site would require review under FAR Part 77 by the FAA for a determination of no hazard. Consistent with ALUC and City General Plan policy, the project proposes that the maximum height of buildings, structures, rides and attractions structures will ~~be conditioned~~ not ~~to~~ exceed 250 feet (above ground level) or the lesser height of the above-referenced Part 77 FAA obstruction surfaces ~~on the site as part of the City's development permit~~ through the FAA review process for a determination of no hazard, which would ensure that project development will not be a hazard to aircraft operation. Additionally, the applicant, Cedar Fair, would assist the Successor Agency to the Redevelopment Agency of the City of Santa Clara, the property owner, in granting an avigation easement to the City of San José consistent with ALUC standard conditions. **(Less Than Significant Impact)**

Page 59 Section 3.2.1.1 Regional Access; **REVISE** the third paragraph, third sentence as follows:

There are toll lanes (one in each direction) provided between Zanker Road and ~~US 101~~ I-880.

Page 79 Section 3.2.2.5 Transit, Pedestrian and Bicycle Analysis; **REVISE** the first sentence of the second paragraph under Bicycle Facilities as follows:

The potential to develop a bicycle and pedestrian trail on the ~~Hetch Hetchy~~ SFPUC right-of-way corridor is being considered as part of the City of Santa Clara Trail Network Expansion project.

Page 80 Section 3.2.2.5 Transit, Pedestrian and Bicycle Analysis; **REVISE** the first sentence of the third paragraph under Bicycle Facilities as follows:

The proposed project and any improvements within the Great America parking lots adjacent to the ~~Hetch Hetchy~~ SFPUC right-of-way should be designed to accommodate the potential Hetch Hetchy Trail.

Page 85 Section 3.3 Air Quality; **INSERT** the following immediately after the section heading:

The following discussion is based on an Air Pollutant and Greenhouse Gas Emissions Memo prepared by *Illingworth & Rodkin, Inc.* in December 2016. A copy of this report is included as Appendix D in this EIR.

Page 88 Section 3.3.1.6 Sensitive Receptors; **REVISE** the fourth sentence in the first paragraph as follows:

The closest sensitive receptors to the site are located in the residential areas approximately 210 feet to the east of the property line, across San Tomas Aquino Creek.

Pages 91-92 Section 3.3.2.3 Long-Term Air Quality Impacts, Impacts on Regional Air Quality; **REVISE** the fourth paragraph and Table 3.3-4 as follows:

The project would result in increased regional criteria pollutant emissions primarily from vehicle emissions. Regional criteria pollutant emissions were calculated using CalEEMod for mobile emissions, energy use, and other operational sources (refer to Appendix D). Project development increases in emissions of regional criteria pollutants (ROG, NO_x, $PM_{2.5}$ and PM_{10}) are shown in Table 3.3-4.[1]

[1] ~~CalEEMod.2013.2.2~~

Table 3.3-4 (REVISED) Project Regional Emissions in ~~Pounds Per Day~~ Tons Per Year				
	ROG	**NO_x**	**PM_{10}**	**$PM_{2.5}$**
Existing Theme Park Operations	2.19	10.91	8.88	2.50
Existing Theme Park Fuel Sources	0.23	1.12	0.08	0.07
Existing Subtotal	2.42	12.03	8.96	2.57
Proposed ~~Project~~ Theme Park Operations	~~18.32~~ 3.14	~~25.84~~ 15.69	~~18.13~~ 12.88	~~1.55~~ 3.62
Proposed Theme Park Fuel Sources	0.19	1.54	0.09	0.09
Proposed Marketplace	2.12	3.66	2.58	0.72
Proposed Project Subtotal	5.45	20.89	15.55	4.43
Project Increase	3.03	8.86	6.59	1.86
~~Daily~~ Annual Emissions Threshold	~~54~~10	~~54~~10	~~82~~15	~~54~~10
Significant?	No	No	No	No

Page 92 Section 3.3.2.3 Long-Term Air Quality Impacts, Impacts on Local Air Quality; **REVISE** the second sentence of the second paragraph as follows:

The project would generate ~~4,242~~ 5,963 net new daily trips when averaged out throughout the year (165-day existing operating schedule to 365-day proposed operating schedule) and would not result in any of the affected study intersection exceeding 44,000 vehicles per hour.

Page 93 Section 3.3.2.4 Short-Term Air Quality Impacts; **INSERT** the following discussion after impact statement AQ-2.

Project TAC Emissions

The proposed Master Plan is assumed to include two new emergency generators to support potential large tower rides at the Theme Park. Consistent with existing emergency generators for large tower rides on the site, any new generator is assumed to be a maximum of 400 horsepower (hp) in size with operations limited to 50 hours per year in total. TAC emissions were calculated to identify $PM_{2.5}$ levels and cancer risk at sensitive receptors. Both emergency generators were assumed to be located at least 600 feet from the nearest sensitive receptor. The resulting $PM_{2.5}$ concentration was 0.01 $\mu g/m^3$ and cancer risk was 3.62 cases per million which are below the BAAQMD thresholds of significance.

The $PM_{2.5}$ exhaust emissions with the increased diesel fuel use were also computed to predict screening level project conditions. The location of fuel use was assumed to be three locations at distances of 600, 1,000, and 2,000 feet from the nearest sensitive receptor to represent diesel equipment use throughout the site. The resulting $PM_{2.5}$ concentration was 0.05 $\mu g/m^3$ and increased cancer risk of 5.8 cases per million.

The potential for annual attendance to result in increased TACs from vehicular emissions were also studied for the main parking lot. The analysis indicates a cancer risk of less than 0.54 per million and an annual $PM_{2.5}$ concentration of less than 0.02 $\mu g/m^3$.

Combining the generator, other diesel equipment and roadway impacts indicates a cancer risk of less than 10.0 per million and an annual $PM_{2.5}$ concentration of 0.05 $\mu g/m^3$ (refer to Table 3.3-5). The project, therefore, would not exceed the BAAQMD significance thresholds for project TAC emissions. **(Less Than Significant Impact)**

Page 93 Section 3.3.2.6 Cumulative Air Quality Impacts; **INSERT** the subheading shown below immediately following the section heading:

Cumulative Regional Criteria Pollutant and Construction Period Emissions

Page 93 Section 3.3.2.6 Cumulative Air Quality Impacts; **INSERT** the subheading shown below following the first paragraph:

Cumulative TAC Emissions

Currently, Great America has sources of TACs and $PM_{2.5}$ emissions, mostly in the form of emissions from diesel engines associated with emergency generators. The park has five generators located throughout the park with the generator at the Lake Pump Station closest to sensitive receptors (approximately 300 feet). Stationary sources within 1,000 feet of the park were identified. A Stationary Source Information Form (SSIF) was submitted to BAAQMD to obtain emissions information for these sources. The screening level risks and annual $PM_{2.5}$ concentrations from these sources were predicted using BAAQMD screening tools that included the beta risk calculator with distance multiplier tools for diesel engines and gasoline dispensing stations. Most of the identified external sources within 1,000 feet of the project are over 2,000 feet from the sensitive receptors that lie to the east of the site. The contribution of all existing stationary sources within 1,000 feet of the project site was computed at less than 36 per million for cancer risk and 0.05 $\mu g/m^3$ for annual $PM_{2.5}$ (refer to Table 3.3-5). Where sources were more than 1,000 feet from the closest receptor, a distance of 1,000 feet was used since the BAAQMD screening tools only predict levels out to 1,000 feet and, therefore, the emissions estimates provided are considered conservative.

The contribution of TACs from diesel equipment used for maintenance, landscaping, and minor construction equipment was also calculated. Existing and project $PM_{2.5}$ concentrations and cancer risk were computed based on the assumptions described in

Section 3.3.2.4 above. The contribution of these sources to cumulative health risks is shown in Table 3.3-5 below.

The contribution from roadways was computed using the BAAQMD Roadway Screening Analysis Calculator. All busy local roadways within 1,000 feet of the site are over 2,000 feet from the nearest sensitive receptors except for the project parking lot and Tasman Drive. As described above, the closest portion of the parking lot is approximately 500 feet from the nearest sensitive receptors. Tasman Drive is 1,800 feet away to the north.

The existing parking lot was modeled in the same manner as the proposed project with a traffic volume of 3,450 trips, which in the average daily number of attendee and worker trips that are assumed to use the parking lot. The computed cancer risk is 0.30 per million and the annual $PM_{2.5}$ concentration is 0.01 $\mu g/m^3$ (refer to Table 3.3-5).

The contribution from Tasman Drive was computed based on an east-west roadway that was greater than 1,000 feet from the nearest sensitive receptor. Note that the roadway is 1,800 feet or further away and the roadway calculator only predicts out to 1,000 feet from the traffic lanes. A traffic volume of 30,000 average daily vehicles was used, which is based on a review of the roadway volumes included in the Traffic Impact Analysis (refer to Appendix A). The contribution from this roadway was a cancer risk of less than 1.26 per million and an annual $PM_{2.5}$ concentration of less than 0.01 $\mu g/m^3$. Cancer risks and annual $PM_{2.5}$ concentrations from all sources are summarized in Table 3.3-5.

Table 3.3-5
Cumulative Community Risks at Closest Sensitive Receptor

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)
Project Sources		
New Diesel Generators	<3.62	<0.01
Maintenance Diesel Fuel Use	5.80	0.02
New Visitor Lot Traffic	0.15	0.01
New Marketplace Traffic	0.39	0.01
Project Totals	<9.96	<0.08
Significance Threshold	>10.0	>0.3
Cumulative Sources (within 1,000 feet of Project)		
Great America Parking Lot	0.30	0.01
Existing Great America Stationary Sources	0.19	<0.01
Existing Misc. Diesel Equipment	26.58	0.04
All Other Stationary Sources	<35.89	<0.05
Tasman Drive	<1.26	<0.01

Table 3.3-5 Cumulative Community Risks at Closest Sensitive Receptor		
Source	**Cancer Risk (per million)**	**Annual $PM_{2.5}$ ($\mu g/m^3$)**
Project + Cumulative	<64.22	<0.20
Cumulative Significance Threshold	>100.0	>0.8
Significant?	No	No

Cumulative health risk impacts from existing and project sources of TACs would not result in increased cancer risk or $PM_{2.5}$ concentrations at sensitive receptors within 1,000 feet of the project site. **(Less Than Significant Cumulative Impact)**

Page 119 Section 3.4.3 Mitigation Measures; **INSERT** the following text as the seventh bullet in mitigation measure, MM NV-6.1:

- Post signs at the nearest entrances to the San Tomas Aquino Trail notifying users when construction activity on the site will occur in the vicinity of the trail.

Page 144 Section 3.8.1.2 Visual Character of the Project Area; **REVISE** the third paragraph, third sentence as follows:

The 80-foot wide, vacant ~~Hetch Hetchy~~ SFPUC right-of-way is located between the water tanks and an established residential neighborhood that borders the east side of the Creek channel along the remainder of Great America (Photos 11-13).

Page 145 Section 3.8.1.3 Existing Views of the Site, Photo 10; **REVISE** the first sentence as follows:

Photo was taken from Lafayette Street, approximately 2,150 feet from Great America, looking west, down the vacant ~~Hetch Hetchy~~ SFPUC right-of-way ~~easement~~.

Page 168 Section 3.10.1.3 Other Hazards; **DELETE** the following text:

The project site is located within the land use referral boundary of the Norman Y. Mineta San José International Airport. The project site is subject to building height restrictions under Federal Aviation Regulations, Part 77, which is administered by the Federal Aviation Administration (FAA) and is incorporated into Santa Clara County Airport Land Use Commission policy. ~~The City of San José holds an existing avigation easement over the site which restricts building heights on the project site to 250 feet above existing grade. The proposed maximum structure heights (Zones 1 and 2) would comply with the height restrictions of the existing avigation easement.~~

Page 171 Section 3.10.2.4 Airport Safety Hazards; **REVISE** the first sentence of the second paragraph as shown below:

The FAR Part 77 airspace notification surface over the project site ranges from approximately ~~225~~ 110 feet to ~~300~~ 160 feet above ground level from the southerly end to the northerly end of the site, respectively.

Page 173 Section 3.11.1.1 Water Service; **REVISE** the first paragraph as follows:

Water service to the site is provided by the City of Santa Clara Water Utility. The water system consists of more than 315 miles of water mains, 27 wells and six storage tanks with more than 27 million gallons of water capacity.[36] Drinking water is provided by an extensive underground aquifer (accessed by the City's wells) and by two wholesale water importers: the Santa Clara Valley Water District (SCVWD) (imported from the Sacramento-San Joaquin Delta) and the San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy System. The City of Santa Clara is currently a temporary interruptible customer of the SFPUC. The SFPUC will decide in 2018 whether or not to make the City of Santa Clara a permanent customer. About 25 percent of the City's water comes from these imported treated water supplies. Another 62 percent is pumped from the City's system of 27 deep wells. The three sources (SCVWD, SFPUC, and groundwater) are used interchangeably or are blended together. A water recharge program administered by SCVWD from local reservoirs and imported water enhances the dependability of the underground aquifer.

Page 173 Section 3.11.1.1 Water Service; **REVISE** the second sentence of the second paragraph as follows:

The ~~Hetch Hetchy~~ SFPUC right-of-way (ROW) traverses the site in an east to west alignment directly north of the park entrance, in the Great America parking lot.

Page 173 Section 3.11.1.1 Water Service; **REVISE** the last sentence of the third paragraph as follows:

Recycled water is currently used by Great America for landscape irrigation, pavement and ride washing, and fire suppression, with an eight-inch reclaimed water line entering the site near the ~~Hetch Hetchy~~ SFPUC ROW and San Tomas Aquino Creek.

Page 186 Section 3.12.3.2; **REVISE** Table 3.12-1 and paragraph following the table as shown below:

Table 3.12-1 (REVISED)
Estimated Operational Annual Energy Use of Full Build-Out

Land Use	Natural Gas Demand	Electricity Demand	Fuel Demand
Existing Theme Park			
Energy Use	10,770,950 kBtu[a]	1,530,551 kWh[b]	~~151,583~~ 1,043,407[c] gallons
Proposed Development			
Estimated Theme Park at Buildout	~~11,309,498~~ 15,187,200 kBtu[d]	4,117,~~181~~290 kWh[e]	~~545,069~~ 1,514,802[d,f] gallons
Marketplace Commercial Entertainment District[g] (140,000 sf)	348,600 kBtu	1,636,600 kWh	293,761 gallons[h]
Total Increase	~~887,148~~ 4,764,850 kBtu	4,223,~~230~~339 kWh	~~687,247~~ 765,156 gallons

[a] Based on actual and estimated natural gas usage from 2015-2016.
[b] Based on average electricity usage from 2012-2015.
[c] Based on actual and estimated fuel usage from 2014-2016 operations and visitor vehicle trips.
[d] Estimate assumes a conservative ~~five~~ 41 percent increase in demand from buildings and maintenance equipment based on the extended operating season.
[e] Electricity demand is based on a 269 percent increase in allowed large rides on the site (currently 13 large rides vs. proposed 35 large rides) and a corresponding increase in electricity demand from current average usage.
[f] Fuel demand from visitors and employees is based on 28,352 daily vehicle miles, multiplied by 365 days/year = ~~10,348,400~~ 33,970,344 annual VMT divided by 23.2 average vehicle efficiency miles/gallon = ~~446,052~~ 1,464,239 gallons/year.
[g] Electricity and natural gas demand based upon a commercial strip center use. See EIR Appendix D.
[h] Fuel demand is based on 18,663 daily vehicle miles, multiplied by 365 days/year = 6,815,262 estimated annual VMT, divided by 23.2 miles per gallon. See EIR Appendix D.

Development allowed by the proposed project would result in ~~at least~~ an approximate increase of on-site annual electricity demand ~~on the site by~~ of approximately 4.2 GWh and natural gas demand by ~~0.887~~ 4.76 MMBtu. Gasoline demand would increase by~~, at minimum, nearly 687,247~~ approximately 765,156 gallons per year.

Page 187 Section 3.12.3.3 Energy Impacts of the Proposed Project, Natural Gas; **REVISE** the first sentence of the paragraph as follows:

Buildout of the Master Plan would increase annual natural gas demand at the Theme Park by ~~887,148~~ 4,764,850 kBtu per year.

Page 187 Section 3.12.3.3 Energy Impacts of the Proposed Project, Gasoline; **REVISE** the paragraph as follows:

As described in Section 3.2, *Transportation*, the proposed new rides and attractions are not anticipated to substantially increase the maximum daily vehicles trips to the Theme Park. Daily operation of the park; however, would increase gasoline demand from visitors traveling to the park throughout the year and an increase in fuel use from maintenance equipment. Gasoline use from visitors to the Theme Park and increased maintenance activities would increase annual gasoline use ~~to 545,069~~ by 471,395 gallons. New vehicle trips would also be generated by the 140,000 s.f. *Marketplace* commercial/entertainment district. Vehicle trips associated with full build-out of the *Marketplace* would increase annual gasoline demand by up to 293,761 gallons per year (assuming it is operational 365 days/year). The net increase in gasoline use from the project, therefore, would be approximately ~~687,247~~ 765,156 gallons annually. Statewide gasoline consumption is projected to decrease to 12.7 billion gallons per year by the year 2022 due to improving vehicle efficiency and use of alternatively-fueled vehicles. Statewide gasoline demand would be met by anticipated supplies, and the City would require the project to incorporate a transportation demand management (TDM) program that reduces vehicle miles traveled (VMT) by at least five percent. TDM measures may include transit passes for employees, increased bicycle storage facilities, and participation in local shuttle services. Therefore, the project includes measures to minimize wasteful use of gasoline and would not increase demand substantially in relation to projected supplies. **(Less Than Significant Impact)**

Page 192 Section 3.13.1.1 Existing On-Site GHG Emissions; **REVISE** Table 3.13-1 as shown below:

Table 3.13-1 (REVISED)
Existing GHG Emissions Estimate

Source	Existing CO_2e (metric tons/year)
Transportation	~~3,732.98~~ 9,253.59
Energy	~~1,025.02~~ 842.04
Stationary	26.83
Offroad	372.66
Area Sources[1]	< 0.1
Water & Wastewater	~~4.38~~ 166.30
Solid Waste	~~136.39~~ 765.92
Total	~~4,899~~ 11,427.34[2]

Note: [1]Area Sources include relatively small quantities of emissions, such as from lawn maintenance equipment.
[2]Existing CO_2e estimates were calculated using CalEEMod based on existing average data provided by California's Great America ~~energy use for the Theme Park~~. See EIR Appendix D.

Page 197 Section 3.13.3.2 Operational Greenhouse Gas Emissions (Long Term Emissions); **REVISE** Table 3.13-2 as shown below:

Table 3.13-2 (REVISED)
Project GHG Emissions

Source	CO_2e Emissions (metric tons/year)		
	Existing	**Proposed**	**Net Increase**
Transportation	~~3,732.98~~ 9,253.59	~~6,608.15~~ 16,105.84	~~2,875.17~~ 6,852.25
Energy	~~1,025.02~~ 842.04	~~1,259.7~~ 1,725.13	~~234.68~~ 883.09
Stationary	26.83	42.11	15.28
Offroad	372.66	507.29	134.63
Area Sources[1]	< 0.1	< 0.1	< 0.1
Water & Wastewater	~~4.38~~ 166.30	~~71.25~~ 256.04	~~66.87~~ 89.74
Solid Waste	~~136.39~~ 765.92	~~172.13~~ 1,146.60	~~35.74~~ 380.68
Total Emissions[2]	~~4,899~~ 11,427.34	~~8,111.23~~ 19,783.01	~~3,212.5~~ 8,355.67

Note: [1]Area Sources include relatively small quantities of emissions, such as from lawn maintenance equipment.
[2]CO_2e estimates were calculated using CalEEMod based on projected energy use for the Theme Park and Marketplace. See EIR Appendix D.

Page 214 Section 9.0 References; **INSERT** the air quality memo to the references list:

Illingworth & Rodkin, Inc. *Air Pollutant and Greenhouse Gas Emissions Memo*. December 21, 2016.

Page 218 Section 10.0 Lead Agency and Consultants; **INSERT** the text shown below following Hexagon Transportation Consultants:

Illingworth & Rodkin, Inc.
Air Quality Consultants
James A. Reyff, Principal

Appendix A **INSERT** Appendix A-2, following the Transportation Impact Analysis (Appendix A-1).

Appendix D **REPLACE** Appendices D-1 through D-3 with the Air Pollutant and Greenhouse Gas Emissions Memo.

SECTION 5.0 COPIES OF THE COMMENT LETTERS RECEIVED ON THE DRAFT EIR

The original comment letters received on the Draft EIR are provided on the following pages.

County of Santa Clara

Parks and Recreation Department

298 Garden Hill Drive
Los Gatos, California 95032-7669
(408) 355-2200 FAX 355-2290
Reservations (408) 355-2201
www.parkhere.org

18 October 2016

Jeff Schwilk
City of Santa Clara
Planning Division
1500 Warburton Avenue
Santa Clara, CA 95050

Subject: Notice of Availability for Public Review of an Draft Environmental Impact Report for Great America Theme Park Master Plan Project

The County of Santa Clara Parks and Recreation Department (the Department) has reviewed the Draft Environmental Impact Report (DEIR) to rezone Great America Theme Park (APNs 104-42-014 and 104-42-019) from Thoroughfare Commercial (CT) to Planned Development (PD). The Great America Theme Park Master Plan Project including the rezoning would continue to allow existing attractions and operating practices and would provide flexibility to allow: the installation of new rides, replacement of aging rides and attractions, extension of the operating season, modified operating practices, and additional hours of operation of the Great America theme park and amphitheater.

8 April 2016, the Department submitted comments in reference to subject: Notice of Preparation of an Environmental Impact Report to rezone the Great America Theme Park from Thoroughfare Commercial to Planned Development for a Park Master Plan. Those Department comments still stand.

The Trails Element of the Parks and Recreation Chapter of the 1995 County of Santa Clara General Plan indicates two planned trail routes within the immediate vicinity of the project area. Per the *Countywide Trails Master Plan Update*, Connector Trail Route C4 (*Hetch - Hetchy Trail*) intersects and runs adjacent to APN 104-42-014, while and Connector Trail Route C5 (*San Tomas Aquino Trail*) runs adjacent to APN 104-42-019.

The Great America Theme Park Master Plan (GAMP) categorizes the property into four zones, with proposed new development primarily occurring in Zone 1. The Hetch-Hetchy (C4) and San Tomas Aquino (C5) Trails bound Zones 1, 3, and 4. While both trails exist within a highly developed area, there is a potential for adversely negative impacts to the current visual and aesthetic views from the trails, specifically the San

Tomas Aquino Trail. *"At the street level, existing views of Great America and its rides and attractions are intermittent and obscured by trees, landscape berms, and the built environment."* The Department recommends that any large mature trees removed during construction be replaced in accordance with City of Santa Clara 2010 – 2035 General Plan policies and guidance. The DEIR also identifies that noise generated by construction activities at the project site will have a significant impact to the environment (Impact NV-6). The Department suggests placing signage at the entrance of the San Tomas Aquino Trail notifying users of the construction activity.

Per County of Santa Clara General Plan policies adopted by the County Board of Supervisors, on lands lying along a trail route designated in the *Countrywide Trails Master Plan* where a proposal is made that would result in a change in land use, including a subdivision, a request for a trail easement can be made. In determining whether a dedication is appropriate, the Department must consider the "nexus" or connection between the proposed project and the nature and extent of a trails dedication on a case by case basis. The dedication of an easement for public trail purposes needs to show a logical connection between or service to the trail from the development.

The Hetch-Hetchy Connector Trail (C4) current alignment and right-of-way corridor runs through the parking lots and along the north side of the Great America Theme Park (APN 104-42-014). Countywide trails offer opportunities for non-motorized connections to nearby parks, trails, open space areas, and other recreational opportunities such as the Levi's Stadium and Great America Theme Park. Implementation of the GAMP will directly influence the alignment of this trail. The Department recommends that the Applicant consider a voluntary trail easement for the Hetch-Hetchy Connector Trail that would provide for safe, public recreation use and an alternate transportation mode for emergency/utility access that would be a value-added amenity. A voluntary dedication of an easement within the property during the planning and permitting phase would also represent a step towards the completion of a long-term vision in the completion of a Countywide trails system. The Department would be happy to work with the Applicant and the County Planning Office to identify the ideal location for the voluntary trail easement to be dedicated by the Applicant.

Defensible space is an area around a structure where vegetation is treated, cleared or reduced to slow the spread of wildfires towards the structure and to provide room for emergency services to safely fight fires and protect homes. Currently, the San Tomas Aquino Trail maintains a defensible space from adjacent properties, including Great America Theme Park. Construction ground disturbance may adversely impact this space. The Department recommends the Applicant consider encroachment of defensible space between the trail and park when planning for new development, specifically in Zone 1, 3, and 4. The Department also recommends that the San Tomas Aquino trail be included in the Stormwater Pollution Prevention Plan (SWPPP) and any mitigation activities related to construction ground disturbance.

Subject: Notice of Availability for Public Review of an Draft Environmental Impact Report for Great America Theme Park Master Plan Project
18 October 2016

The land use designation change and the GAMP will impact the Trails Element of the Parks and Recreation Chapter of the 1995 General Plan. Please use the County of Santa Clara Parks and Recreation Planning Team as a resource to ensure compliance with Trails Element of the Parks and Recreation Chapter of the 1995 County of Santa Clara General Plan.

The Recreation Department appreciates the opportunity to provide comments. If you should have any questions or concerns, please contact me, commercial 408.355.2228 or by email Cherise.Orange@prk.sccgov.org.

Sincerely,

Cherise Orange
Cherise Orange
Associate Planner

cc. Annie Thomson, Principal Planner

NORMAN Y. MINETA
SAN JOSE
INTERNATIONAL
AIRPORT

SILICON VALLEY'S AIRPORT

November 1, 2016

Mr. Jeff Schwilk
City of Santa Clara Planning Division
1500 Warburton Avenue
Santa Clara, CA 95050

Subject: **Draft EIR for Great America Theme Park Master Plan Project (File No. CEQ2016-01007)**

Dear Jeff:

The City of San Jose Airport Department has reviewed the aviation-related sections of the subject Draft EIR. We have no major concerns with the analyses presented, but have identified the following specific text revisions to improve the accuracy of the information.

1. **Page 43 - Subsection 2.1.4 (CLUP for San Jose International Airport):**

   The "Consistency" paragraph should be updated to cite the ALUC's 9/28/16 hearing and action on the project (as partially presented on Page 56).

2. **Page 56 - Subsection 3.1.2.2 (Consistency with Land Use Plans):**

   The 2nd paragraph under "Airport Land Use Compatibility" is not fully correct. In the 1st sentence, the FAR Part 77 notification surface actually goes over the project site at an elevation ranging from approximately 135-175 feet above mean sea level (or, depending on actual ground elevation, roughly 110 feet above ground at the southerly end of the site to 160 feet above ground at the northerly end of the site). The 2nd & 3rd sentences should add the ALUC standard condition that an avigation easement over the project site be granted to the City of San Jose (as Airport operator).

3. **Page 168 - Subsection 3.10.1.3 (Other Hazards):**

   The 3rd & 4th sentences of the paragraph are incorrect and should be deleted (there is no existing avigation easement over the project site).

4. **Page 171 - Subsection 3.10.2.4 (Airport Safety Hazards):**

   In the 2nd paragraph, the 1st sentence is incorrect. See Comment 2 above.

If your office or the EIR consultant has any questions regarding the above comments, please contact me at 408-392-3623 or cgreene@sjc.org. Please also provide the San Jose Airport Department a copy of any further DEIR or Final EIR document when available.

Sincerely,

Cary Greene

Cary Greene
Airport Planner

County of Santa Clara
Roads and Airports Department

101 Skyport Drive
San Jose, California 95110-1302
1-408-573-2400

November 17, 2016

Jeff Schwilk
Associate Planner
City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050

SUBJECT: Notice of Availability of Draft Environmental Impact Report
Great America Theme Park Master Plan Project

Dear Mr. Schwilk:

The County of Santa Clara Roads and Airports Department appreciates the opportunity to review to the Draft Environmental Impact Report (DEIR) for the subject project and is submitting the following comments.

- The intersection level of service (LOS) analysis for Montague Expressway at Mission Boulevard does not reflect appropriate signal timing settings leading to better LOS. As indicated in our comment letter dated April 1, 2016 on the NOP, the traffic analysis should be conducted using County signal timing for County study intersections. Please contact Ananth Prasad at (408) 494-1342 or Ananth.Prasad@rda.sccgov.org for this information.
- Analysis should be revised to reflect the correct information and if it results in impacts, mitigation measures should be identified. The preliminary Comprehensive County Expressway Planning Study – 2040 project list should be consulted for a list of mitigation measures for significant impacts to the expressways. Should the preliminary Expressway Plan 2040 project list not include an improvement that would mitigate a significant impact, the TIA should identify mitigation measures that would address the significant impact. Mitigation measures listed in the TIA should be incorporated into the EIR document.
- Santa Clara County Roads and Airports Encroachment Permit is required prior to any work performed in the County Maintained Road Right of Way.

If you have any questions or concerns about these comments, please contact me at (408) 573-2462 or aruna.bodduna@rda.sccgov.org.

Sincerely,

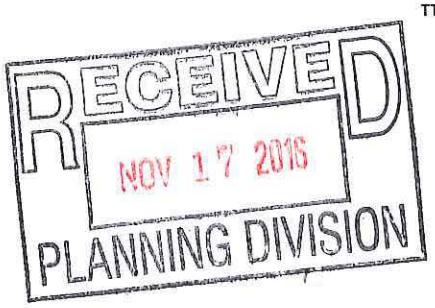
Aruna Bodduna
Associate Transportation Planner

cc: MA, AP, DSC

San Francisco
Water Power Sewer
Operator of the Hetch Hetchy Regional Water System

525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102
T 415.554.3155
F 415.554.3161
TTY 415.554.3488

November 17, 2016



Mr. Jeff Schwilk, Associate Planner
City of Santa Clara - Planning Division
1500 Warburton Avenue
Santa Clara, CA 95050

Emailed to: jschwilk@santaclaraca.gov

Re: Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR)

Dear Mr. Schwilk:

Thank you for the Notice of Availability and for this opportunity to comment on the Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR). The San Francisco Public Utilities Commission (SFPUC) provides the following general comments below and specific comments in the attached table to be addressed in the final EIR.

General DEIR Comments

The SFPUC previously sent a letter on April 18, 2016 providing comments as requested in the Notice of Preparation for the proposed project DEIR. For your reference, I am attaching that letter.

That letter included a general description of SFPUC land ownership for utility operations within the project area. The SFPUC requests that the lead agency accurately reflect the City and County of San Francisco's land ownership (San Francisco Property) throughout the final EIR. Currently, the DEIR mentions the right-of-way but it does not describe the ownership accurately. The DEIR "Project Location" section describes the entire project location ownership as follows: "The entire site, including the parking lot, is owned by the Successor Agency to the Redevelopment Agency..." This is incorrect and the final EIR should be updated to indicate that the strip of land separating the Great America Theme Park from the surface parking lot is owned by the City and County of San Francisco and not by the Successor Agency to the Redevelopment Agency.

The EIR should also clarify that the San Francisco Property's primary use is for utility purposes to provide water throughout the SFPUC's Hetch Hetchy Regional Water System. This information should be included in the DEIR "Existing Land Use" discussion in Section 3.1 (Land Uses). In addition, The

SFPUC has policies that limit third-party uses and improvements on San Francisco Property. Please see the attached Interim Water Pipeline ROW Use Policy and Integrated Vegetation Management Policy for more information about restrictions on the ROW. The SFPUC would like to underscore that the San Francisco Property may not be used to "*...fulfill another jurisdiction's open space, setback, parking, or third-party development requirements...*"[i] This prohibition also includes emergency access or other requirements. Any proposed use or improvement on the SFPUC ROW must: 1.) comply with current SFPUC policies; 2.) be vetted through the SFPUC's Project Review process (see below for more information); and 3.) be formally authorized by the SFPUC.

Please see the attached table for specific SFPUC comments about the DEIR.

SFPUC Project Review Process

Proposed projects and other activities on any San Francisco Property must undergo the Project Review Process if the project will include: construction; digging or earth moving; clearing; installation; the use of hazardous materials; other disturbance to watershed and ROW resources; or the issuance of new or revised leases, licenses and permits. This review is done by the SFPUC's Project Review Committee (Committee).

The Project Review Committee is a multidisciplinary team with expertise in natural resources management, environmental regulatory compliance, engineering, water quality and real estate. Projects and activities are reviewed by the Committee for:

1. Conformity with the Alameda and Peninsula Watershed Management Plans;
2. Consistency with our Environmental Stewardship Policy, Real Estate Guidelines, Interim ROW Use Policy and other policies and best management practices; and
3. Compliance with the California Environmental Quality Act (CEQA) and environmental regulations including mitigation, monitoring and reporting plans.

In reviewing a proposed project, the Project Review Committee may conclude that modifications or avoidance and minimization measures are necessary. Large and/or complex projects may require several project review sessions to review the project at significant planning and design stages.

Please notify all property owners and/or developers that, to the extent their proposals will involve the development or use of the San Francisco Property, such proposals are first subject to the SFPUC's Project Review Process. The proposal must first be vetted in Project Review, and then the project sponsor must receive authorization from the SFPUC pursuant to a final executed lease

or revocable license before they can use or make any changes to the SFPUC ROW. To initiate the Project Review process, a project sponsor must download and fill out a Project Review application at http://www.sfwater.org/ProjectReview and return the completed application to Jonathan S. Mendoza at jsmendoza@sfwater.org.

If you have any questions or need further information, please contact Jonathan S. Mendoza, Land and Resources Planner, in the SFPUC's Natural Resources and Lands Management Division at jsmendoza@sfwater.org.

Sincerely,

Tim Ramirez, Division Manager
Natural Resources and Lands Management

Attachments: 1.) Table 1. Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR) - SFPUC Comments
2.) April 18, 2016 SFPUC Letter - Notice of Preparation of an Environmental Impact Report for the Great America Theme Park Master Plan Project
3.) SFPUC Interim Water Pipeline ROW Use Policy
4.) ROW Integrated Vegetation Management Policy

C: *SFPUC / Natural Resources and Lands Management Division (NRLMD):*
Ellen Natesan, Planning and Regulatory Compliance Manager
Neal Fujita, Alameda Watershed Manager
Joanne Wilson, Senior Land and Resources Planner
Jonathan Mendoza, Land and Resources Planner

SFPUC / Real Estate Services (RES):
Rosanna Russell, Real Estate Director
Dina Brasil, Principal Administrative Analyst
Christopher Wong, Principal Administrative Analyst
Janice Levy, Administrative Analyst

SFPUC / Water Supply and Treatment Division (WSTD):
Chris Nelson, Division Manager
Jonathan Chow, Principal Engineer
Stacie Feng, Associate Engineer
Tracy Leung, Associate Engineer

SFPUC / Water Resources Division (WRD):
Paula Kehoe, Director of Water Resources
Fan Lau, Regulatory Specialist

SFPUC / Bureau of Environmental Management (BEM):
Irina Torrey, Bureau Manager
Angela Yu, Consultant

[i] SFPUC Real Estate Guidelines, Section 2.0 Land Use.

Table 1. Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR) - SFPUC Comments

Comment Number	Draft EIR Document Page Number	Section Number and Title	Beginning Text of Paragraph	Table or Figure Number	Comment
1	N/A	General Comment	N/A	N/A	Change "Hetch Hetchy right-of-way" to "SFPUC right-of-way."
2	5	Summary Description of the Proposed Project	Cedar Fair proposes a Master Planned Development (PD) Zoning covering the 112-acre Great America Theme Park site, that continues to allow existing attractions and operating practices and allows for future (20 years) proposed new attractions and practices. An additional approximately 55 acres of surface parking (167-acre total site) would continue to be provided north of the park entrance from the Hetch Hetchy right-of-way north to Tasman Drive.	N/A	Add the following text: "The City and County of San Francisco (San Francisco), through the San Francisco Public Utilities Commission (SFPUC), owns approximately four (4) acres of real property in fee in Santa Clara (San Francisco Property) that crosses the project location as an 80-foot wide right-of-way (ROW). The SFPUC ROW traverses the project location in an east-to-west alignment directly north of the park entrance. The San Francisco Property's primary purpose is to serve as a utility corridor which is improved by two large subsurface water transmission lines and other appurtenances." Note: This right-of-way is NOT an easement.

Table 1. Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR) - SFPUC Comments

Comment Number	Draft EIR Document Page Number	Section Number and Title	Beginning Text of Paragraph	Table or Figure Number	Comment
3	27	1.2 Project Location	The proposed project is located at 4701 Great America Parkway in Santa Clara. The project site includes two parcels, APNs 104-42-008, -014, and -019, with a combined area of approximately 112 acres.	N/A	The City and County of San Francisco owns Assessor Parcel Number 104-43-004 in fee. This property does not belong to the Successor Agency to the Redevelopment Agency. Cedar Fair occupies the San Francisco property pursuant to an expired ground lease. Add the following text: "Assessor Parcel Number 104-43-004 is the 80-foot wide SFPUC right-of-way and accounts for approximately 4 acres of real property (San Francisco Property) in the proposed project location. The right-of-way is owned in fee by the City and County of San Francisco through its SFPUC."
4	29	1.3.3 Stadium Parking Agreement	General Comment	N/A	The San Francisco Property cannot be used to satisfy parking requirements. Any proposed use of the SFPUC right-of-way must: 1.) comply with current SFPUC policies; 2.) be vetted through the SFPUC's Project Review process; and 3.) be formally authorized by the SFPUC.

Table 1. Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR) - SFPUC Comments

Comment Number	Draft EIR Document Page Number	Section Number and Title	Beginning Text of Paragraph	Table or Figure Number	Comment
5	31	1.4.3 Site Access and Parking	General Comment	N/A	The San Francisco Property cannot be used to satisfy parking requirements. Any proposed use of the SFPUC right-of-way must: 1.) comply with current SFPUC policies; 2.) be vetted through the SFPUC's Project Review process; and 3.) be formally authorized by the SFPUC.
6	31	1.4.2 Building Heights and Setbacks	Footnote 5: Minimum setbacks are identified from adjacent property lines with the exception of the northern setback in Zone 1 which is identified from the northern edge of the zone.	Table 1.4-3 Building Heights and Setbacks by Zone	Please clarify how the "Zone 1" northern edge of zone differs from the San Francisco Property (APN 104-43-004) southern boundary. Does this increase the setback to more than 10 feet? The SFPUC recommends that the minimum setback be increased from the San Francisco Property boundary to reduce the potential for undermining the structural integrity of the proposed Zone 1 developments in the event of a large pipeline leak or breach. In the event of a planned or emergency pipeline repair, the SFPUC may need additional space for heavy equipment (e.g. cranes).
7	31	1.4.3 Site Access and Parking	N/A	Figure 1.3-3	Figure 1.3-3 does not exist.

Table 1. Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR) - SFPUC Comments

Comment Number	Draft EIR Document Page Number	Section Number and Title	Beginning Text of Paragraph	Table or Figure Number	Comment
8	31	1.4.3 Site Access and Parking	The project will maintain a minimum of 6,500 parking spaces in the main parking lot as part of the existing ground lease with the City. Employee parking in Zone 4 will continue to be provided with a minimum of 600 parking spaces. An additional 327 parking spaces are provided on the site under a separate lease.	N/A	Clarify where the additional 327 parking spaces are located. The San Francisco Property cannot be used to satisfy parking requirements. Any proposed use of the SFPUC right-of-way must: 1.) comply with current SFPUC policies; 2.) be vetted through the SFPUC's Project Review process; and 3.) be formally authorized by the SFPUC.

Table 1. Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR) - SFPUC Comments

Comment Number	Draft EIR Document Page Number	Section Number and Title	Beginning Text of Paragraph	Table or Figure Number	Comment
9	54	3.1.1.1 Existing Land Use	The approximately 112-acre project site is comprised of two parcels located on the east side of Great America Parkway, between Mission College Boulevard and Tasman Drive, in the northern portion of the City of Santa Clara.	N/A	This section should include a description of the SFPUC's ROW as part of the existing land uses and development. Add the following text to this section: "The City and County of San Francisco (San Francisco), through the San Francisco Public Utilities Commission (SFPUC), owns approximately four (4) acres of real property in fee in Santa Clara (San Francisco Property) that crosses the project location as an 80-foot wide right-of-way (ROW). The SFPUC ROW traverses the project location in an east-to-west alignment directly north of the park entrance. The San Francisco Property's primary purpose is to serve as a utility corridor which is improved by two large subsurface water transmission lines and other appurtenances." Note: This right-of-way is NOT an easement.

Table 1. Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR) - SFPUC Comments

Comment Number	Draft EIR Document Page Number	Section Number and Title	Beginning Text of Paragraph	Table or Figure Number	Comment
10	55-58	3.1.2 Land Use Impacts	General Comment	N/A	The SFPUC has adopted land use policies for its ROW. One of the DEIR thresholds includes analyzing the project for any "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..." The SFPUC policies are in place to avoid any potential impacts to SFPUC infrastructure and/or water customers. The proposal may potentially conflict with SFPUC land use policies so the proposal should be analyzed in the DEIR with relation to the SFPUC's existing ROW policies. A project proposal may not use the SFPUC ROW to fulfill another jurisdiction's open space, setback, parking, emergency access or other development requirements.
11	61	3.2.1 Existing Setting (Transportation)	N/A	Figure 3.2-1 Roadway Network and Study Intersections	Map labels are unintelligible.

Table 1. Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR) - SFPUC Comments

Comment Number	Draft EIR Document Page Number	Section Number and Title	Beginning Text of Paragraph	Table or Figure Number	Comment
12	63	3.2.1.3 Existing Bicycle and Pedestrian Facilities	N/A	Figure 3.2-2 Existing Bicycle Facilities	Some map labels are unintelligible.
13	173	3.11 Utilities and Service Systems	"Water service to the site..."	N/A	The DEIR briefly references the SFPUC as a wholesale water supplier. The City of Santa Clara receives wholesale water service from the SFPUC, but is considered a temporary, interruptible customer. By the end of 2018, the SFPUC will decide whether or not to make the City of Santa Clara a permanent customer. Thus, although the increased demands associated with the proposed project are relatively small, it is recommended that the EIR acknowledge this uncertainty with the City of Santa Clara's water supply.

San Francisco
Water Power Sewer
Operator of the Hetch Hetchy Regional Water System

525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102
T 415.554.3155
F 415.554.3161
TTY 415.554.3488

April 18, 2016

Mr. Jeff Schwilk, AICP
City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050

Re: Notice of Preparation of an Environmental Impact Report for the Great America Theme Park Master Plan Project

Dear Mr. Schwilk:

Thank you for the Notice of Preparation (NOP) and for this opportunity to comment on the scope of the Environmental Impact Report (EIR) for the Great America Theme Park Master Plan Project (Project). On behalf of the San Francisco Public Utilities Commission (SFPUC), I provide the following revised general comments to be discussed in the EIR. This letter supersedes the previous letter dated April 11, 2016.

Background and General Comments

The San Francisco Public Utilities Commission (SFPUC) manages 63,000 acres of watershed land and 210 miles of pipeline right-of-way (ROW) in three Bay Area counties that are part of a regional system providing water to approximately 2.6 million people. The SFPUC monitors and protects its lands by reviewing proposed projects and activities on or that affect SFPUC lands for consistency with SFPUC policies and plans.

The City and County of San Francisco (San Francisco), through the SFPUC, owns approximately 3.95 acres of real property **in fee** in Santa Clara (San Francisco Property) that crosses the Great America Theme Park as an 80-foot wide ROW. The San Francisco Property serves as a utility corridor improved by two large subsurface water transmission lines and other appurtenances, linking the Hetch Hetchy Reservoir to the SFPUC regional water system.

Pursuant to the 1950 deed whereby San Francisco acquired the San Francisco Property, San Francisco also acquired certain ancillary easement rights across the adjacent lands now owned by the City of Santa Clara (Santa Clara) and the Successor Agency to the Santa Clara Redevelopment Agency.

Cedar Fair occupies the San Francisco Property pursuant to a long-expired ground lease dated March 22, 1999 (the Existing Lease) between San Francisco, through the SFPUC, and Cedar Fair's predecessor-in-interest: Paramount Parks, Incorporated. Although Cedar Fair and San Francisco are currently negotiating a new lease to replace the Existing Lease, such new lease does not presently contemplate any further development of the San Francisco Property and any further improvements by Cedar Fair to the San Francisco Property will require San Francisco's prior consent.

The SFPUC's primary mission is to provide water, power, and sewer utility services. The primary use of the San Francisco Property is to support our utility infrastructure. There are several appurtenance structures inside the San Francisco Property that require routine maintenance. The exclusive San Francisco ROW provides greater flexibility in operating the transmission system in the present time and in the future. Any development in or on the ROW could reduce our operational flexibility and increase operating cost for our rate payers. The SFPUC requires unrestricted access to the San Francisco Property to ensure timely completion of both routine and emergency maintenance on our high-pressure water pipelines. Because of the critical role of the SFPUC's water transmission system, the SFPUC is compelled to preserve its existing real property rights in its ROW and oppose any development that could impede its mission to provide water to millions of people in the San Francisco Bay Area.

To ensure the SFPUC's access and use of its ROW, our Commission has adopted land use policies that heavily restrict the scope of use of the San Francisco Property by third parties. Any proposed project on the San Francisco Property must participate in and complete the SFPUC's Project Review process (as described in the next section) to ensure that the any proposed use or project conforms to the SFPUC land use policies.

To the extent Cedar Fair proposes redevelopment adjacent to San Francisco Property, the SFPUC draws the City of Santa Clara's attention to a SFPUC Commission land use policy that prohibits any use on the San Francisco Property to fulfill another jurisdiction's open space, setback, parking, or third-party development requirements. This means Cedar Fair cannot incorporate the San Francisco Property to meet the requirements of any project requiring approval by the City of Santa Clara.

Moreover, the SFPUC disallows any use that:

- makes the San Francisco Property the sole emergency access to a neighboring property;
- creates a regulatory compliance issue;
- includes installation of structures, trees, or large shrubs on the San Francisco Property;

- includes the installation of utilities, roads, fences, or other improvements parallel to, rather than across, SFPUC pipelines or electric transmission lines;
- includes the San Francisco Property as part of a transit-oriented development plan, dedicated rapid transit lane, or transit corridor;
- would increase the SFPUC's potential liability or diminish the security of the SFPUC's utility infrastructure;
- risks contamination of our land or water with hazardous materials;
- provides aerial utility crossing or overhead transmission lines within the San Francisco Property or watershed;
- cannot be removed promptly to allow SFPUC construction; maintenance or emergency repairs of its facilities; and
- is inconsistent with any existing or future SFPUC policies, as they may be amended or modified from time to time.

Cedar Fair seeks to enter into a new lease for use of the San Francisco Property for parking, access, and circulation. Should such lease be finalized, approved, and executed, the SFPUC will approve use of supplemental parking for Cedar Fair, but will retain rights to disallow or approve any improvements to the San Francisco Property. Under no circumstances should the City of Santa Clara or Cedar Fair incorporate or designate any leased parking on the San Francisco Property as parking required to obtain any entitlement from Santa Clara.

Specific Comments

Here are our preliminary comments regarding the Cedar Fair proposal that should be included and/or discussed in the EIR:

1. Because a portion of our pipeline runs through the San Francisco Property, we must preserve our ability to access at all times the San Francisco Property surface for pipeline installation, maintenance, and repair.
2. The SFPUC does not permit trees or large shrubs on its ROW property. Any landscape plans must adhere to the SFPUC's Integrated Vegetation Management Policy, Section 12.005, at: http://www.sfwater.org/index.aspx?page=431.
3. No utilities may be installed along, rather than across, the San Francisco Property. Only perpendicular crossings are permitted. No aerial utility crossing over the SFPUC Property is permitted.
4. No use is permitted that would restrict access to San Francisco Property at any time by SFPUC staff, construction equipment, or vehicles. In no event will the SFPUC allow the San Francisco Property to be the sole point of ingress and egress or emergency access between the adjacent parcels.
5. In any EIR or other documents that are prepared in connection with the proposed Cedar Fair development, the San Francisco Property should

be described as owned in fee by San Francisco (and **not** as an easement).

6. The EIR should discuss where any temporary construction staging areas will be located.
7. The EIR should discuss changes in drainage that may impact the San Francisco Property. Water should drain away from the San Francisco Property.

By acknowledging the application filing, the SFPUC retains the right to provide further comments on the application and the proposed development and does not waive any right it may have to object to the proposed development.

SFPUC NRLMD Project Review Process

Projects and other activities on the SFPUC ROW (as well as on other SFPUC lands in Alameda, Santa Clara, and San Mateo counties) must undergo NRLMD Project Review if the project will include: construction; digging or earth moving; clearing; installation; the use of hazardous materials; other disturbance to watershed and ROW resources; or the issuance of new or revised leases, licenses and permits. This review is done by the SFPUC's Project Review Committee (Committee).

The Project Review Committee is a multidisciplinary team with expertise in natural resources management, environmental regulatory compliance, engineering, water quality and real estate. Projects and activities are reviewed by the Committee for:

1. Conformity with the Alameda and Peninsula Watershed Management Plans;
2. Consistency with our Environmental Stewardship Policy, Real Estate Guidelines, Interim ROW Use Policy and other policies and best management practices; and
3. Compliance with the California Environmental Quality Act (CEQA) and environmental regulations including mitigation, monitoring and reporting plans.

In reviewing a proposed project, the Project Review Committee may conclude that modifications or avoidance and minimization measures are necessary. Large and/or complex projects may require several project review sessions to review the project at significant planning and design stages.

Please notify Cedar Fair that to the extent its proposals will involve the development or increased uses of the SFPUC ROW, such proposals are first subject to the SFPUC's Project Review Committee. Cedar Fair must first have the project vetted in Project Review, and then it must receive authorization from the SFPUC pursuant to a final executed lease before it can make any changes to the SFPUC ROW. To initiate the Project Review process, Cedar Fair must download and fill out a Project Review application at http://www.sfwater.org/ProjectReview and return the completed application to Jonathan Mendoza at jsmendoza@sfwater.org.

If you have any questions or need further information, please contact Jonathan Mendoza, Land and Resources Planner in the SFPUC's Natural Resources and Lands Management Division at jsmendoza@sfwater.org or (650) 652-3215.

Sincerely,

Steven R. Ritchie
Assistant General Manager, Water

C: *SFPUC / Natural Resources and Lands Management Division:*
Tim Ramirez, Division Manager
Ellen Natesan, Planning and Regulatory Compliance Manager
Joe Naras, Peninsula Watershed Manager
Jane Herman, ROW Manager
Joanne Wilson, Senior Land and Resources Planner
Jonathan Mendoza, Land and Resources Planner

SFPUC / Real Estate Services (RES):
Rosanna Russell, Real Estate Director
Dina Brasil, Principal Administrative Analyst

SFPUC / Water Supply and Treatment Division (WSTD):
Chris Nelson, Division Manager
Jonathan Chow, Principal Engineer
Stacie Feng, Associate Engineer

SFPUC / Bureau of Environmental Management (BEM)
Irina Torrey, Bureau Manager
Sally Morgan, Environmental Planner

Hetch Hetchy
Regional Water System
Services of the San Francisco Public Utilities Commission

SFPUC Interim Water Pipeline Right of Way Use Policy for San Mateo, Santa Clara, and Alameda Counties

Approved January 13, 2015

by

SFPUC Resolution No. 15-0014

as an amendment to the SFPUC Real Estate Guidelines

SFPUC Water Pipeline Right of Way Use Policy for San Mateo, Santa Clara, and Alameda Counties

As part of its utility system, the San Francisco Public Utilities Commission (SFPUC) operates and maintains hundreds of miles of water pipelines. The SFPUC provides for public use on its water pipeline property or right of way (ROW) throughout Alameda, Santa Clara, and San Mateo counties consistent with our existing plans and policies. The following controls will help inform how and in which instances the ROW can serve the needs of third parties—including public agencies, private parties, nonprofit organizations, and developers—seeking to provide recreational and other use opportunities to local communities.

Primarily, SFPUC land is used to deliver high quality, efficient and reliable water, power, and sewer services in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to our care. The SFPUC's utmost priority is maintaining the safety and security of the pipelines that run underneath the ROW.

Through our formal Project Review and Land Use Application and Project Review process, we may permit a secondary use on the ROW if it benefits the SFPUC, is consistent with our mission and policies, and does not in any way interfere with, endanger, or damage the SFPUC's current or future operations, security or facilities.[1] No secondary use of SFPUC land is permitted without the SFPUC's consent.

These controls rely on and reference several existing SFPUC policies, which should be read when noted in the document. Being mindful of these policies while planning a proposed use and submitting an application will ease the process for both the applicant and the SFPUC. These controls are subject to change over time and additional requirements and restrictions may apply depending on the project.

The SFPUC typically issues five-year revocable licenses for use of our property, with a form of rent and insurance required upon signing.[2]

Note: The project proponent is referred to as the "Applicant" until the license agreement is signed, at which point the project proponent is referred to as the "Licensee."

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[1] SFPUC Guidelines for the Real Estate Services Division, Section 2.0.

[2] SFPUC Guidelines for the Real Estate Services Division, Section 3.3.

I. *Land Use, Structures, and Compliance with Law*

The following tenets govern the specifics of land use, structures, and accessibility for a project. Each proposal will still be subject to SFPUC approval on a case-by-case basis.

A. SFPUC Policies. The Applicant's proposed use must conform to policies approved by the SFPUC's Commission, such as the SFPUC's Land Use Framework (http://sfwater.org/index.aspx?page=586).

B. Americans with Disabilities Act Compliance. The Applicant must demonstrate that a Certified Access Specialist (CASp) has reviewed and approved its design and plans to confirm that they meet all applicable accessibility requirements.

C. Environmental Regulations. The SFPUC's issuance of a revocable license for use of the ROW is subject to compliance with the California Environmental Quality Act (CEQA). The Applicant is responsible for assessing the potential environmental impacts under CEQA of its proposed use of the ROW. The SFPUC must be named as a Responsible Agency on any CEQA document prepared for the License Area. In addition, the Applicant shall provide to SFPUC a copy of the approved CEQA document prepared by the Applicant, the certification date, and documentation of the formal approval and adoption of CEQA findings by the CEQA lead agency. The SFPUC will not issue a license for the use of the ROW until CEQA review and approval is complete.

D. Crossover and Other Reserved Rights. For a ROW parcel that bisects a third party's land, the Applicant's proposed use must not inhibit that party's ability to cross the ROW. The Applicant must demonstrate any adjoining owner with crossover or other reserved rights approves of the proposed recreational use and that the use does not impinge on any reserved rights.

E. Width. The License Area must span the entire width of the ROW.
   - *For example, the SFPUC will not allow a 10-foot wide trail license on a ROW parcel that is 60 feet wide.*

F. Structures. Structures on the ROW are generally prohibited. The Licensee shall not construct or place any structure or improvement in, on, under or about the entire License Area that requires excavation, bored footings or concrete pads that are greater than six inches deep.

   i. Structures such as benches and picnic tables that require shallow (four to six inches deep) cement pads or footings are generally permitted on the ROW. No such structure may be placed directly on top of a pipeline or within 20 feet of the edge of a pipeline.

   ii. The SFPUC will determine the permitted weight of structures on a case-by-case basis.

- *When the SFPUC performs maintenance on its pipelines, structures of significant weight and/or those that require footings deeper than six inches are very difficult and time-consuming to move and can pose a safety hazard to the pipelines. The longer it takes the SFPUC to reach the pipeline in an emergency, the more damage that can occur.*

G. Paving Materials. Permitted trails or walkways should be paved with materials that both reduce erosion and stormwater runoff (e.g., permeable pavers).

H. License Area Boundary Marking. The License Area's boundaries should be clearly marked by landscaping or fencing, with the aim to prevent encroachments.

I. Fences and Gates. Any fence along the ROW boundary must be of chain-link or wooden construction with viewing access to the ROW. The fence must include a gate that allows SFPUC access to the ROW.[3] Any gate must be of chain-link construction and at least 12 feet wide with a minimum 6-foot vertical clearance.

II. *Types of Recreational Use*

Based on our past experience and research, the SFPUC will allow simple parks without play structures, community gardens and limited trails.

A. Fulfilling an Open Space Requirement. An applicant may not use the ROW to fulfill a development's open space, setback, emergency access or other requirements.[4] In cases where a public agency has received consideration for use of SFPUC land from a third party, such as a developer, the SFPUC may allow such recreational use if the public agency applicant pays full Fair Market Rent.

B. Trail Segments. At this time, the SFPUC will consider trail proposals when a multi-jurisdictional entity presents a plan to incorporate specific ROW parcels into a fully connected trail. Licensed trail segments next to unlicensed parcels may create a trail corridor that poses liability to the SFPUC. The SFPUC will only consider trail proposals where the trail would not continue onto, or encourage entry onto, another ROW parcel without a trail and the trail otherwise meet all SFPUC license requirements.

III. *Utilities*

A. Costs. The Licensee is responsible for all costs associated with use of utilities on the License Area.

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[3] SFPUC Right of Way Requirements.

[4] SFPUC Guidelines for the Real Estate Services Division, Section 2.0.

B. Placement. No utilities may be installed on the ROW running parallel to the SFPUC's pipelines, above or below grade.[5] With SFPUC approval, utilities may run perpendicular to the pipelines.

C. Lights. The Licensee shall not install any light fixtures on the ROW that require electrical conduits running parallel to the pipelines. With SFPUC approval, conduits may run perpendicular to and/or across the pipelines.

- Any lighting shall have shielding to prevent spill over onto adjacent properties.

D. Electricity. Licensees shall purchase all electricity from the SFPUC at the SFPUC's prevailing rates for comparable types of electrical load, so long as such electricity is reasonably available for the Licensee's needs.

IV. *Vegetation*

A. The Applicant shall refer to the SFPUC Integrated Vegetation Management Policy for the *minimum* requirements concerning types of vegetation and planting. (http://www.sfwater.org/index.aspx?page=431.) The Licensee is responsible for all vegetation maintenance and removal.

B. The Applicant shall submit a Planting Plan as part of its application.

(Community garden applicants should refer to Section VII.C for separate instructions.)

i. The Planting Plan should include a layout of vegetation placement (grouped by hydrozone) and sources of irrigation, as well as a list of intended types of vegetation. The SFPUC will provide an area drawing including pipelines and facilities upon request.

ii. The Applicant shall also identify the nursery(ies) supplying plant stock and provide evidence that each nursery supplier uses techniques to reduce the risk of plant pathogens, such as Phytophthora ramorum.

V. *Measures to Promote Water Efficiency*[6]

A. The Licensee shall maintain landscaping to ensure water use efficiency.

B. The Licensee shall choose and arrange plants in a manner best suited to the site's climate, soil, sun exposure, wildfire susceptibility and other factors. Plants with similar water needs must be grouped within an area controlled by a single irrigation valve

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[5] SFPUC Land Engineering Requirements.

[6] SFPUC Rules and Regulations Governing Water Service to Customers, Section F.

C. Turf is not allowed on slopes greater than 25 percent.

D. The SFPUC encourages the use of local native plant species in order to reduce water use and promote wildlife habitat.

E. Recycled Water. Irrigation systems shall use recycled water if recycled water meeting all public health codes and standards is available and will be available for the foreseeable future.

F. Irrigation Water Runoff Prevention. For landscaped areas of any size, water runoff leaving the landscaped area due to low head drainage, overspray, broken irrigation hardware, or other similar conditions where water flows onto adjacent property, walks, roadways, parking lots, structures, or non-irrigated areas, is prohibited.

VI. *Other Requirements*

A. Financial Stability. The SFPUC requires municipalities or other established organizations with a stable fiscal history as Licensees.

   i. Applicants must also demonstrate sufficient financial backing to pay rent, maintain the License Area, and fulfill other license obligations over the license term.

B. Smaller, community-based organizations without 501(c)(3) classifications must partner with a 501(c)(3) classified organization or any other entity through which it can secure funding for the License Area over the license term. Maintenance. The Licensee must maintain the License Area in a clean and sightly condition at its sole cost.[7] Maintenance includes, but is not limited to, regular weed abatement, mowing, and removing graffiti, dumping, and trash.

C. Mitigation and Restoration. The Licensee will be responsible, at its sole cost, for removing and replacing any recreational improvements in order to accommodate planned or emergency maintenance, repairs, replacements, or projects done by or on behalf of the SFPUC. If the Licensee refuses to remove its improvements, SFPUC will remove the improvements I at the Licensee's sole expense without any obligation to replace them.

D. Encroachments. The Licensee will be solely responsible for removing any encroachments on the License Area. An encroachment is any improvement on SFPUC property not approved by the SFPUC. Please read the SFPUC ROW Encroachment Policy for specific requirements. If the Licensee fails to remove encroachments, the SFPUC will remove them at Licensee's sole expense. The Licensee must regularly patrol the License Area to spot encroachments and remove them at an early stage.

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[7] SFPUC Framework for Land Management and Use.

E. Point of Contact. The Licensee will identify a point of contact (name, position title, phone number, and address) to serve as the liaison between the Licensee, the local community, and the SFPUC regarding the License Agreement and the License Area. In the event that the point of contact changes, the Licensee shall immediately provide the SFPUC with the new contact information. Once the License Term commences, the point of contact shall inform local community members to direct any maintenance requests to him or her. In the event that local community members contact the SFPUC with such requests, the SFPUC will redirect any requests or complaints to the point of contact.

F. Community Outreach.

i. Following an initial intake conversation with the SFPUC, the Applicant shall provide a Community Outreach Plan for SFPUC approval. This Plan shall include the following information:

1. Identification of key stakeholders to whom the Applicant will contact and/or ask for input, along with their contact information;

2. A description of the Applicant's outreach strategy, tactics, and materials

3. A timeline of outreach (emails/letters mailing date, meetings, etc.); and

4. A description of how the Applicant will incorporate feedback into its proposal.

ii. The Applicant shall conduct outreach for the project at its sole cost and shall keep the SFPUC apprised of any issues arising during outreach.

iii. During outreach, the Applicant shall indicate that it in no way represents the SFPUC.

G. Signage. The SFPUC will provide, at Licensee's cost, a small sign featuring the SFPUC logo and text indicating SFPUC ownership of the License Area at each entrance. In addition, the Licensee will install, at its sole cost, an accompanying sign at each entrance to the License Area notifying visitors to contact the organization's point of contact and provide a current telephone number in case the visitors have any issues. The SFPUC must approve the design and placement of the Licensee's sign.

VII. *Community Gardens*

The following requirements also apply to community garden sites. As with all projects, the details of the operation of a particular community garden are approved on a case-by-case basis.

A. The Applicant must demonstrate stable funding. The Applicant must provide information about grants received, pending grants, and any ongoing foundational support.

B. The Applicant must have an established history and experience in managing urban agriculture or community gardening projects. Alternatively, the Applicant may demonstrate a formal partnership with an organization or agency with an established history and experience in managing urban agriculture or community gardening projects

C. During the Project Review process, the Applicant shall submit a Community Garden Planting Plan that depicts the proposed License Area with individual plot and planter box placements, landscaping, and a general list of crops that may be grown in the garden.

D. The Applicant shall designate a Garden Manager to oversee day-to-day needs and serve as a liaison between the SFPUC and garden plot holders. The Garden Manager may be distinct from the point of contact, see Section VI.E.

E. The Licensee must ensure that the Garden Manager informs plot holders about the potential for and responsibilities related to SFPUC repairs or emergency maintenance on the License Area. In such circumstances, the SFPUC is not liable for the removal and replacement of any features on the License Area or the costs associated with such removal and replacement.

F. The Licensee must conduct all gardening within planter boxes with attached bottoms that allow for easy removal without damaging the crops.

Hetch Hetchy
Regional Water System
Services of the San Francisco Public Utilities Commission

AMENDMENT TO THE

RIGHT OF WAY INTEGRATED VEGETATION MANAGEMENT POLICY

Approved January 13, 2015

by

SFPUC Resolution No. 15-0014

12.000 RIGHT OF WAY INTEGRATED VEGETATION MANAGEMENT POLICY

12.001 General

The San Francisco Public Utilities Commission ("SFPUC") is responsible for the delivery of potable water and the collection and treatment of wastewater for some 800,000 customers within the City of San Francisco; it is also responsible for the delivery of potable water to 26 other water retailers with a customer base of 1.8 million. **The following policy is established to manage vegetation on the transmission, distribution and collection systems within the SFPUC Right of Way ("ROW") so that it does not pose a threat or hazard to the system's integrity and infrastructure or impede utility maintenance and operations.**

The existence of large woody vegetation[1], hereinafter referred to as vegetation, and water transmission lines within the ROW are not compatible and, in fact, are mutually exclusive uses of the same space. Roots can impact transmission pipelines by causing corrosion. The existence of trees and other vegetation directly adjacent to pipelines makes emergency and annual maintenance very difficult, hazardous, and expensive, and increases concerns for public safety. The risk of fire within the ROW is always a concern and the reduction of fire ladder fuels within these corridors is another reason to modify the vegetation mosaic. In addition to managing vegetation in a timely manner to prevent any disruption in utility service, the SFPUC also manages vegetation on its ROW to comply with local fire ordinances enacted to protect public safety.

One of the other objectives of this policy is to reduce and eliminate as much as practicable the use of herbicides on vegetation within the ROW and to implement integrated pest management (IPM).

12.002 Woody Vegetation Management

1.0 Vegetation of any size or species will not be allowed to grow within certain critical portions of the ROW, pumping stations or other facilities as determined by a SFPUC qualified professional, and generally in accordance with the following guidelines.

1.1 Emergency Removal

SFPUC Management reserves the right to remove any vegetation without prior public notification that has been assessed by a SFPUC qualified professional as an immediate threat to transmission lines or other utility infrastructure, human life and property due to acts of God, insects, disease, or natural mortality.

1.2 Priority Removal

Vegetation that is within 15 feet of the edge of any pipe will be removed and the vegetative debris will be cut into short lengths and chipped whenever possible. Chips will be spread upon the site where the vegetation was removed. Material that cannot be chipped will be hauled away to a proper disposal site.

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[1] Woody vegetation is defined as all brush, tree and ornamental shrub species planted in (or naturally occurring in) the native soil having a woody stem that at maturity exceeds 3 inches in diameter.

If vegetation along the ROW is grouped in contiguous stands[2], or populations, a systematic and staggered removal of that vegetation will be undertaken to replicate a natural appearance. Initial removal[3] will be vegetation immediately above or within 15 feet of the pipeline edges; secondary vegetation[4] within 15 to 25 feet from pipelines will then be removed.

1.3 Standard Removal

Vegetation that is more than 25 feet from the edge of a pipeline and up to the boundary of the ROW will be assessed by a SFPUC qualified professional for its age and condition, fire risk, and potential impact to the pipelines. Based on this assessment, the vegetation will be removed or retained.

1.4 Removal Standards

Each Operating Division will develop its own set of guidelines or follow established requirements in accordance with local needs.

2.0 All stems of vegetation will be cut flush with the ground and where deemed necessary or appropriate, roots will be removed. All trees identified for removal will be clearly marked with paint and/or a numbered aluminum tag.

3.0 Sprouting species of vegetation will be treated with herbicides where practicable, adhering to provisions of Chapter 3 of the San Francisco Environment Code.

4.0 Erosion control measures, where needed, will be completed before the work crew or contractors leave the work site or before October 15 of the calendar year.

5.0 Department personnel will remove in a timely manner any and all material that has been cut for maintenance purposes within any stream channel.

6.0 All vegetation removal work and consultation on vegetation retention will be reviewed and supervised by a SFPUC qualified professional. All vegetation removal work and/or treatment will be made on a case-by-case basis by a SFPUC qualified professional.

7.0 Notification process for areas of significant resource impact that are beyond regular and ongoing maintenance:

7.1 County/City Notification – The individual Operating Division will have sent to the affected county/city a map showing the sections of the ROW which will be worked, a written description of the work to be done, the appropriate removal time for the work crews, and a contact person for more information. This should be done approximately 10 days prior to start of work. Each Operating Division will develop its own set of guidelines in accordance with local need.

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[2] A stand is defined as a community of trees possessing sufficient uniformity in composition, structure, age, arrangement, or condition to be distinguishable from adjacent forest communities to form a management unit.
[3] Initial removal is defined as the vegetation removed during the base year or first year of cutting.
[4] Secondary vegetation is defined as the vegetative growth during the second year following the base year for cutting.

7.2 Public Notification – The Operating Division will have notices posted at areas where the vegetation is to be removed with the same information as above also approximately 10 days prior to removal. Notices will also be sent to all property owners within 300 feet of the removal site. Posted notices will be 11- by 17-inches in size on colored paper and will be put up at each end of the project area and at crossover points through the ROW. Questions and complaints from the public will be handled through a designated contact person. Each Operating Division will develop its own set of guidelines in accordance with local needs.

12.003 Annual Grass and Weed Management

Annual grasses and weeds will be mowed, disked, sprayed or mulched along the ROW as appropriate to reduce vegetation and potential fire danger annually. This treatment should be completed before July 30 of each year. This date is targeted to allow the grasses, forbs and weeds to reach maturity and facilitate control for the season.

12.004 Segments of ROW that are covered by Agricultural deed rights

The only vegetation that may be planted within the ROW on those segments where an adjacent owner has Deeded Agricultural Rights will be: non-woody herbaceous plants such as grasses, flowers, bulbs, or vegetables.

12.005 Segments of ROW that are managed and maintained under a Lease or License

Special allowance may be made for these types of areas, as the vegetation will be maintained by the licensed user as per agreement with the City, and not allowed to grow unchecked. Only shallow rooted plants may be planted directly above the pipelines.

Within the above segments, the cost of vegetation maintenance and removal will be borne by the tenant or licensee exclusively. In a like fashion, when new vegetative encroachments are discovered they will be assessed by a SFPUC qualified professional on a case-by-case basis and either be permitted or proposed for removal.

The following is a guideline for the size at maturity of plants (small trees, shrubs, and groundcover) that may be permitted to be used as landscape materials. Note: All distance measurements are for mature trees and plants measured from the edge of the drip-line to the edge of the pipeline.

- Plants that may be permitted to be planted directly above existing and future pipelines: shallow rooted plants such as ground cover, grasses, flowers, and very low growing plants that grow to a maximum of one foot in height at maturity.
- Plants that may be permitted to be planted 15–25 feet from the edge of existing and future pipelines: shrubs and plants that grow to a maximum of five feet in height at maturity.
- Plants that may be permitted to be planted 25 feet or more from the edge of existing and future pipelines: small trees or shrubs that grow to a maximum of twenty feet in height and fifteen feet in canopy width.

Trees and plants that exceed the maximum height and size limit (described above) may be permitted within a leased or licensed area provided they are in containers and are above ground. Container load and placement location(s) are subject to review and approval by the SFPUC.

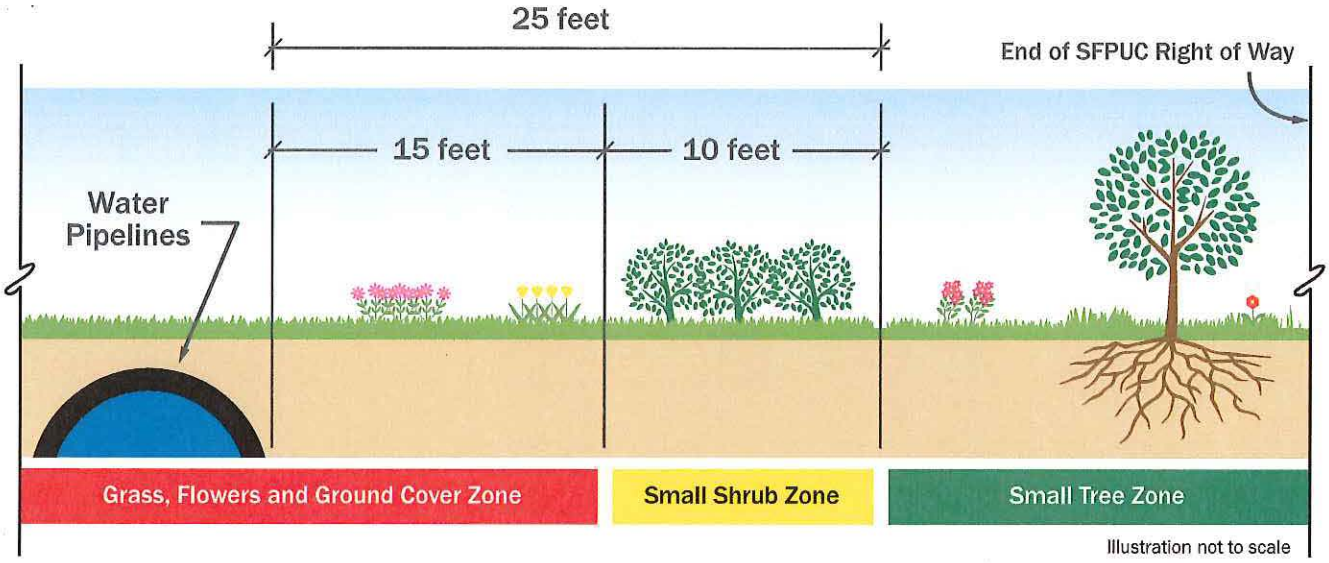
Low water use plant species are encouraged and invasive plant species are not allowed.

All appurtenances, vaults, and facility infrastructure must remain visible and accessible at all times. All determinations of species acceptability will be made by a SFPUC qualified professional.

The above policy is for general application and for internal administration purposes only and may not be relied upon by any third party for any reason whatsoever. The SFPUC reserves the right at its sole discretion, to establish stricter policies in any particular situation and to revise and update the above policy at any time.

San Francisco Public Utilities Commission (SFPUC)

Right Of Way (ROW) Landscape Vegetation Guidelines



The following vegetation types are permitted on the ROW within the appropriate zones.

Plantings that may be permitted directly above existing and future pipelines:

Ground cover, grasses, flowers, and very low growing plants that reach no more than one foot in height at maturity.

Plantings that may be permitted 15–25 feet from the edge of existing and future pipelines:

Shrubs and plants that grow no more than five feet tall in height at maturity.

Plantings that may be permitted 25 feet or more from the edge of existing and future pipelines:

Small trees or shrubs that grow to a maximum of twenty feet in height and fifteen feet in canopy width or less.

Jeff Schwilk

From:	Russell, Rosanna S <RSRussell@sfwater.org>
Sent:	Friday, November 18, 2016 9:39 AM
To:	Jeff Schwilk; Mendoza, Jonathan S; acrabtree@santaclara.gov; Planning
Cc:	Ramirez, Tim; Natesan, Ellen; Fujita, Neal; Wilson, Joanne; Brasil, Dina; Wong, Christopher J; Levy, Janice; Nelson, Chris; Chow, Jonathan; Feng, Stacie; Leung, Tracy; Kehoe, Paula; Lau, Fan; Torrey, Irina; Yu, Angela; Handel, Richard
Subject:	RE: Great America Theme Park Master Plan Project DEIR – SFPUC Comments -

Jeff:

With respect, please understand that the City and County of San Francisco, through the SFPUC, owns the property in FEE where Cedar Fair is planning some of its improvements. We have raised this comment before, but sometimes it seems to be overlooked. We keep encountering references in public documents to our "easement," which is not correct.

We have water transmission lines in our property that serve millions of water customers, so our first mission is to protect the utility use of our property, as you can appreciate.

Cedar Fair has an long-expired lease with the SFPUC for use of our property. The SFPUC will not consider granting approval to any of the proposed improvements on our property unless and until Cedar Fair enters into a market-rate lease with the SFPUC.

We have been in lease negotiations for some time with Cedar Fair, so it is surprising that Cedar Fair did not bring these planned improvements to our attention before commencing the master plan process.

We would welcome an opportunity to meet with you over the phone or in person to discuss this project if you have any questions.

Sincerely,

Rosanna Russell

Rosanna S. Russell
Real Estate Director
San Francisco Public Utilities Commission
Telephone: (415) 487-5213
RSRussell@sfwater.org

From: Jeff Schwilk [mailto:JSchwilk@santaclaraca.gov]
Sent: Thursday, November 17, 2016 5:42 PM
To: Mendoza, Jonathan S
Cc: Ramirez, Tim; Natesan, Ellen; Fujita, Neal; Wilson, Joanne; Russell, Rosanna S; Brasil, Dina; Wong, Christopher J; Levy, Janice; Nelson, Chris; Chow, Jonathan; Feng, Stacie; Leung, Tracy; Kehoe, Paula; Lau, Fan; Torrey, Irina; Yu, Angela
Subject: RE: Great America Theme Park Master Plan Project DEIR – SFPUC Comments

Hello Jonathan,

Thank you for your email and for providing comments on the Draft EIR for the Great America Theme Park Master Plan Project. The City of Santa Clara will review and consider these comments provided by your agency as we prepare the Final EIR for the project.

We have your contact information on our mailing list to receive notice when the Final EIR is available, and to receive notice of the upcoming City Planning Commission and City Council public hearings for this project.

Please let me know if you have any questions.

Regards,

Jeff

Jeff Schwilk, AICP |Associate Planner
Community Development Department
1500 Warburton Avenue | Santa Clara, CA 95050
Office: 408.615.2450 | Direct: 408.615.2456

City of Santa Clara
The Center of What's Possible

From: Mendoza, Jonathan S [mailto:JSMendoza@sfwater.org]
Sent: Thursday, November 17, 2016 3:50 PM
To: Jeff Schwilk
Cc: Ramirez, Tim; Natesan, Ellen; Fujita, Neal; Wilson, Joanne; Russell, Rosanna S; Brasil, Dina; Wong, Christopher J; Levy, Janice; Nelson, Chris; Chow, Jonathan; Feng, Stacie; Leung, Tracy; Kehoe, Paula; Lau, Fan; Torrey, Irina; Yu, Angela
Subject: Great America Theme Park Master Plan Project DEIR – SFPUC Comments

Good Afternoon Mr. Schwilk:

Attached are the SFPUC comments related to the City of Santa Clara's Great America Theme Park Master Plan Project Draft Environmental Impact Report (DEIR). I am also sending hard copies of all the attachments found in this email to the following address:

City of Santa Clara - Planning Division
Attn: Mr. Jeff Schwilk, Associate Planner
1500 Warburton Avenue
Santa Clara, CA 95050

Please let me know if you have any questions.

Thanks,

Jonathan S. Mendoza
Land and Resources Planner
Natural Resources and Lands Management Division
San Francisco Public Utilities Commission
1657 Rollins Road
Burlingame, CA 94010
O: 650.652.3215 (Mondays and Fridays)
C: 415.770.1997 (Tuesdays and Thursdays)
F: 650.652.3219
E: jsmendoza@sfwater.org
W: http://www.sfwater.org/ProjectReview

NOTE: I am out of the office on Wednesdays

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
P.O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5528
FAX (510) 286-5559
TTY 711
www.dot.ca.gov

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04-SCL-2016-00060
SCLVAR067
SCL/101/PM 42.7
SCH# 2016032036

Mr. Jeff Schwilk
Planning Division
City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050

Dear Mr. Schwilk:

Great America Theme Park Master Plan Project – Draft Environmental Impact Report

Thank you for continuing to include the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced project. In tandem with the Metropolitan Transportation Commission's (MTC) Sustainable Communities Strategy (SCS), Caltrans new mission signals a modernization of our approach to evaluating and mitigating impacts to the State Transportation Network (STN). We aim to reduce vehicle miles traveled (VMT) by tripling bicycle and doubling both pedestrian and transit travel by 2020. Our comments are based on the Draft Environmental Impact Report (DEIR). Please also refer to the previous comment letter, dated April 12, 2016, on this project and incorporated herein.

Project Understanding

The proposed project is located approximately 0.80 mile north of US 101 and 0.80 mile south of State Route (SR) 237 on Great America Parkway. Vehicle access to the project site will continue to be provided from the three existing driveways serving the site on Great America Parkway, Tasman Drive, and Agnew Road. No modifications are currently proposed to the existing site access points. The Great America property has been divided into four zones, each of which would allow for a mix of uses intended to meet Great America's long-term operational goals. Development within the zones may include the installation of new rides and replacement of rides and attractions, and extension of the operating season and hours of operation of the Great America theme park and amphitheater. Maximum building and structure heights are proposed up to 250 feet, but will ultimately be determined based on Mineta San Jose International Airport airspace requirements by the Federal Aviation Administration (FAA).

The project also includes a commercial/entertainment district. This commercial/entertainment district would comprise up to 250,000 square feet (sf) of floor area. The existing approximately

110,000 sf Redwood Amphitheater would be a part of the commercial/entertainment district, continuing in its current use, and 40,000 sf of additional theater space currently within Great America would be repurposed. A maximum of 10,000 seats would be allowed within the existing amphitheater and planned outdoor stage facilities. Special events of a non-concert nature would also be allowed within the entertainment zone. A total of 100,000 sf of new commercial space is proposed within the 250,000 sf commercial/entertainment district. The proposed commercial/ entertainment district may be located outside of the Theme Park entrance and open to the general public separate from the rest of the Theme Park.

Lead Agency

As the lead agency, the City of Santa Clara (City) is responsible for all project mitigation, including any needed improvements to the STN and for VMT reduction. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Multimodal Transportation Impacts

1. Montague Expressway/Mission College Boulevard Intersection: Please provide a queuing analysis and mitigation, if the analysis shows queuing onto US 101. The northbound (NB) left-turn traffic queue from Montague Expressway is blocking the through traffic, which could potentially block the NB US 101 diagonal off-ramp to Montague Expressway. During the PM peak hour, this blockage can extend the off-ramp queue onto the freeway, causing a potential safety issue at this location due to the speed differential.

2. Mitigation for increasing VMT should be identified and mitigated in a manner that does not further raise VMT. Mitigation may include contributions to the Santa Clara Valley Transportation Authority's (VTA) voluntary contribution program, and should support the use of transit and active transportation modes. Potential mitigation measures that include the requirements of other agencies such as Caltrans are fully enforceable through permit conditions, agreements, or other legally-binding instruments under the control of the City.

3. Please consider contributing to the following regional projects to mitigate this project's impacts:

    - RTP ID 240481 – Convert SR 237 High-Occupancy Vehicle (HOV) Lanes to Express Lanes from N. 1st Street to Mathilda Avenue.
    - RTP ID 240466 – Convert US 101 HOV Lanes to Express Lanes from the San Mateo/Santa Clara County Line to Morgan Hill.

4. "Regional Access" SR 237 HOV and High-Occupancy Toll (HOT) Lanes (DEIR p. 59): The description of these State facilities are confusing and should be clarified. It is correct to state there are 2 HOV lanes between Zanker Road and US 101; however, what is not clear is the statement that follows of 2 toll lanes between Zanker Road and US 101. If it was the intent to disclose the HOV to Express Lanes conversion in the near future, then the DEIR should state that the existing Express Lanes limits are from Interstate (I-) 880 to Zanker Road, not US 101 to Zanker Road.

Vehicle Trip Reduction
Caltrans recommends that the project set a more ambitious VMT reduction goal. The DEIR (p. 187) states that the project will be required to implement a Transportation Demand Management (TDM) program with a goal to decrease VMT by five percent. Given the project's proximity to light rail transit, Class I and II bicycle facilities, and a complete sidewalk network, a greater reduction in VMT for the project is achievable.

To reduce VMT the project should also include:

- Membership in a transportation management association.
- Transit subsidies and/or EcoPasses on a permanent basis to all employees.
- Ten percent vehicle parking reduction.
- Transit and trip planning resources.
- Carpool and vanpool ride-matching support.
- Carpool and clean-fuel parking spaces.
- Secured bicycle storage facilities.
- Bicycles for employee uses to access nearby destinations.
- Showers, changing rooms and clothing lockers.
- Fix-it bicycle repair station(s).
- Transportation and commute information kiosk.
- Outdoor patios, outdoor areas, furniture, pedestrian pathways, picnic and recreational areas.
- Nearby walkable amenities.
- Kick-off commuter event at full occupancy.
- Employee transportation coordinator.
- Emergency Ride Home program.
- Bicycle route mapping resources and bicycle parking incentives.

The TDM program should be documented with annual monitoring reports by an onsite TDM coordinator to demonstrate effectiveness. These smart growth approaches are consistent with the MTC's Regional Transportation Plan (RTP)/SCS goals and would meet Caltrans Strategic Management Plan. Reducing parking supply can encourage active forms of transportation, reduce regional VMT, and lessen future transportation impacts on SR 237, US 101, and other nearby State facilities.

Transportation Impact Fees
We request that an analysis of the plan's impacts and mitigation include information regarding the City's local and/or regional impact fee program. The analysis should identify if those programs include improvements to pedestrian, bicycle and transit infrastructure or that could be considered representative of the project's likely TDM mitigation measures. If no such fee exists, we would appreciate exploring with you the establishment of (local or regional) VMT-based transportation impact fee programs.

Should you have any questions regarding this letter, please contact Brian Ashurst at (510) 286-5505 or brian.ashurst@dot.ca.gov.

Sincerely,

PATRICIA MAURICE
District Branch Chief
Local Development - Intergovernmental Review

c: Scott Morgan, State Clearinghouse
Robert Swierk, Santa Clara Valley Transportation Authority (VTA) – electronic copy

CHARLES T.C. COMPTON

2387 Shoreside Court

Santa Clara, CA 95054

October 24, 2016

City of Santa Clara Planning Division
Jeff Schwilk, Associate Planner
1500 Warburton Avenue
Santa Clara, CA 95050

Re: DEIR, Great America Theme Park Master Plan Project

Dear Mr. Schwilk:

I write in opposition to Cedar Fair's proposal to add new rides and expand operating hours, to the extent that these would have "significant unavoidable cumulative impacts with regard to noise."

The Great America Theme Park ("Great America") is bordered by a large, high-density residential area, such that hundreds of townhomes and single family homes will be negatively affected by additional noise impacts. Those homes, including my own, are already impacted by the noise of Great America under its current operations. Expanding that noise will both harm the lifestyle of residents and their families, and also lessen the value of their properties.

The Planning Commission and City Council will, I trust, take note that the impacted homes already suffer from two major sources of noise pollution other than Great America: The new Levi's Stadium to the north, with a full and increasing schedule of games and concerts; and the San Jose International Airport, with its growing number of flights that cross directly over our community as they take off. Adding a greater noise

impact from Great America can only result in an intolerable burden on the enjoyment and value of our homes.

Santa Clara needs more housing, and must act to protect the modest-cost housing reflected in the community bordering Great America. At some point, the cumulative impact of the Theme Park, the Stadium and the Airport will drive residents out of the area, impacting property taxes and the availability of housing for the tens of thousands of employees working at nearby tech companies like Intel, Cisco, Brocade, Siemens, Palo Alto Networks and many dozens of others. Having our residential community in the center of these businesses lessens traffic and air pollution—benefits threatened by "piling on" high-noise activities such as that proposed by Cedar Fair.

Please do not permit this harmful increase in the noise burden for nearby residents.

Sincerely,

Charles T.C. Compton

APPENDIX A – 2
REVISED LEVEL OF SERVICE SUMMARY

Great America Master Plan Levels of Service Summary

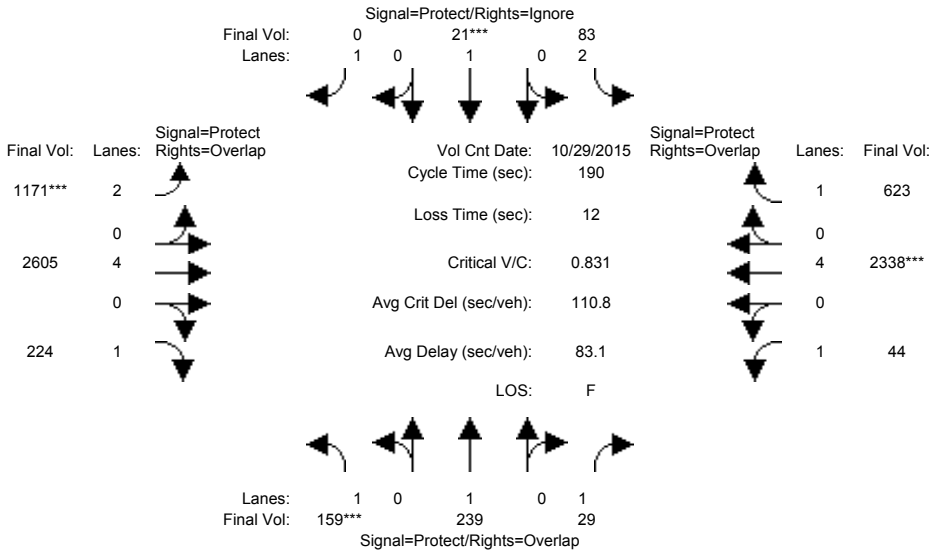
Study Number	Intersection	Location	Peak Hour	Count Date	Existing Avg. Delay	Existing LOS	Existing Plus Project Avg. Delay	Existing Plus Project LOS	Background Avg. Delay	Background LOS	Background Plus Project Avg. Delay	Background Plus Project LOS	Background Plus Project Incr. In Crit. Delay	Background Plus Project Incr. In Crit. V/C	Cumulative No Project Avg. Delay	Cumulative No Project LOS	Cumulative with Project Avg. Delay	Cumulative with Project LOS	Cumulative with Project Incr. In Crit. Delay	Cumulative with Project Incr. In Crit. V/C	% of Project Contribution
1	Great America Parkway and Tasman Drive *	Santa Clara	AM	10/27/15	26.6	C	26.6	C	38.0	D	38.1	D	0.3	0.002	58.6	E	58.9	E	0.7	0.002	
			PM	09/16/14	28.7	C	28.9	C	33.3	C	33.2	C	3.1	0.037	**98.9**	**F**	**102.7**	**F**	**4.0**	**0.009**	
2	Great America Parkway and Great America Way	Santa Clara	AM	01/26/16	21.5	C	21.5	C	24.1	C	24.2	C	0.0	0.003	34.3	C	34.7	C	0.6	0.003	
			PM	01/26/16	18.1	B	17.9	B	16.4	B	16.2	B	0.0	0.005	20.0	C	20.1	C	0.1	0.005	
3	Great America Parkway and Alviso Road	Santa Clara	AM	01/26/16	16.5	B	16.5	B	19.2	B	19.3	B	0.1	0.003	**96.0**	**F**	**97.3**	**F**	**2.0**	**0.003**	
			PM	01/26/16	33.6	C	34.6	C	**79.1**	**E**	**80.8**	**F**	**2.7**	**0.005**	**140.9**	**F**	**144.9**	**F**	**2.9**	**0.005**	
4	Great America Parkway and Bunker Hill Lane	Santa Clara	AM	01/26/16	13.4	B	13.4	B	13.2	B	13.2	B	0.0	0.003	13.5	B	13.5	B	0.0	0.003	
			PM	01/26/16	15.1	B	15.0	B	14.6	B	14.5	B	0.0	0.005	15.2	B	15.2	B	0.1	0.009	
5	Great America Parkway and Old Glory Lane	Santa Clara	AM	01/26/16	10.4	B	10.7	B	14.6	B	14.6	B	0.1	0.003	15.3	B	15.3	B	0.0	0.000	
			PM	01/26/16	10.8	B	11.2	B	19.8	B	19.8	B	-0.1	-0.002	50.2	D	48.8	D	-0.8	-0.002	
6	Great America Parkway and Patrick Henry Drive	Santa Clara	AM	01/26/16	21.2	C	21.1	C	25.3	C	25.4	C	0.2	0.003	28.1	C	28.3	C	0.5	0.003	
			PM	01/26/16	25.5	C	25.4	C	19.6	B	19.6	B	0.1	0.007	28.5	C	29.9	C	2.2	0.007	
7	Great America Parkway and Mission College Boulevard *	Santa Clara	AM	10/29/15	39.3	D	39.5	D	47.4	D	48.0	D	1.1	0.006	65.7	E	67.8	E	1.7	0.006	
			PM	09/17/14	49.2	D	49.4	D	72.1	E	72.9	E	1.5	0.004	**121.1**	**F**	**122.0**	**F**	**1.8**	**0.004**	
8	Great America Parkway and US 101 Northbound Ramps *	Santa Clara	AM	01/26/16	7.4	A	7.4	A	21.7	C	21.8	C	0.1	0.002	28.3	C	28.6	C	0.5	0.002	
			PM	09/30/14	9.0	A	8.9	A	20.2	C	20.8	C	0.9	0.005	54.5	D	55.7	E	1.9	0.005	
9	Bowers Avenue and US 101 Southbound Ramps *	Santa Clara	AM	01/26/16	21.2	C	21.2	C	25.5	C	25.6	C	0.1	0.002	29.6	C	29.9	C	0.4	0.002	
			PM	09/30/14	7.3	A	7.5	A	7.4	A	7.6	A	0.3	0.006	8.4	A	8.7	A	0.4	0.006	
10	Mission College Boulevard and Montague Expressway *	Santa Clara	AM	10/29/15	**83.1**	**F**	**83.3**	**F**	**159.1**	**F**	**160.0**	**F**	**2.7**	**0.003**	**201.1**	**F**	**202.0**	**F**	**2.8**	**0.003**	
			PM	09/24/14	63.4	E	64.2	E	**138.7**	**F**	**139.9**	**F**	**2.4**	**0.006**	**198.7**	**F**	**200.0**	**F**	**2.7**	**0.006**	
11	Convention Center and Tasman Drive	Santa Clara	AM	08/14/14	10.7	B	10.8	B	10.0	B	10.1	B	0.0	0.000	10.1	B	10.1	B	0.0	0.000	
			PM	08/14/14	13.2	B	13.8	B	12.9	B	13.4	B	0.8	0.016	14.4	B	14.6	B	0.5	0.017	
12	Great America Parkway and SR-237 (N) *	San Jose	AM	01/26/16	18.2	B	18.3	B	37.8	D	38.3	D	0.7	0.004	**91.3**	**F**	**92.4**	**F**	**85.5**	**0.261**	**1%**
			PM	09/11/14	17.4	B	17.5	B	23.3	C	23.8	C	0.6	0.011	**69.6**	**E**	**73.0**	**E**	**62.5**	**0.322**	**3%**
13	Great America Parkway and SR-237 (S) *	San Jose	AM	01/26/16	13.3	B	13.3	B	18.0	B	18.0	B	0.1	0.002	**84.7**	**F**	**85.2**	**F**	**105.8**	**0.378**	**1%**
			PM	09/11/14	11.9	B	11.8	B	15.4	B	15.4	B	0.1	0.004	39.3	D	39.8	D	45.2	0.261	

* Denotes CMP Intersections
Entries denoted in **bold** indicate conditions that exceed the applicable level of service standard.
Bold and boxed indicate significant project impact.

Great America Theme Park Master Plan
Santa Clara

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing (AM)

Intersection #5805: MONTAGUE EXPWY/MISSION COLLEGE BLVD



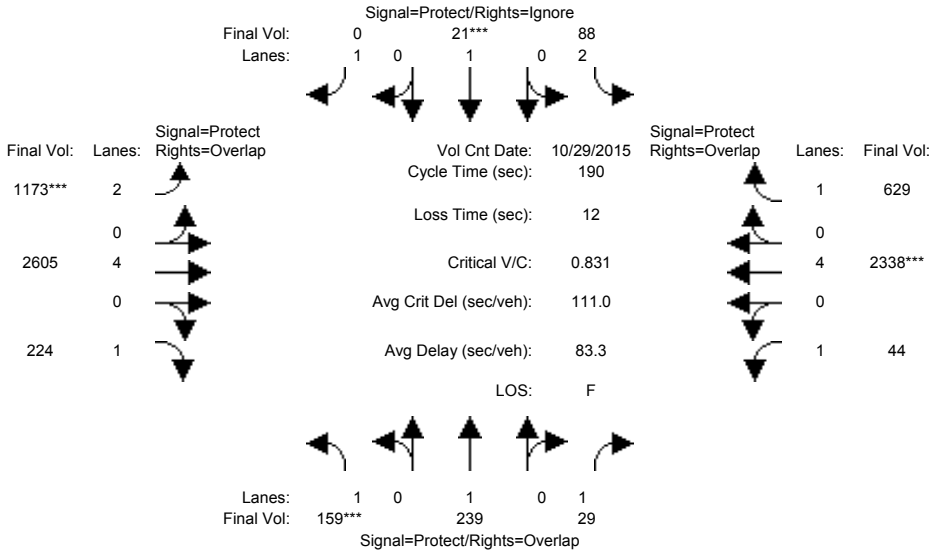
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	28	37	37	15	24	24	66	122	122	16	72	72
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 29 Oct 2015 <<												
Base Vol:	159	239	29	83	21	309	1171	2605	224	44	2338	623
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	239	29	83	21	309	1171	2605	224	44	2338	623
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	239	29	83	21	309	1171	2605	224	44	2338	623
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	159	239	29	83	21	0	1171	2605	224	44	2338	623
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	239	29	83	21	0	1171	2605	224	44	2338	623
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	159	239	29	83	21	0	1171	2605	224	44	2338	623
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	3150	7600	1750	1750	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.13	0.02	0.03	0.01	0.00	0.37	0.34	0.13	0.03	0.31	0.36
Crit Moves:	****				****		****				****	
Green Time:	26.3	34.8	49.9	14.1	22.6	0.0	62.1	115	141.1	15.0	67.7	81.8
Volume/Cap:	0.66	0.69	0.06	0.35	0.09	0.00	1.14	0.57	0.17	0.32	0.86	0.83
Delay/Veh:	88.8	82.7	55.9	89.8	79.5	0.0	164.1	48.8	22.5	94.2	85.8	84.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	88.8	82.7	55.9	89.8	79.5	0.0	164.1	48.8	22.5	94.2	85.8	84.0
LOS by Move:	F	F	E	F	E	A	F	D	C	F	F	F
HCM2k95thQ:	20	26	3	6	2	0	85	54	20	6	58	64

Note: Queue reported is the number of cars per lane.

Great America Theme Park Master Plan
Santa Clara

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing+Project (AM)

Intersection #5805: MONTAGUE EXPWY/MISSION COLLEGE BLVD



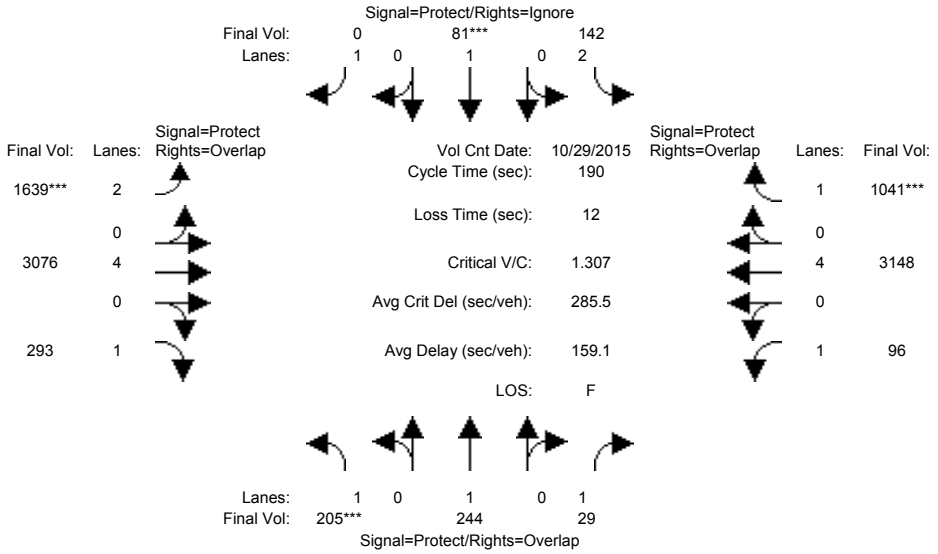
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	28	37	37	15	24	24	66	122	122	16	72	72
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 29 Oct 2015 <<												
Base Vol:	159	239	29	83	21	309	1171	2605	224	44	2338	623
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	239	29	83	21	309	1171	2605	224	44	2338	623
Added Vol:	0	0	0	5	0	2	2	0	0	0	0	6
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	239	29	88	21	311	1173	2605	224	44	2338	629
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	159	239	29	88	21	0	1173	2605	224	44	2338	629
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	239	29	88	21	0	1173	2605	224	44	2338	629
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	159	239	29	88	21	0	1173	2605	224	44	2338	629
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	3150	7600	1750	1750	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.13	0.02	0.03	0.01	0.00	0.37	0.34	0.13	0.03	0.31	0.36
Crit Moves:	****				****		****				****	
Green Time:	26.3	34.8	49.9	14.1	22.6	0.0	62.1	115	141.1	15.0	67.7	81.8
Volume/Cap:	0.66	0.69	0.06	0.38	0.09	0.00	1.14	0.57	0.17	0.32	0.86	0.83
Delay/Veh:	88.8	82.7	55.9	90.1	79.5	0.0	164.9	48.8	22.5	94.2	85.8	84.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	88.8	82.7	55.9	90.1	79.5	0.0	164.9	48.8	22.5	94.2	85.8	84.9
LOS by Move:	F	F	E	F	E	A	F	D	C	F	F	F
HCM2k95thQ:	20	26	3	7	2	0	85	54	20	6	58	65

Note: Queue reported is the number of cars per lane.

Great America Theme Park Master Plan
Santa Clara

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background (AM)

Intersection #5805: MONTAGUE EXPWY/MISSION COLLEGE BLVD



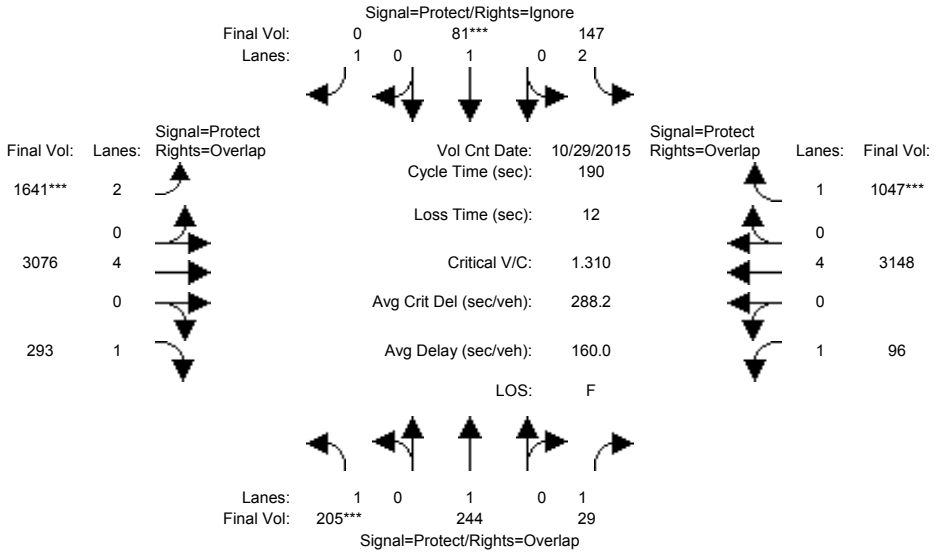
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	28	37	37	15	24	24	66	122	122	16	72	72
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 29 Oct 2015 <<												
Base Vol:	159	239	29	83	21	309	1171	2605	224	44	2338	623
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	239	29	83	21	309	1171	2605	224	44	2338	623
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	46	5	0	59	60	78	468	471	69	52	810	418
Initial Fut:	205	244	29	142	81	387	1639	3076	293	96	3148	1041
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	205	244	29	142	81	0	1639	3076	293	96	3148	1041
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	205	244	29	142	81	0	1639	3076	293	96	3148	1041
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	205	244	29	142	81	0	1639	3076	293	96	3148	1041
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	3150	7600	1750	1750	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.13	0.02	0.05	0.04	0.00	0.52	0.40	0.17	0.05	0.41	0.59
Crit Moves:	****				****		****					****
Green Time:	26.3	34.8	49.9	14.1	22.6	0.0	64.9	115	141.1	15.0	67.7	81.8
Volume/Cap:	0.85	0.70	0.06	0.61	0.36	0.00	1.52	0.67	0.23	0.69	1.16	1.38
Delay/Veh:	107.9	83.6	55.9	95.2	82.9	0.0	329.9	54.1	23.6	109.8	166	266.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	107.9	83.6	55.9	95.2	82.9	0.0	329.9	54.1	23.6	109.8	166	266.3
LOS by Move:	F	F	E	F	F	A	F	D	C	F	F	F
HCM2k95thQ:	27	26	3	12	9	0	151	65	26	14	96	159

Note: Queue reported is the number of cars per lane.

Great America Theme Park Master Plan
Santa Clara

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background+Project (AM)

Intersection #5805: MONTAGUE EXPWY/MISSION COLLEGE BLVD



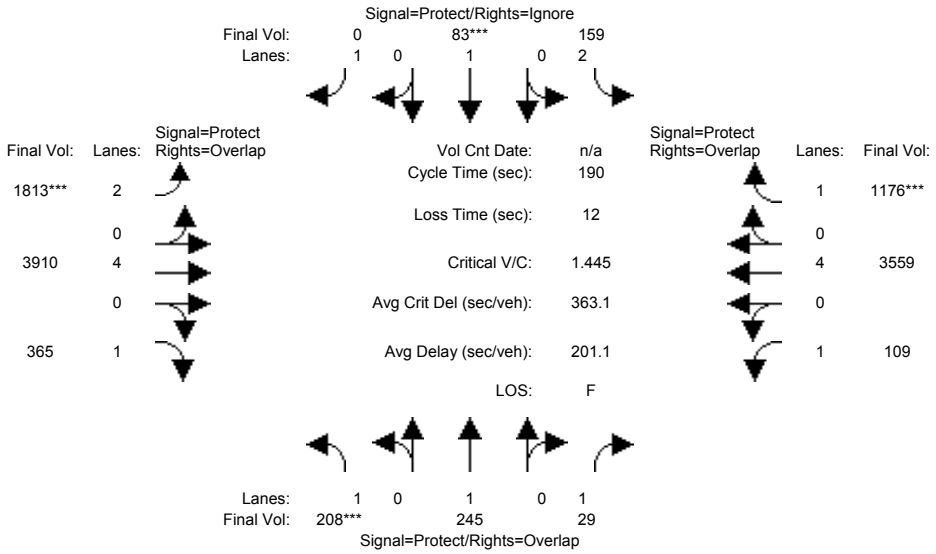
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	28	37	37	15	24	24	66	122	122	16	72	72
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 29 Oct 2015 <<												
Base Vol:	205	244	29	142	81	387	1639	3076	293	96	3148	1041
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	244	29	142	81	387	1639	3076	293	96	3148	1041
Added Vol:	0	0	0	5	0	2	2	0	0	0	0	6
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	205	244	29	147	81	389	1641	3076	293	96	3148	1047
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	205	244	29	147	81	0	1641	3076	293	96	3148	1047
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	205	244	29	147	81	0	1641	3076	293	96	3148	1047
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	205	244	29	147	81	0	1641	3076	293	96	3148	1047
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	3150	7600	1750	1750	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.13	0.02	0.05	0.04	0.00	0.52	0.40	0.17	0.05	0.41	0.60
Crit Moves:	****				****		****					****
Green Time:	26.3	34.8	49.9	14.1	22.6	0.0	64.7	115	141.1	15.0	67.7	81.8
Volume/Cap:	0.85	0.70	0.06	0.63	0.36	0.00	1.53	0.67	0.23	0.69	1.16	1.39
Delay/Veh:	107.8	83.6	55.9	96.2	82.9	0.0	332.6	54.1	23.6	109.8	166	269.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	107.8	83.6	55.9	96.2	82.9	0.0	332.6	54.1	23.6	109.8	166	269.8
LOS by Move:	F	F	E	F	F	A	F	D	C	F	F	F
HCM2k95thQ:	27	26	3	12	9	0	152	65	26	14	96	160

Note: Queue reported is the number of cars per lane.

Great America Theme Park Master Plan
Santa Clara

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative No Project (AM)

Intersection #5805: MONTAGUE EXPWY/MISSION COLLEGE BLVD



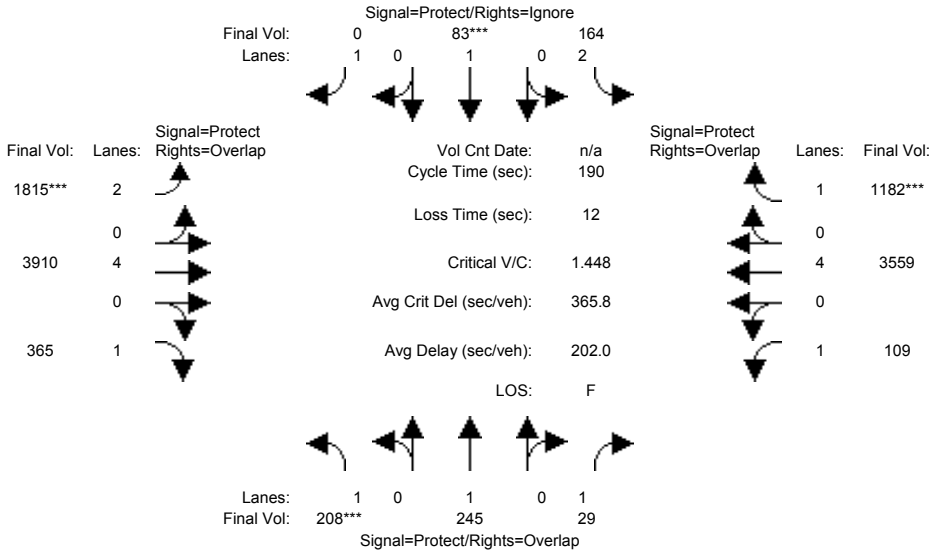
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	28	37	37	15	24	24	66	122	122	16	72	72
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	205	244	29	142	81	387	1639	3076	293	96	3148	1041
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	244	29	142	81	387	1639	3076	293	96	3148	1041
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	3	1	0	17	2	64	174	834	72	13	411	135
Initial Fut:	208	245	29	159	83	451	1813	3910	365	109	3559	1176
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	208	245	29	159	83	0	1813	3910	365	109	3559	1176
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	208	245	29	159	83	0	1813	3910	365	109	3559	1176
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	208	245	29	159	83	0	1813	3910	365	109	3559	1176
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	3150	7600	1750	1750	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.13	0.02	0.05	0.04	0.00	0.58	0.51	0.21	0.06	0.47	0.67
Crit Moves:	****				****		****					****
Green Time:	26.3	34.8	49.9	14.1	22.6	0.0	63.7	115	141.1	15.0	67.7	81.8
Volume/Cap:	0.86	0.70	0.06	0.68	0.37	0.00	1.72	0.85	0.28	0.79	1.31	1.56
Delay/Veh:	109.9	83.8	55.9	99.0	83.0	0.0	416.6	67.5	24.8	121.6	233	345.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	109.9	83.8	55.9	99.0	83.0	0.0	416.6	67.5	24.8	121.6	233	345.1
LOS by Move:	F	F	E	F	F	A	F	E	C	F	F	F
HCM2k95thQ:	28	26	3	13	10	0	181	88	32	17	121	197

Note: Queue reported is the number of cars per lane.

Great America Theme Park Master Plan
Santa Clara

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative+Project (AM)

Intersection #5805: MONTAGUE EXPWY/MISSION COLLEGE BLVD



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	28	37	37	15	24	24	66	122	122	16	72	72
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	208	245	29	159	83	451	1813	3910	365	109	3559	1176
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	208	245	29	159	83	451	1813	3910	365	109	3559	1176
Added Vol:	0	0	0	5	0	2	2	0	0	0	0	6
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	208	245	29	164	83	453	1815	3910	365	109	3559	1182
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	208	245	29	164	83	0	1815	3910	365	109	3559	1182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	208	245	29	164	83	0	1815	3910	365	109	3559	1182
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	208	245	29	164	83	0	1815	3910	365	109	3559	1182
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	3150	7600	1750	1750	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.13	0.02	0.05	0.04	0.00	0.58	0.51	0.21	0.06	0.47	0.68
Crit Moves:	****				****		****					****
Green Time:	26.3	34.8	49.9	14.1	22.6	0.0	63.5	115	141.1	15.0	67.7	81.8
Volume/Cap:	0.86	0.70	0.06	0.70	0.37	0.00	1.72	0.85	0.28	0.79	1.31	1.57
Delay/Veh:	109.9	83.8	55.9	100.5	83.0	0.0	419.3	67.5	24.8	121.6	233	348.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	109.9	83.8	55.9	100.5	83.0	0.0	419.3	67.5	24.8	121.6	233	348.6
LOS by Move:	F	F	E	F	F	A	F	E	C	F	F	F
HCM2k95thQ:	28	26	3	14	10	0	182	88	32	17	121	199

Note: Queue reported is the number of cars per lane.

APPENDIX D
~~CALEEMOD MODELING RESULTS~~
AIR POLLUTANT AND GREENHOUSE GAS EMISSIONS MEMO

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
1 Willowbrook Court, Suite 120
Petaluma, California 94954
Tel: 707-794-0400 *Fax: 707-794-0405*
www.illingworthrodkin.com *illro@illingworthrodkin.com*

M E M O

Date: December 21, 2016

To: **Will Burns**
David J. Powers & Associates

From: James A. Reyff

SUBJECT: **Great America Theme Park Master Plan**
Job# 15-206

This memo addresses air pollutant and greenhouse gas (GHG) emissions modeling associated with potential expansion of the Great America Theme Park under the Great America Theme Park Master Plan. In addition, the potential increased community risk impacts associated with this expansion was assessed using screening tools provided by the Bay Area Air Quality Management District (BAAQMD). This memo provides the technical analyses of these focused assessments.

Emissions Modeling Using CalEEMod

The most recent version of the California Emissions Model, CalEEMod Version 2016.3.1, was used to model emissions from the Theme Park for existing activity and future conditions. The primary source of emissions from an amusement park would be traffic. This model utilizes the States EMFAC2014 Motor Vehicle Emissions Model and provides emissions from area sources, energy usage, as well as indirect GHG emissions from electricity usage, water consumption, and solid water generation. Emissions were modeled for both scenarios for the year 2018, which is the earliest possible time that the park could be expanded under the master plan.

General Inputs

One of the first major steps in modeling is to select the land use. CalEEMod provides numerous types of land uses, but not one for amusement parks. In this case, an "Arena" use was selected with a size of 1 acre so that the specific inputs could be normalized. The project location was selected as Santa Clara County. CalEEMod was used to compute annual emissions, which were then used to compute average daily emissions based on the number of operating days. With the exception of the trip generation for the Marketplace, all other CalEEMod assumptions for Zone 1 of the Master Plan were based on a 140,000 s.f. strip commercial center.

Traffic

Traffic inputs included both attendee traffic trips and worker trips. Given the unique nature of this land use, trip generation and trip length was computed based on specific historical data and future

projections that build on the historical data.

Attendee Traffic

Attendee total vehicles were provided for weekday and weekend days during each month. This allowed the computation of total trips and average trips per day, assuming each vehicle has two trips. Average daily trip rates were computed based on 365 days per year. Since the existing park only operates 165 days per year, the daily trip rate is lower than the actual average day that the park operates. The future projections include 365 days of operation. For existing conditions that operate 165 days per year, the daily trip rate is 6,282 trips per average operating day or 2,840 trips per day based on a 365-day year. Under future conditions, the average trip rate was computed at 4,044 trips per day, assuming 365 days of operation. The lower average daily trip rate reflects operations during more weekdays or off-season weekend days when trip rates would be lower. Overall, the project scenario would have 439,674 more trips annually than existing conditions.

Trip lengths were based on survey information provided that breaks down the percentages of counties where attendees were located. Google's mapping website was used to estimate distances to approximate population centroids of each county. For counties outside of the Bay Area, the distance was measured to the air basin boundary. The trip lengths were assumed to be the same for existing and future conditions. The overall average attendee trip length was computed at 29 miles, heavily biased toward trips made from Santa Clara and San Mateo counties. This trip distance was entered into CalEEMod for "Non-Res C-C Trip Length (in miles)."

Worker Traffic

Worker trips were computed based on seasonal periods employment estimates provided. The workforce ranges from 800 to 1,800 employees. It is estimated that 70 percent of the workforce at the time works on weekend days and 50 percent work on weekdays. Daily trips were computed by assuming each worker makes two trips per day with adjustments: (1) approximately 10 percent of the workforce uses transit or alternative transportation (a 10-percent reduction in trips) and (2) approximately 12 percent of the workforce carpools (a 6-percent reduction in trips). For existing conditions, the average daily trip rate is 1,349 trips per day over 165 days per year or 610 trips per day over 365 days. For future conditions, there would be 1,127 trips per day. The CalEEMod default trip length for worker travel in Santa Clara County, i.e., "Non-Res C-W Trip Length (in miles)" was used.

Combined Trip Rate

The combination of attendee worker trips were entered into CalEEMod, based on the annual average trip rate since annual emissions are being computed.

Electricity and Natural Gas

Historical usage information was provided for electricity (4-year average) and natural gas (2-year). The average annual consumption rates were input to CalEEMod and confirmed with the output. Electricity usage was assumed to increase by a rate of 2.69 times the existing rate. Natural gas usage was predicted to increase at a rate proportional to the increase number of days operating, or 365 days/165 days = 2.21.

Solid Waste Generation

The combination of garbage and food waste were obtained from historical records. Since these represent only a partial year, the annual waste was computed assuming the same rate of waste generation throughout the year. Solid waste generation was assumed to increase at a rate proportional with the increased number of daily operations, or 2.21.

Water Usage

The total water usage records for both domestic and reclaimed water during the 4-year period (2012-15) were used to develop water usage rates. These data were computed to million gallons per year. Only the domestic water portion was input to CalEEMod, since reclaimed water is likely used for fountains, rides, ponds or landscaping and is not returned to wastewater treatment facilities.

Off-Road Equipment – Stationary Sources

The current project includes five emergency generators that are powered by diesel engines. Per State law and BAAQMD regulations, these generators would be limited to 50 hours of operation per year. Generators would only be operated for limited testing or maintenance and the on rare occasions for emergencies when power is not available. Total horsepower for the existing generators is 1,404 hp. The emission rates were entered as Tier 1 engines, assuming they are older than 10 years. The project would possibly add two new generators. Since these generators have not been identified, the size in terms of horsepower was based on size of the generators used for the larger rides of 400 horsepower each.

Miscellaneous Sources

Great America includes fuel dispensing facilities that have dispensed approximately 10,750 gallons of diesel fuel and 25,100 gallons of gasoline. There is no breakdown of the types of equipment or vehicles that consume this fuel. For this analysis, diesel fuel is assumed to power generators during testing and maintenance, other off-road equipment for maintenance, landscaping and minor construction equipment. Gasoline is assumed to be used by fleet vehicles and small off-road equipment that would operate on or near the site.

For diesel equipment, the amount of horsepower hours was computed assuming a fuel use rate of 0.05 gallons per horsepower hour. The fuel use for generator testing was computed based on 50 hours per year for the total horsepower of all the generators (i.e., 1,404 horsepower). Based on this rate, the park would have had a 110-horsepower piece of equipment operating 8 hours per day for the 165 days of existing operation. The CalEEMod model was used to compute annual emissions using the equipment type “Other Construction Equipment” with 50 horsepower, operating 8 hours

per day for 365 days per year. Based on an evaluation of the potential increase in equipment usage, a 41-percent increase was assumed for the project, so future fuel use would be 15,158 gallons per year. With testing and maintenance of existing generators and the assumption of two 400-hp generators operating 50 hours per year, fuel use for other equipment would increase to 66 horsepower, 8 hours per day over 365 days).

Assuming gasoline vehicles have a fuel economy of about 20 miles per gallon, the gasoline usage for the existing theme park would equate to 1,255 miles per year. Since the theme park traffic is currently computed to generate over 20 million miles per year, this additional gasoline usage was considered to have negligible emissions.

Marketplace Development

In addition, emissions associated with the proposed Marketplace were modeled as a separate CalEEMod run. This run included the proposed land use type and size as follows: "Strip Mall" at 140,000 square feet on 3.21 acres. Vehicle trips from the proposed Marketplace included in Zone 1 of the proposed Master Plan were entered into CalEEMod consistent with the Traffic Impact Analysis prepared by Hexagon Transportation Consultants (September 2016). CalEEMod default trip types and trip lengths were used in this modeling. All other CalEEMod defaults were used in the Marketplace modeling.

Modeled Emissions CalEEMod

CalEEMod provided total emissions based on average daily or annual inputs to the model. Under the existing conditions, the project operates for 165 days, so average daily emissions are computed by dividing the annual total by 165. The proposed project would operate 365 days, so those daily average emissions were computed accordingly. Results are provided in Table 1. While there would be increases in annual emissions with the proposed project, the average daily emissions would decrease. The reason for the decrease in daily emissions is that the project would increase the number of operating days and most of these days would have less attendance and workers than average conditions for the existing project that is operating mostly during busy summer days.

GHG Emissions

Based on the CalEEMod modeling shown above, the project would increase GHG emissions by 8,355 metric tons per year, as computed for year 2018 conditions. The modeling for the project indicates that over 85 percent of the emissions are from traffic.

Attachment 1 includes the CalEEMod output along with all input calculations for traffic, electricity/natural gas usage, water consumption, solid waste generation, and generator information.

Table 1. Operational Emissions

Scenario	ROG	NOx	PM_{10}	$PM_{2.5}$	GHG
Existing Theme Park Operations – from CalEEMod	2.19 tons	10.91 tons	8.88 tons	2.50 tons	11,055 MT
Existing Theme Park Diesel Sources – from CalEEMod	0.23 tons	1.12 tons	0.08 tons	0.07 tons	373 MT
Project Theme Park Operations – from CalEEMod	3.14 tons	15.69 tons	12.88 tons	3.62 tons	16,338 MT
Project Theme Park Msc. Diesel and Gasoline Sources – from CalEEMod	0.19 tons	1.54 tons	0.09 tons	0.09 tons	507 MT
Proposed Marketplace – from CalEEMod	2.12 tons	3.66 tons	2.58 tons	0.72 tons	2,937 MT
Project Increase	*3.03 tons*	*8.86 tons*	*6.59 tons*	*1.86 tons*	*8,355 MT*
BAAQMD Thresholds (tons /year)	*10 tons*	*10 tons*	*15 tons*	*10 tons*	
Exceed Threshold?	**No**	***No***	**No**	**No**	
Average Daily - Existing Operations	29.3 lbs.	145.8 lbs.	108.4 lbs.	30.9 lbs.	
Average Daily – Proposed Operations	29.9 lbs.	114.5 lbs.	85.2 lbs.	24.2 lbs.	
Project Increase	*+0.5 lbs.*	*-31.4 lbs*	*-23.4 lbs*	*-6.9 lbs*	
BAAQMD Thresholds (pounds/day)	*54* lbs.	*54* lbs.	*82* lbs.	*54* lbs.	
Exceed Threshold?	**No**	**No**	**No**	**No**	

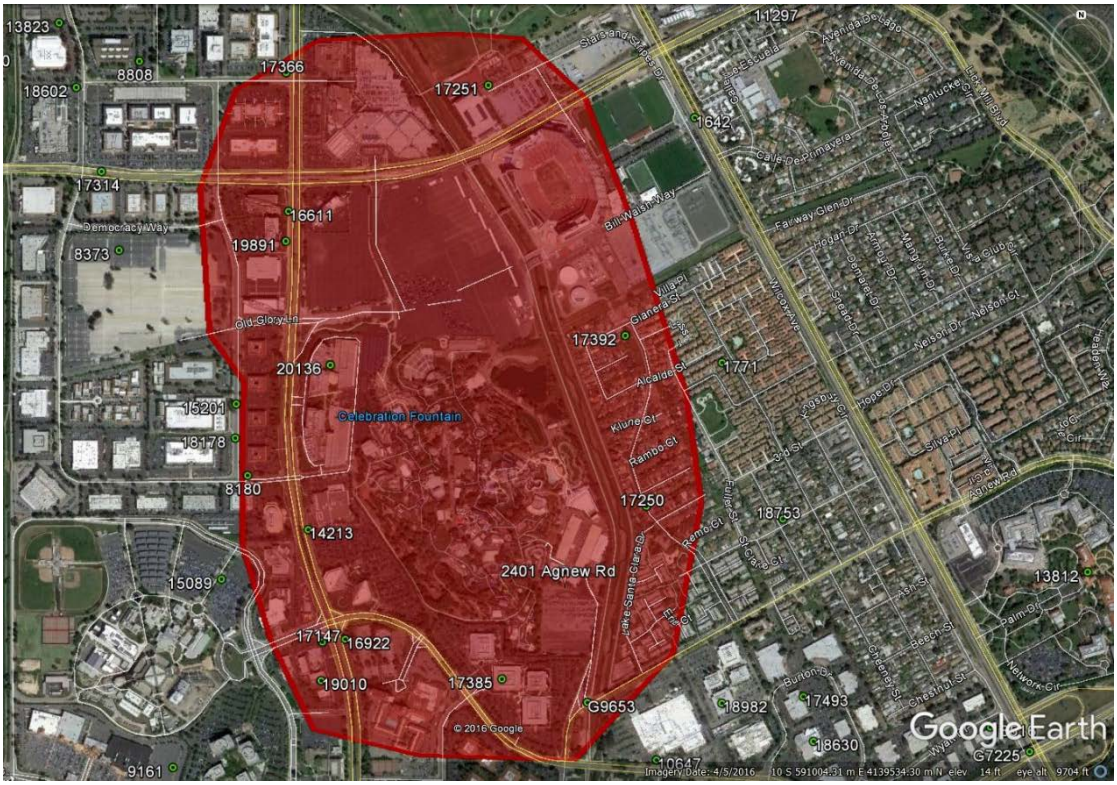
Community Risk Impact

The project currently has minor toxic air contaminant sources that include diesel engines used to power generators that could be used in the event of a power outage. These engines are used seldom. Another source is traffic from attendees and workers. Although there are not any specific plans, it is envisioned that the project could add two new diesel engines to power generators for elevated rides. The closest sensitive receptors are east of the project site, over 600 feet from locations where generators could be located.

Sensitive Receptors

The closest sensitive receptors identified were residences located east of the project site, across San Tomas-Aquino Creek. These are 600 feet or further away from the usable portions of the park where a generator could be located in the "Zone 2" theme park area. Figure 1 shows the 1,000-foot area around the project site, including the parking lot.

Figure 1 Great America Theme Park – 1,000-foot Influence Area



New Project Sources

As described above, the generator engines are not anticipated to be over 400 hp in size. Their operation would be limited to 50 hours per year for testing and maintenance purposes. Any emergency operation is expected to be very small and not cause the engines to operate more than 50 hours per year in total. The emissions of diesel particulate matter (or DPM), which is the toxic portion of diesel exhaust was input to BAAQMD's beta risk calculator. This calculator predicts screening level annual concentrations of PM2.5 and cancer risk. The calculator includes a diesel engine distance multiplier to predict screening level community risk at sensitive receptors. The CalEEMod emission factor of 0.15 grams of PM2.5 per horsepower per hour was combined with the number of hours per year (50), hp (2 x 400) and load factor of 0.74 to compute the annual emissions of 0.005 tons per year (7 pounds), which is considered DPM. This would lead to an annual PM2.5 concentration of 0.01μg/m^3 if both these generators were installed at a portion of the park closest to sensitive receptors. The generators would be installed in "Zone 2" of the theme park, which is 600 to over 2,000 feet away from the closest sensitive receptors. The corresponding cancer risk would be 3.52 cases per million if both generators were located 600 feet away from a sensitive receptor. The risk decreases to 1.56 per million at 1,000 feet. The actual location of the generators would likely be over 600 feet and up to 2,200 feet, so the screening cancer risk prediction is an upper limit. These cancer risk calculations include the 2015 guidance from BAAQMD to include Office of Environmental Health and Hazards Assessments (OEHHA) guidance. To apply this guidance, a factor of 1.37 was applied to the screening cancer risk calculations.

The increase in traffic was computed using BAAQMD's *Roadway Screening Analysis Calculator*,

which computes cancer risk and annual PM2.5 concentrations for each county from local traffic. Inputs to the calculator include traffic volume, distance to the receptor, and roadway orientation. The main parking lot is approximately 500 feet or further west from the nearest sensitive receptors. Based on the traffic projections described above that were developed for the CalEEMod modeling, the project would add about 1,722 daily vehicle trips to the parking lot for the park and 4,424 daily vehicle trips for the marketplace. Marketplace traffic was also assumed to use the parking lot that would be 500 to over 2,000 feet from the nearest sensitive receptors. Roadways accessing the parking lots would be over 1,000 feet from these sensitive receptors. The calculator indicates a cancer risk of less than 0.54 per million and an annual PM2.5 concentration of less than 0.02 $\mu g/m^3$.

Combining the generator, other diesel equipment and roadway impacts indicates a cancer risk of less than 10.0 per million and an annual PM2.5 concentration of 0.05 $\mu g/m^3$ caused by the project.

Existing Sources

Currently, Great America has sources of TACs and PM2.5 emission, mostly in the form of emissions from diesel engines associated with emergency generators. The park has 5 generators located throughout the park with the generator at the Lake Pump Station closest to sensitive receptors (about 300 feet). Stationary sources within 1,000 feet of the park were identified. A Stationary Source Information Form (SSIF) was submitted to BAAQMD to obtain emissions information for these sources. The screening level risks and annual PM2.5 concentrations from these sources were predicted using BAAQMD screening tools that included the beta risk calculator with distance multiplier tools for diesel engines and gasoline dispensing stations. Most of the identified sources within 1,000 feet of the project are over 2,000 feet from the sensitive receptors that lie to the east of the site. The contribution of all existing stationary sources was computed at less than 36 per million for cancer risk and 0.05 for annual PM2.5. Where sources were more than 1,000 feet from the closest receptor, a distance of 1,000 feet was used. The BAAQMD screening tools only predict levels out to 1,000 feet. So, the predictions provided are *very* conservative.

Miscellaneous Sources

As described above, there is diesel fuel usage, which is assumed to include the diesel generators described above, maintenance, landscape and minor construction activity. The emissions associated with this fuel usage is assumed to be in addition to that computed in the CalEEMod runs, except for generator operation. For existing conditions, this diesel fuel use was computed to generate $PM_{2.5}$ exhaust (i.e., DPM) emissions of 0.0665 tons per year and would occur across the park from about 400 to 2,700 feet from sensitive receptors closest to the project site. The BAAQMD screening tools, which included the beta risk calculator with distance multiplier tools for diesel engines, were used to compute screening level cancer risks and $PM_{2.5}$ concentrations over distances of 600, 1,000 and 2,000 feet. The calculations assumed the average risk levels from the three distances and assumed levels at 2,000 feet were half of the levels at 1,000 feet, since the calculator does not compute levels beyond 1,000 feet. The $PM_{2.5}$ exhaust emissions with the increased diesel fuel use were also computed to predict screening level project conditions. $PM_{2.5}$ exhaust emissions with the project (existing plus project increase) were computed at 0.0810 tons per year and the average daily emissions were input to the calculator. Note that use of the screening calculator is meant to provide conservative estimates. Had screening levels been predicted to be above thresholds, then modeling using dispersion models that incorporate representative historical meteorological data would have been used and likely would predict lower impacts.

The contribution from roadways was computed using the BAAQMD *Roadway Screening Analysis Calculator*. All busy local roadways within 1,000 feet of the site are over 2,000 feet from the nearest sensitive receptors except for the project parking lot and Tasman Drive. As describes above, the closest portion of the parking lot is approximately 500 feet from the nearest sensitive receptors. Tasman Drive is 1,800 feet away to the north but within 1,000 feet of the project site.

The existing parking lot was modeled in the same manner as the proposed project with a traffic volume of 3,450 trips, which in the average daily number of attendee and worker trips that are assumed to use the parking lot. The computed cancer risk is 0.30 per million and the annual PM2.5 concentration is 0.01 µg/m^3.

The contribution form Tasman Drive was computed based on an east-west roadway that was greater than 1,000 feet from the nearest sensitive receptor. Note that the roadway is 1,800 feet or further away and the roadway calculator only predicts out to 1,000 feet from the traffic lanes. A traffic volume of 30,000 average daily vehicles was input, which is based on a crude estimate for this roadway[1]. The contribution from this roadway was a cancer risk of less than 1.26 per million and an annual PM2.5 concentration of less than 0.01 µg/m^3.

Cancer risks and annual PM2.5 concentrations are summarized in Table 2. The screening risk calculation information are provided in *Attachment 2*.

Table 2. Summary of Community Risks at Closest Sensitive Receptors

Source	Cancer Risk (per million)	Annual PM2.5 (µg/m^3)
Project Sources		
Possible new diesel generators (2) at 400hp each, >600 feet	<3.62	<0.01
Increase due to diesel fuel usage (less generators shown above)	5.80	0.05
New attendee traffic at parking lot, 500ft	0.15	0.01
New market place traffic at parking lot, 500ft	0.39	0.01
Total Project	<9.96	<0.08
Significance Threshold	>10.0	>0.3
Cumulative Sources within 1,000 feet of Project		
Existing Great America Parking Lot	0.30	0.01
Existing Great America Stationary Sources	0.19	<0.01
Existing msc. diesel equipment (less generators shown above as existing stationary sources)	26.58	0.04
All other Stationary Sources	<35.89	<0.05
Tasman Road	<1.26	<0.01
Total Project + Cumulative	<64.22	<0.20
Cumulative Significance Threshold	>100.0	>0.8
Significant?	**No**	**No**

[1] The peak-hour "Existing Plus Project Traffic Volume" is 2,396 vehicles in the PM-peak hour based on the traffic data for Intersection #11 (Tasman Drive and Convention Center). The ADT is assumed to be 10 times that volume.

Supporting Documentation

Attachment 1 includes the CalEEMod output files and supporting documentation for the inputs. **Attachment 2** includes the supporting documentation for the community risk assessment. This includes the Stationary Source Information Form and accompanying emissions information, locations and sizes of existing project generators, roadway screening calculations, and misc. diesel equipment risk calculations (including CalEEMod output).

Attachment 1

Great America - Existing (Operating in future)

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	1.00	Acre	1.00	43,560.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2018
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	380	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Assume SVP meeting 2035 CAP Goal

Land Use - Use Arena as closest use, but 1 acre to normalize emissions

Construction Phase - Construction not modeled

Off-road Equipment -

Grading -

Vehicle Trips - 2840 customers (29mi/trip) and 566 employees (9.5mi/trip)

Road Dust - Use CARB's Santa Clara silt loading value

Energy Use - Electricity computed from 1,530,551 total kW (adjusted to 35.136 for CalEEMod using /43.56) and 10,771 MMBTU (adjusted to 247.27 for CalEEMod /43.56)

Water And Wastewater - Only included computed 72.50 mGal/year and not 36.03 mGal Recycled

Solid Waste - included only garbage and foodwaste = 1,320 + 202.5 = 1523

Stationary Sources - Emergency Generators and Fire Pumps - Based on sum of HP for the 5 existing Generators = 1404 hp

Stationary Sources - Emergency Generators and Fire Pumps EF - Assumed Tier 1 emissions for NOx and PM (6.9 and 0.4 g/bhp) 300-600hp engines: https://www.dieselnet.com/standards/us/nonroad.php#tier2

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.80	0.00
tblEnergyUse	NT24E	3.70	35.14
tblEnergyUse	NT24NG	6.67	247.27
tblEnergyUse	T24E	1.93	0.00
tblEnergyUse	T24NG	22.58	0.00
tblProjectCharacteristics	CO2IntensityFactor	0	380
tblSolidWaste	SolidWasteGenerationRate	0.09	1,523.00
tblStationaryGeneratorsPumpsEF	NOX_EF	4.56	6.90
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	0.40
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	0.40
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,404.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	7.30	29.00
tblVehicleTrips	CC_TTP	81.00	82.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TTP	0.00	18.00

tblVehicleTrips	ST_TR	0.00	3,450.00
tblVehicleTrips	SU_TR	0.00	3,450.00
tblVehicleTrips	WD_TR	33.33	3,450.00
tblWater	IndoorWaterUseRate	1,346,156.62	72,500,000.00
tblWater	OutdoorWaterUseRate	85,924.89	0.00

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	0.1928	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0581	0.5280	0.4435	3.1700e-003		0.0401	0.0401		0.0401	0.0401	0.0000	838.6249	838.6249	0.0110	0.0105	842.0406
Mobile	1.8854	9.9909	31.8518	0.1013	8.6945	0.1186	8.8130	2.3280	0.1118	2.4398	0.0000	9,245.6647	9,245.6647	0.3170	0.0000	9,253.5889
Stationary	0.0576	0.3898	0.1469	2.8000e-004		0.0226	0.0226		0.0226	0.0226	0.0000	26.7320	26.7320	3.7500e-003	0.0000	26.8257
Waste						0.0000	0.0000		0.0000	0.0000	309.1552	0.0000	309.1552	18.2706	0.0000	765.9190
Water						0.0000	0.0000		0.0000	0.0000	23.0009	67.6184	90.6193	2.3624	0.0558	166.3026
Total	**2.1939**	**10.9086**	**32.4422**	**0.1048**	**8.6945**	**0.1813**	**8.8758**	**2.3280**	**0.1745**	**2.5025**	**332.1562**	**10,178.6400**	**10,510.7961**	**20.9647**	**0.0663**	**11,054.6768**

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	0.1928	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0581	0.5280	0.4435	3.1700e-003		0.0401	0.0401		0.0401	0.0401	0.0000	838.6249	838.6249	0.0110	0.0105	842.0406
Mobile	1.8854	9.9909	31.8518	0.1013	8.6945	0.1186	8.8130	2.3280	0.1118	2.4398	0.0000	9,245.6647	9,245.6647	0.3170	0.0000	9,253.5889
Stationary	0.0576	0.3898	0.1469	2.8000e-004		0.0226	0.0226		0.0226	0.0226	0.0000	26.7320	26.7320	3.7500e-003	0.0000	26.8257
Waste						0.0000	0.0000		0.0000	0.0000	309.1552	0.0000	309.1552	18.2706	0.0000	765.9190
Water						0.0000	0.0000		0.0000	0.0000	23.0009	67.6184	90.6193	2.3624	0.0558	166.3026
Total	**2.1939**	**10.9086**	**32.4422**	**0.1048**	**8.6945**	**0.1813**	**8.8758**	**2.3280**	**0.1745**	**2.5025**	**332.1562**	**10,178.6400**	**10,510.7961**	**20.9647**	**0.0663**	**11,054.6768**

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

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	1.8854	9.9909	31.8518	0.1013	8.6945	0.1186	8.8130	2.3280	0.1118	2.4398	0.0000	9,245.6647	9,245.6647	0.3170	0.0000	9,253.5889
Unmitigated	1.8854	9.9909	31.8518	0.1013	8.6945	0.1186	8.8130	2.3280	0.1118	2.4398	0.0000	9,245.6647	9,245.6647	0.3170	0.0000	9,253.5889

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	3,450.00	3,450.00	3450.00	23,375,084	23,375,084
Total	3,450.00	3,450.00	3,450.00	23,375,084	23,375,084

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	9.50	29.00	7.30	18.00	82.00	0.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.596719	0.040200	0.188056	0.111125	0.016796	0.004948	0.012194	0.019466	0.002007	0.001626	0.005410	0.000612	0.000841

5.0 Energy Detail

Historical Energy Use: Y

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	263.8390	263.8390	0.0000	0.0000	263.8390
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	263.8390	263.8390	0.0000	0.0000	263.8390
NaturalGas Mitigated	0.0581	0.5280	0.4435	3.1700e-003		0.0401	0.0401		0.0401	0.0401	0.0000	574.7859	574.7859	0.0110	0.0105	578.2016
NaturalGas Unmitigated	0.0581	0.5280	0.4435	3.1700e-003		0.0401	0.0401		0.0401	0.0401	0.0000	574.7859	574.7859	0.0110	0.0105	578.2016

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					

Arena	1.07711e+007	0.0581	0.5280	0.4435	3.1700e-003		0.0401	0.0401		0.0401	0.0401	0.0000	574.7859	574.7859	0.0110	0.0105	578.2016
Total		**0.0581**	**0.5280**	**0.4435**	**3.1700e-003**		**0.0401**	**0.0401**		**0.0401**	**0.0401**	**0.0000**	**574.7859**	**574.7859**	**0.0110**	**0.0105**	**578.2016**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	1.07711e+007	0.0581	0.5280	0.4435	3.1700e-003		0.0401	0.0401		0.0401	0.0401	0.0000	574.7859	574.7859	0.0110	0.0105	578.2016
Total		**0.0581**	**0.5280**	**0.4435**	**3.1700e-003**		**0.0401**	**0.0401**		**0.0401**	**0.0401**	**0.0000**	**574.7859**	**574.7859**	**0.0110**	**0.0105**	**578.2016**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	1.5307e+006	263.8390	0.0000	0.0000	263.8390
Total		**263.8390**	**0.0000**	**0.0000**	**263.8390**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	1.5307e+006	263.8390	0.0000	0.0000	263.8390
Total		**263.8390**	**0.0000**	**0.0000**	**263.8390**

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	0.1928	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.1928	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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	0.0227					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.1928**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	0.0227					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.1928**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	90.6193	2.3624	0.0558	166.3026
Unmitigated	90.6193	2.3624	0.0558	166.3026

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
Arena	72.5 / 0	90.6193	2.3624	0.0558	166.3026
Total		**90.6193**	**2.3624**	**0.0558**	**166.3026**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	72.5 / 0	90.6193	2.3624	0.0558	166.3026
Total		**90.6193**	**2.3624**	**0.0558**	**166.3026**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	309.1552	18.2706	0.0000	765.9190
Unmitigated	309.1552	18.2706	0.0000	765.9190

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	1523	309.1552	18.2706	0.0000	765.9190
Total		**309.1552**	**18.2706**	**0.0000**	**765.9190**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e

Land Use	tons	MT/yr			
Arena	1523	309.1552	18.2706	0.0000	765.9190
Total		**309.1552**	**18.2706**	**0.0000**	**765.9190**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	50	1404	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.0576	0.3898	0.1469	2.8000e-004		0.0226	0.0226		0.0226	0.0226	0.0000	26.7320	26.7320	3.7500e-003	0.0000	26.8257
Total	**0.0576**	**0.3898**	**0.1469**	**2.8000e-004**		**0.0226**	**0.0226**		**0.0226**	**0.0226**	**0.0000**	**26.7320**	**26.7320**	**3.7500e-003**	**0.0000**	**26.8257**

11.0 Vegetation

Great America - Expansion (Operating in future)

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	1.00	Acre	1.00	43,560.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2018
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	380	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Assume SVP meeting 2035 CAP Goal

Land Use - Use Arena as closest use, but 1 acre to normalize emissions

Construction Phase - Construction not modeled

Off-road Equipment -

Grading -

Vehicle Trips - 2840 customers (29mi/trip) and 566 employees (9.5mi/trip)

Road Dust - Use CARB's Santa Clara silt loading value

Energy Use - Electricity computed from 1,530,551 total kW (adjusted to 35.136 for CalEEMod using /43.56) and 10,771 MMBTU (adjusted to 247.27 for CalEEMod /43.56)

Water And Wastewater - Only included computed 72.50 mGal/year and not 36.03 mGal Recycled. Increased by 41% =

Solid Waste - included only garbage and foodwaste = 1,320 + 202.5 = 1523. Increased by 41% (1.41) = 2147

Stationary Sources - Emergency Generators and Fire Pumps - Based on sum of HP for the 5 existing Generators = 1404 hp + 2 new generators assumed 400 hp each

Stationary Sources - Emergency Generators and Fire Pumps EF - Assumed Tier 1 emissions for NOx and PM (6.9 and 0.4 g/bhp) 300-600hp engines: https://www.dieselnet.com/standards/us/nonroad.php#tier2

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.80	0.00
tblEnergyUse	NT24E	3.70	94.52
tblEnergyUse	NT24NG	6.67	348.65
tblEnergyUse	T24E	1.93	0.00
tblEnergyUse	T24NG	22.58	0.00
tblProjectCharacteristics	CO2IntensityFactor	0	380
tblSolidWaste	SolidWasteGenerationRate	0.09	2,147.00
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,404.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	400.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00

tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	2.00
tblVehicleTrips	CC_TL	7.30	29.00
tblVehicleTrips	CC_TTP	81.00	78.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TTP	0.00	22.00
tblVehicleTrips	ST_TR	0.00	5,172.00
tblVehicleTrips	SU_TR	0.00	5,172.00
tblVehicleTrips	WD_TR	33.33	5,172.00
tblWater	IndoorWaterUseRate	1,346,156.62	102,225,000.00
tblWater	OutdoorWaterUseRate	85,924.89	0.00

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	0.1928	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0819	0.7445	0.6254	4.4700e-003		0.0566	0.0566		0.0566	0.0566	0.0000	1,520.1238	1,520.1238	0.0155	0.0149	1,524.9399
Mobile	2.7744	14.5993	46.4603	0.1473	12.6354	0.1725	12.8079	3.3832	0.1627	3.5458	0.0000	13,446.0231	13,446.0231	0.4624	0.0000	13,457.5823
Stationary	0.0904	0.3493	0.2306	4.3000e-004		0.0133	0.0133		0.0133	0.0133	0.0000	41.9639	41.9639	5.8800e-003	0.0000	42.1109
Waste						0.0000	0.0000		0.0000	0.0000	435.8216	0.0000	435.8216	25.7563	0.0000	1,079.7296
Water						0.0000	0.0000		0.0000	0.0000	32.4313	95.3419	127.7732	3.3310	0.0787	234.4867
Total	**3.1396**	**15.6931**	**47.3162**	**0.1522**	**12.6354**	**0.2424**	**12.8778**	**3.3832**	**0.2326**	**3.6157**	**468.2529**	**15,103.4527**	**15,571.7056**	**29.5711**	**0.0935**	**16,338.8494**

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	0.1928	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0819	0.7445	0.6254	4.4700e-003		0.0566	0.0566		0.0566	0.0566	0.0000	1,520.1238	1,520.1238	0.0155	0.0149	1,524.9399
Mobile	2.7744	14.5993	46.4603	0.1473	12.6354	0.1725	12.8079	3.3832	0.1627	3.5458	0.0000	13,446.0231	13,446.0231	0.4624	0.0000	13,457.5823
Stationary	0.0904	0.3493	0.2306	4.3000e-004		0.0133	0.0133		0.0133	0.0133	0.0000	41.9639	41.9639	5.8800e-003	0.0000	42.1109
Waste						0.0000	0.0000		0.0000	0.0000	435.8216	0.0000	435.8216	25.7563	0.0000	1,079.7296
Water						0.0000	0.0000		0.0000	0.0000	32.4313	95.3419	127.7732	3.3310	0.0787	234.4867
Total	**3.1396**	**15.6931**	**47.3162**	**0.1522**	**12.6354**	**0.2424**	**12.8778**	**3.3832**	**0.2326**	**3.6157**	**468.2529**	**15,103.4527**	**15,571.7056**	**29.5711**	**0.0935**	**16,338.8494**

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

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	2.7744	14.5993	46.4603	0.1473	12.6354	0.1725	12.8079	3.3832	0.1627	3.5458	0.0000	13,446.0231	13,446.0231	0.4624	0.0000	13,457.5823
Unmitigated	2.7744	14.5993	46.4603	0.1473	12.6354	0.1725	12.8079	3.3832	0.1627	3.5458	0.0000	13,446.0231	13,446.0231	0.4624	0.0000	13,457.5823

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	5,172.00	5,172.00	5172.00	33,970,344	33,970,344
Total	5,172.00	5,172.00	5,172.00	33,970,344	33,970,344

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	9.50	29.00	7.30	22.00	78.00	0.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.596719	0.040200	0.188056	0.111125	0.016796	0.004948	0.012194	0.019466	0.002007	0.001626	0.005410	0.000612	0.000841

5.0 Energy Detail

Historical Energy Use: Y

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	709.6773	709.6773	0.0000	0.0000	709.6773
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	709.6773	709.6773	0.0000	0.0000	709.6773
NaturalGas Mitigated	0.0819	0.7445	0.6254	4.4700e-003		0.0566	0.0566		0.0566	0.0566	0.0000	810.4465	810.4465	0.0155	0.0149	815.2626
NaturalGas Unmitigated	0.0819	0.7445	0.6254	4.4700e-003		0.0566	0.0566		0.0566	0.0566	0.0000	810.4465	810.4465	0.0155	0.0149	815.2626

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	1.51872e+007	0.0819	0.7445	0.6254	4.4700e-003		0.0566	0.0566		0.0566	0.0566	0.0000	810.4465	810.4465	0.0155	0.0149	815.2626
Total		**0.0819**	**0.7445**	**0.6254**	**4.4700e-003**		**0.0566**	**0.0566**		**0.0566**	**0.0566**	**0.0000**	**810.4465**	**810.4465**	**0.0155**	**0.0149**	**815.2626**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	1.51872e+007	0.0819	0.7445	0.6254	4.4700e-003		0.0566	0.0566		0.0566	0.0566	0.0000	810.4465	810.4465	0.0155	0.0149	815.2626
Total		**0.0819**	**0.7445**	**0.6254**	**4.4700e-003**		**0.0566**	**0.0566**		**0.0566**	**0.0566**	**0.0000**	**810.4465**	**810.4465**	**0.0155**	**0.0149**	**815.2626**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	4.11729e+006	709.6773	0.0000	0.0000	709.6773
Total		**709.6773**	**0.0000**	**0.0000**	**709.6773**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	4.11729e+006	709.6773	0.0000	0.0000	709.6773
Total		**709.6773**	**0.0000**	**0.0000**	**709.6773**

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	0.1928	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.1928	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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	0.0227					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.1928**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	0.0227					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.1928**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	127.7732	3.3310	0.0787	234.4867
Unmitigated	127.7732	3.3310	0.0787	234.4867

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	102.225 / 0	127.7732	3.3310	0.0787	234.4867
Total		**127.7732**	**3.3310**	**0.0787**	**234.4867**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	102.225 / 0	127.7732	3.3310	0.0787	234.4867
Total		**127.7732**	**3.3310**	**0.0787**	**234.4867**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	435.8216	25.7563	0.0000	1,079.7296
Unmitigated	435.8216	25.7563	0.0000	1,079.7296

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	2147	435.8216	25.7563	0.0000	1,079.7296
Total		**435.8216**	**25.7563**	**0.0000**	**1,079.7296**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	2147	435.8216	25.7563	0.0000	1,079.7296
Total		**435.8216**	**25.7563**	**0.0000**	**1,079.7296**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	2	0.5	50	400	0.73	Diesel
Emergency Generator	1	0.5	50	1404	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)	0.0328	0.0917	0.0837	1.6000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003	0.0000	15.2319	15.2319	2.1400e-003	0.0000	15.2853
Emergency Generator - Diesel (750 - 9999 HP)	0.0576	0.2576	0.1469	2.8000e-004		8.4700e-003	8.4700e-003		8.4700e-003	8.4700e-003	0.0000	26.7320	26.7320	3.7500e-003	0.0000	26.8257
Total	**0.0904**	**0.3493**	**0.2306**	**4.4000e-004**		**0.0133**	**0.0133**		**0.0133**	**0.0133**	**0.0000**	**41.9639**	**41.9639**	**5.8900e-003**	**0.0000**	**42.1109**

11.0 Vegetation

Great America Master Plan

Santa Clara County, Annual

Marketplace

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
	0.00		0.00		0
Strip Mall	140.00	1000sqft	3.21	140,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	242	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Intensity factor is based on 2035 CAP goal

Land Use - based on square footage provided

Vehicle Trips - The daily trip rate is based on the 4,425 daily trips that the project generates.

Mobile Land Use Mitigation -

Energy Use - used default energy intensity

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00

tblProjectCharacteristics	CO2IntensityFactor	641.35	242
tblProjectCharacteristics	OperationalYear	2014	2018
tblVehicleTrips	ST_TR	42.04	31.61
tblVehicleTrips	SU_TR	20.43	31.61
tblVehicleTrips	WD_TR	44.32	31.61

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4635	3.9559	3.1655	4.8400e-003	0.1371	0.2422	0.3793	0.0561	0.2270	0.2831	0.0000	425.4108	425.4108	0.0856	0.0000	427.2092
2018	1.6429	0.1860	0.1708	2.8000e-004	3.2100e-003	0.0111	0.0143	8.6000e-004	0.0104	0.0113	0.0000	24.0743	24.0743	5.7700e-003	0.0000	24.1955
Total	**2.1064**	**4.1419**	**3.3363**	**5.1200e-003**	**0.1403**	**0.2533**	**0.3936**	**0.0570**	**0.2374**	**0.2943**	**0.0000**	**449.4850**	**449.4850**	**0.0914**	**0.0000**	**451.4047**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4635	3.9559	3.1655	4.8400e-003	0.1371	0.2422	0.3793	0.0561	0.2270	0.2831	0.0000	425.4104	425.4104	0.0856	0.0000	427.2088
2018	1.6429	0.1860	0.1708	2.8000e-004	3.2100e-003	0.0111	0.0143	8.6000e-004	0.0104	0.0113	0.0000	24.0742	24.0742	5.7700e-003	0.0000	24.1955

Total	**2.1064**	**4.1419**	**3.3363**	**5.1200e-003**	**0.1403**	**0.2533**	**0.3936**	**0.0570**	**0.2374**	**0.2943**	**0.0000**	**449.4846**	**449.4846**	**0.0914**	**0.0000**	**451.4042**

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

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	0.6199	1.0000e-005	1.3300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-003	2.5000e-003	1.0000e-005	0.0000	2.6500e-003
Energy	1.8800e-003	0.0171	0.0144	1.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003	0.0000	198.2512	198.2512	0.0219	4.8000e-003	200.1972
Mobile	2.1206	3.6594	17.9647	0.0357	2.5294	0.0472	2.5766	0.6762	0.0435	0.7197	0.0000	2,645.9867	2,645.9867	0.1084	0.0000	2,648.2639
Waste						0.0000	0.0000		0.0000	0.0000	29.8397	0.0000	29.8397	1.7635	0.0000	66.8726
Water						0.0000	0.0000		0.0000	0.0000	3.2900	8.6014	11.8913	0.3389	8.1900e-003	21.5487
Total	**2.7424**	**3.6765**	**17.9804**	**0.0358**	**2.5294**	**0.0485**	**2.5779**	**0.6762**	**0.0448**	**0.7210**	**33.1296**	**2,852.8418**	**2,885.9714**	**2.2327**	**0.0130**	**2,936.8851**

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	0.6199	1.0000e-005	1.3300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-003	2.5000e-003	1.0000e-005	0.0000	2.6500e-003

Energy	1.8800e-003	0.0171	0.0144	1.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003	0.0000	198.2512	198.2512	0.0219	4.8000e-003	200.1972
Mobile	2.1206	3.6594	17.9647	0.0357	2.5294	0.0472	2.5766	0.6762	0.0435	0.7197	0.0000	2,645.9867	2,645.9867	0.1084	0.0000	2,648.2639
Waste						0.0000	0.0000		0.0000	0.0000	29.8397	0.0000	29.8397	1.7635	0.0000	66.8726
Water						0.0000	0.0000		0.0000	0.0000	3.2900	8.6014	11.8913	0.3389	8.1800e-003	21.5434
Total	**2.7424**	**3.6765**	**17.9804**	**0.0358**	**2.5294**	**0.0485**	**2.5779**	**0.6762**	**0.0448**	**0.7210**	**33.1296**	**2,852.8418**	**2,885.9714**	**2.2327**	**0.0130**	**2,936.8798**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.08**	**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	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/3/2017	5	5	
3	Grading	Grading	2/4/2017	2/15/2017	5	8	
4	Building Construction	Building Construction	2/16/2017	1/3/2018	5	230	
5	Paving	Paving	1/4/2018	1/29/2018	5	18	
6	Architectural Coating	Architectural Coating	1/30/2018	2/22/2018	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: 210,000; Non-Residential Outdoor: 70,000 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
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
Demolition	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	45.00	23.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

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	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8292
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**		**0.0213**	**0.0213**		**0.0198**	**0.0198**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8292**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	7.0000e-004	6.8200e-003	2.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.1574	1.1574	6.0000e-005	0.0000	1.1586
Total	**5.0000e-004**	**7.0000e-004**	**6.8200e-003**	**2.0000e-005**	**1.3700e-003**	**1.0000e-005**	**1.3800e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.1574**	**1.1574**	**6.0000e-005**	**0.0000**	**1.1586**

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	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8291
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**		**0.0213**	**0.0213**		**0.0198**	**0.0198**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8291**

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	5.0000e-004	7.0000e-004	6.8200e-003	2.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.1574	1.1574	6.0000e-005	0.0000	1.1586
Total	**5.0000e-004**	**7.0000e-004**	**6.8200e-003**	**2.0000e-005**	**1.3700e-003**	**1.0000e-005**	**1.3800e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.1574**	**1.1574**	**6.0000e-005**	**0.0000**	**1.1586**

3.3 Site Preparation - 2017

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	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0789	9.0789	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0452**	**6.8900e-003**	**0.0521**	**0.0248**	**6.3300e-003**	**0.0312**	**0.0000**	**9.0789**	**9.0789**	**2.7800e-003**	**0.0000**	**9.1373**

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	1.5000e-004	2.1000e-004	2.0400e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3472	0.3472	2.0000e-005	0.0000	0.3476
Total	**1.5000e-004**	**2.1000e-004**	**2.0400e-003**	**0.0000**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3472**	**0.3472**	**2.0000e-005**	**0.0000**	**0.3476**

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					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0788	9.0788	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0452**	**6.8900e-003**	**0.0521**	**0.0248**	**6.3300e-003**	**0.0312**	**0.0000**	**9.0788**	**9.0788**	**2.7800e-003**	**0.0000**	**9.1373**

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	1.5000e-004	2.1000e-004	2.0400e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3472	0.3472	2.0000e-005	0.0000	0.3476
Total	**1.5000e-004**	**2.1000e-004**	**2.0400e-003**	**0.0000**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3472**	**0.3472**	**2.0000e-005**	**0.0000**	**0.3476**

3.4 Grading - 2017

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	0.0138	0.1439	0.1015	1.2000e-004		8.1600e-003	8.1600e-003		7.5000e-003	7.5000e-003	0.0000	11.0447	11.0447	3.3800e-003	0.0000	11.1157
Total	**0.0138**	**0.1439**	**0.1015**	**1.2000e-004**	**0.0262**	**8.1600e-003**	**0.0344**	**0.0135**	**7.5000e-003**	**0.0210**	**0.0000**	**11.0447**	**11.0447**	**3.3800e-003**	**0.0000**	**11.1157**

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	2.0000e-004	2.8000e-004	2.7300e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4629	0.4629	2.0000e-005	0.0000	0.4634
Total	**2.0000e-004**	**2.8000e-004**	**2.7300e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4629**	**0.4629**	**2.0000e-005**	**0.0000**	**0.4634**

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					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0138	0.1439	0.1015	1.2000e-004		8.1600e-003	8.1600e-003		7.5000e-003	7.5000e-003	0.0000	11.0447	11.0447	3.3800e-003	0.0000	11.1157
Total	**0.0138**	**0.1439**	**0.1015**	**1.2000e-004**	**0.0262**	**8.1600e-003**	**0.0344**	**0.0135**	**7.5000e-003**	**0.0210**	**0.0000**	**11.0447**	**11.0447**	**3.3800e-003**	**0.0000**	**11.1157**

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	2.0000e-004	2.8000e-004	2.7300e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4629	0.4629	2.0000e-005	0.0000	0.4634

Total	**2.0000e-004**	**2.8000e-004**	**2.7300e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4629**	**0.4629**	**2.0000e-005**	**0.0000**	**0.4634**

3.5 Building Construction - 2017

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	0.3521	2.9970	2.0577	3.0400e-003		0.2022	0.2022		0.1899	0.1899	0.0000	271.8088	271.8088	0.0669	0.0000	273.2136
Total	**0.3521**	**2.9970**	**2.0577**	**3.0400e-003**		**0.2022**	**0.2022**		**0.1899**	**0.1899**	**0.0000**	**271.8088**	**271.8088**	**0.0669**	**0.0000**	**273.2136**

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	0.0272	0.2334	0.3252	6.2000e-004	0.0169	3.3800e-003	0.0202	4.8300e-003	3.1000e-003	7.9400e-003	0.0000	55.4850	55.4850	4.3000e-004	0.0000	55.4940
Worker	0.0170	0.0240	0.2321	5.4000e-004	0.0465	3.5000e-004	0.0469	0.0124	3.3000e-004	0.0127	0.0000	39.4077	39.4077	2.0000e-003	0.0000	39.4498
Total	**0.0442**	**0.2573**	**0.5573**	**1.1600e-003**	**0.0634**	**3.7300e-003**	**0.0671**	**0.0172**	**3.4300e-003**	**0.0206**	**0.0000**	**94.8927**	**94.8927**	**2.4300e-003**	**0.0000**	**94.9438**

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	0.3521	2.9970	2.0577	3.0400e-003		0.2022	0.2022		0.1899	0.1899	0.0000	271.8085	271.8085	0.0669	0.0000	273.2133
Total	**0.3521**	**2.9970**	**2.0577**	**3.0400e-003**		**0.2022**	**0.2022**		**0.1899**	**0.1899**	**0.0000**	**271.8085**	**271.8085**	**0.0669**	**0.0000**	**273.2133**

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	0.0272	0.2334	0.3252	6.2000e-004	0.0169	3.3800e-003	0.0202	4.8300e-003	3.1000e-003	7.9400e-003	0.0000	55.4850	55.4850	4.3000e-004	0.0000	55.4940
Worker	0.0170	0.0240	0.2321	5.4000e-004	0.0465	3.5000e-004	0.0469	0.0124	3.3000e-004	0.0127	0.0000	39.4077	39.4077	2.0000e-003	0.0000	39.4498
Total	**0.0442**	**0.2573**	**0.5573**	**1.1600e-003**	**0.0634**	**3.7300e-003**	**0.0671**	**0.0172**	**3.4300e-003**	**0.0206**	**0.0000**	**94.8927**	**94.8927**	**2.4300e-003**	**0.0000**	**94.9438**

3.5 Building Construction - 2018

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	4.0000e-003	0.0349	0.0263	4.0000e-005		2.2400e-003	2.2400e-003		2.1100e-003	2.1100e-003	0.0000	3.5516	3.5516	8.7000e-004	0.0000	3.5698
Total	**4.0000e-003**	**0.0349**	**0.0263**	**4.0000e-005**		**2.2400e-003**	**2.2400e-003**		**2.1100e-003**	**2.1100e-003**	**0.0000**	**3.5516**	**3.5516**	**8.7000e-004**	**0.0000**	**3.5698**

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	3.2000e-004	2.7900e-003	4.0500e-003	1.0000e-005	2.2000e-004	4.0000e-005	2.6000e-004	6.0000e-005	4.0000e-005	1.0000e-004	0.0000	0.7205	0.7205	1.0000e-005	0.0000	0.7206
Worker	2.0000e-004	2.9000e-004	2.7500e-003	1.0000e-005	6.1000e-004	0.0000	6.2000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5014	0.5014	2.0000e-005	0.0000	0.5019
Total	**5.2000e-004**	**3.0800e-003**	**6.8000e-003**	**2.0000e-005**	**8.3000e-004**	**4.0000e-005**	**8.8000e-004**	**2.2000e-004**	**4.0000e-005**	**2.7000e-004**	**0.0000**	**1.2219**	**1.2219**	**3.0000e-005**	**0.0000**	**1.2225**

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	4.0000e-003	0.0349	0.0263	4.0000e-005		2.2400e-003	2.2400e-003		2.1100e-003	2.1100e-003	0.0000	3.5515	3.5515	8.7000e-004	0.0000	3.5698
Total	**4.0000e-003**	**0.0349**	**0.0263**	**4.0000e-005**		**2.2400e-003**	**2.2400e-003**		**2.1100e-003**	**2.1100e-003**	**0.0000**	**3.5515**	**3.5515**	**8.7000e-004**	**0.0000**	**3.5698**

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	3.2000e-004	2.7900e-003	4.0500e-003	1.0000e-005	2.2000e-004	4.0000e-005	2.6000e-004	6.0000e-005	4.0000e-005	1.0000e-004	0.0000	0.7205	0.7205	1.0000e-005	0.0000	0.7206
Worker	2.0000e-004	2.9000e-004	2.7500e-003	1.0000e-005	6.1000e-004	0.0000	6.2000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5014	0.5014	2.0000e-005	0.0000	0.5019
Total	**5.2000e-004**	**3.0800e-003**	**6.8000e-003**	**2.0000e-005**	**8.3000e-004**	**4.0000e-005**	**8.8000e-004**	**2.2000e-004**	**4.0000e-005**	**2.7000e-004**	**0.0000**	**1.2219**	**1.2219**	**3.0000e-005**	**0.0000**	**1.2225**

3.6 Paving - 2018

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	0.0127	0.1289	0.1104	1.7000e-004		7.4500e-003	7.4500e-003		6.8700e-003	6.8700e-003	0.0000	15.0641	15.0641	4.5600e-003	0.0000	15.1599
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0127**	**0.1289**	**0.1104**	**1.7000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8700e-003**	**6.8700e-003**	**0.0000**	**15.0641**	**15.0641**	**4.5600e-003**	**0.0000**	**15.1599**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	7.6000e-004	7.3400e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3371	1.3371	6.0000e-005	0.0000	1.3385
Total	**5.4000e-004**	**7.6000e-004**	**7.3400e-003**	**2.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6500e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3371**	**1.3371**	**6.0000e-005**	**0.0000**	**1.3385**

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	0.0127	0.1289	0.1104	1.7000e-004		7.4500e-003	7.4500e-003		6.8700e-003	6.8700e-003	0.0000	15.0641	15.0641	4.5600e-003	0.0000	15.1599
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0127**	**0.1289**	**0.1104**	**1.7000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8700e-003**	**6.8700e-003**	**0.0000**	**15.0641**	**15.0641**	**4.5600e-003**	**0.0000**	**15.1599**

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	5.4000e-004	7.6000e-004	7.3400e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3371	1.3371	6.0000e-005	0.0000	1.3385

Total	**5.4000e-004**	**7.6000e-004**	**7.3400e-003**	**2.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6500e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3371**	**1.3371**	**6.0000e-005**	**0.0000**	**1.3385**

3.7 Architectural Coating - 2018

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	1.6223					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3025
Total	**1.6249**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3025**

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	2.4000e-004	3.4000e-004	3.3000e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.6017	0.6017	3.0000e-005	0.0000	0.6023
Total	**2.4000e-004**	**3.4000e-004**	**3.3000e-003**	**1.0000e-005**	**7.4000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6017**	**0.6017**	**3.0000e-005**	**0.0000**	**0.6023**

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	1.6223					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3025
Total	**1.6249**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3025**

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	2.4000e-004	3.4000e-004	3.3000e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.6017	0.6017	3.0000e-005	0.0000	0.6023
Total	**2.4000e-004**	**3.4000e-004**	**3.3000e-003**	**1.0000e-005**	**7.4000e-004**	**1.0000e-005**	**7.4000e-004**	**2.0000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6017**	**0.6017**	**3.0000e-005**	**0.0000**	**0.6023**

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	2.1206	3.6594	17.9647	0.0357	2.5294	0.0472	2.5766	0.6762	0.0435	0.7197	0.0000	2,645.9867	2,645.9867	0.1084	0.0000	2,648.2639
Unmitigated	2.1206	3.6594	17.9647	0.0357	2.5294	0.0472	2.5766	0.6762	0.0435	0.7197	0.0000	2,645.9867	2,645.9867	0.1084	0.0000	2,648.2639

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	4,425.40	4,425.40	4425.40	6,815,262	6,815,262
Total	4,425.40	4,425.40	4,425.40	6,815,262	6,815,262

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.551461	0.058468	0.185554	0.123211	0.029507	0.004440	0.012712	0.023230	0.001775	0.001270	0.006089	0.000516	0.001766

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	179.6485	179.6485	0.0215	4.4500e-003	181.4814
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	179.6485	179.6485	0.0215	4.4500e-003	181.4814
NaturalGas Mitigated	1.8800e-003	0.0171	0.0144	1.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003	0.0000	18.6026	18.6026	3.6000e-004	3.4000e-004	18.7158
NaturalGas Unmitigated	1.8800e-003	0.0171	0.0144	1.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003	0.0000	18.6026	18.6026	3.6000e-004	3.4000e-004	18.7158

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					
Strip Mall	348600	1.8800e-003	0.0171	0.0144	1.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003	0.0000	18.6026	18.6026	3.6000e-004	3.4000e-004	18.7158
Total		**1.8800e-003**	**0.0171**	**0.0144**	**1.0000e-004**		**1.3000e-003**	**1.3000e-003**		**1.3000e-003**	**1.3000e-003**	**0.0000**	**18.6026**	**18.6026**	**3.6000e-004**	**3.4000e-004**	**18.7158**

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					
Strip Mall	348600	1.8800e-003	0.0171	0.0144	1.0000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003	0.0000	18.6026	18.6026	3.6000e-004	3.4000e-004	18.7158
Total		**1.8800e-003**	**0.0171**	**0.0144**	**1.0000e-004**		**1.3000e-003**	**1.3000e-003**		**1.3000e-003**	**1.3000e-003**	**0.0000**	**18.6026**	**18.6026**	**3.6000e-004**	**3.4000e-004**	**18.7158**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	1.6366e+006	179.6485	0.0215	4.4500e-003	181.4814
Total		**179.6485**	**0.0215**	**4.4500e-003**	**181.4814**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	1.6366e+006	179.6485	0.0215	4.4500e-003	181.4814
Total		**179.6485**	**0.0215**	**4.4500e-003**	**181.4814**

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	0.6199	1.0000e-005	1.3000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-003	2.5000e-003	1.0000e-005	0.0000	2.6500e-003
Unmitigated	0.6199	1.0000e-005	1.3000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-003	2.5000e-003	1.0000e-005	0.0000	2.6500e-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	0.0730					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5468					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.3000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-003	2.5000e-003	1.0000e-005	0.0000	2.6500e-003
Total	**0.6199**	**1.0000e-005**	**1.3000e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.5000e-003**	**2.5000e-003**	**1.0000e-005**	**0.0000**	**2.6500e-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	0.0730					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5468					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.3000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5000e-003	2.5000e-003	1.0000e-005	0.0000	2.6500e-003
Total	**0.6199**	**1.0000e-005**	**1.3000e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.5000e-003**	**2.5000e-003**	**1.0000e-005**	**0.0000**	**2.6500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.8913	0.3389	8.1800e-003	21.5434
Unmitigated	11.8913	0.3389	8.1900e-003	21.5487

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	10.3702 / 6.3559	11.8913	0.3389	8.1900e-003	21.5487
Total		**11.8913**	**0.3389**	**8.1900e-003**	**21.5487**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	10.3702 / 6.3559	11.8913	0.3389	8.1800e-003	21.5434
Total		**11.8913**	**0.3389**	**8.1800e-003**	**21.5434**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.8397	1.7635	0.0000	66.8726
Unmitigated	29.8397	1.7635	0.0000	66.8726

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	147	29.8397	1.7635	0.0000	66.8726
Total		**29.8397**	**1.7635**	**0.0000**	**66.8726**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	147	29.8397	1.7635	0.0000	66.8726
Total		**29.8397**	**1.7635**	**0.0000**	**66.8726**

9.0 Operational Offroad

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

10.0 Vegetation

Great America 2016 (163 day operation)		Number of Operating Days	Average Vehicles Per Day	Total Vehicles
JAN	weekdays	0	0	0
	weekends	0	0	0
FEB	weekdays	0	0	0
	weekends	0	0	0
MAR	weekdays	3	1716	5148
	weekends	2	2444	4888
APR	weekdays	8	1196	9568
	weekends	9	2600	23400
MAY	weekdays	8	2275	18200
	weekends	9	3488	31392
JUN	weekdays	22	2651	58322
	weekends	8	4348	34784
JUL	weekdays	21	3397	71337
	weekends	10	5526	55260
AUG	weekdays	11	3011	33121
	weekends	7	4896	34272
SEP	weekdays	3	2894	8682
	weekends	8	3641	29128
OCT	weekdays	4	3170	12680
	weekends	10	4856	48560
NOV	weekdays	1	1442	1442
	weekends	2	1442	2884
DEC	weekdays	13	1820	23660
	weekends	6	1923	11538
Total Number of Operating Days		165		518,266
			6,282	
	Trips/day		2,840	
	annual daily rate			

Great America 2035 (365 day operation)		Number of Operating Days	Average Vehicles Per Day	Total Vehicles
JAN	weekdays	22	641	14102
	weekends	9	1122	10098
FEB	weekdays	20	801	16020
	weekends	8	1282	10256
MAR	weekdays	23	943	21689
	weekends	8	1513	12104
APR	weekdays	20	911	18220
	weekends	10	2834	28340
MAY	weekdays	23	1497	34431
	weekends	8	3837	30696
JUN	weekdays	22	2916	64152
	weekends	8	4783	38264
JUL	weekdays	21	3736	78456
	weekends	10	6079	60790
AUG	weekdays	23	2002	46046
	weekends	8	5385	43080
SEP	weekdays	21	1004	21084
	weekends	9	4005	36045
OCT	weekdays	22	1224	26928
	weekends	9	5342	48078
NOV	weekdays	22	837	18414
	weekends	8	1238	9904
DEC	weekdays	21	1606	33726
	weekends	10	1718	17180
Total Number of Operating Days		365		738,103
			4,044.40	439,674
	Trips/day		4,044	
	annual daily rate			

2016 Great America DMA - YTD

revised 11/01/16			Estimated miles	Weighted miles	Source
Core Market	**Percent**				
- Santa Clara County	26.46%		8	2.12	Approximate CalEEMod (Santa Clara (C-C trip length)
- Alameda County	9.84%		30	2.95	Google (travel to San Leandro, Pleasanton, Livermore)
- San Mateo County	5.93%		25	1.48	Google (travel to San Mateo)
- Contra Costa County	2.53%		50	1.26	Google (travel to Concord)
- San Francisco County	3.00%		45	1.35	Google (travel to San Francisco)
- Sonoma County	0.45%		90	0.41	Google (travel to Rohnert Park)
- Solano County	0.55%		70	0.39	Google (travel to Vallejo, Fairfield)
- Marin County	0.25%		60	0.15	Google (travel to San Rafael)
- Napa County	0.09%		85	0.08	Google (travel to Napa)
- Mendocino County	0.10%		110	0.11	Google (travel to BAAQMD northern boundary)
- Lake County	0.03%		80	0.03	Google (travel to BAAQMD northeast boundary)
Primary Markets					
Monterey-Salinas	3.01%		45	1.35	Google (travel to BAAQMD south boundary)
Sacramento	6.53%		80	5.22	Google (travel to BAAQMD northeast boundary)
Secondary Market					
Fresno-Visalia	1.43%		45	0.64	Google (travel to BAAQMD south boundary)
		Subtotal		29.14	Assumed weighted average of above (sum of weighted/60.19%)
Other					
Did not specify	39.81%		29.14		Assumed weighted average of above (sum of weighted/60.19%)
Total	100.00%				
		Total	29.1415431		

Great America 2016 (163 day operation)		Number of Operating Days	Average Vehicles Per Day	Employee Total Trips
JAN	weekdays	0		0
	weekends	0		0
FEB	weekdays	0		0
	weekends	0		0
MAR	weekdays	3		1200
	weekends	2		1120
APR	weekdays	8		3200
	weekends	9		5040
MAY	weekdays	8		5200
	weekends	9		8190
JUN	weekdays	22		14300
	weekends	8		7280
JUL	weekdays	21		18900
	weekends	10		12600
AUG	weekdays	11		9900
	weekends	7		8820
SEP	weekdays	3		2250
	weekends	8		8400
OCT	weekdays	4		3000
	weekends	10		10500
NOV	weekdays	1		500
	weekends	2		1400
DEC	weekdays	13		6500
	weekends	6		4200
Total Number of Operating Days		165		132,500

Great America 2035 (365 day operation)		Number of Operating Days	Employee Total Trips
JAN	weekdays	22	8800
	weekends	9	5040
FEB	weekdays	20	8000
	weekends	8	4480
MAR	weekdays	23	9200
	weekends	8	4480
APR	weekdays	20	8000
	weekends	10	5600
MAY	weekdays	23	14950
	weekends	8	7280
JUN	weekdays	22	14300
	weekends	8	7280
JUL	weekdays	21	18900
	weekends	10	12600
AUG	weekdays	23	20700
	weekends	8	10080
SEP	weekdays	21	15750
	weekends	9	9450
OCT	weekdays	22	16500
	weekends	9	9450
NOV	weekdays	22	11000
	weekends	8	5600
DEC	weekdays	21	10500
	weekends	10	7000
Total Number of Operating Days		365	244,940

Unadjusted Employee Roundt 363

note the lower rate reflects the fewer number of days

total adjusted for one-way trips, carpool and transit

Trip Rate = 610

annual daily rate

1349

Unadjusted Employee Rounc 671

does not include any increase in daily employment

Trip Rate = 1,127

annual daily rate

- Employee trips/parking fluctuates with HI-MED-LOW attendance days in the Park (ie. directly related to guest vehicles parked in the main lot).
- To align these scenarios with the modeling in the 365 day operation template, I would estimate HI days to correspond to days were we park 5,000 guest cars or more in the main lot.
- Estimate MED days as days where we park 2,500 guest cars to 4,999 in the main lot.
- Estimate LOW days as days where we park less than 2,500 guest cars in the main lot.
- Our employee parking lot has 750 parking spaces.
- We would estimate usage of the employee lot in three scenarios: HI usage (75% of the employee lot used), MED (50% of the employee lot used), and LOW (25% of the employee lot used)
- Our employee headcount fluctuates with seasons as we ramp up during peak season. The following our average employee staffing counts for current operations

JAN-APR	800
MAY-JUN	1,300
JUL-AUG	1,800
SEP-OCT	1,500
NOV-DEC	1000

- Estimate approximately 70% of the employees to work on weekends and 50% of the employees to work on weekdays depending upon the time of season (days off, reserves, etc.).
- Estimate 75% of the spaces in the employee lot are used twice each day (opening shift employee vehicle would be replaced by a closing shift employee vehicle).
- Estimate 25% of the spaces in the employee lot are used only once on any given day (mid-shifts).
- Estimate 12% of all employee trips are in a carpool with other employees.
- Estimate 10% of all employee trips being dropped off from bus/train.

EXAMPLE

On a busy weekend (Saturday) in July we would approximate/expect the following

- 70% of total headcount of 1,800 employees to work or 1,260 employees
- 75% of employee parking lot filled or 562 spaces
- These 562 spaces would be used as follows: 421 spaces parked twice (opening shift/closing shift) and 140 spaces parked once (mid-shift).
- 12% of the employees or 151 would have come via carpool
- 10% of the employees or 126 would have been dropped off from bus/train

Existing Conditions:	
Customer Trip Rate	2840
Percent of Total	82%
Customer Trip Length	29.14154
Employee Trip Rate	610
Employee Trip Length	9.5
Percent of Total	18%
Total Trip Rate	**3450**

Future Conditions:	
Customer Trip Rate	4044
Percent of Total	78%
Customer Trip Length	29.14154
Employee Trip Rate	1127
Employee Trip Length	9.5
Percent of Total	22%
Total Trip Rate	**5172**

	Annual Electricity Use (kWh)					Increase based on ride quantity	Gold Striker data in kWh		Vs. Prior year	
Month	2012	2013	2014	2015						
January	87,266	145,410	50,055	56,292		4,117,181.52	2/7/2012	8681		
February	66,751	67,186	51,270	112,846	CalEEMod	94,517.47	3/7/2012	11092		
March	76,919	67,944	64,980	81,820			4/10/2012	23224		
April	125,039	79,668	88,755	121,204			5/8/2012	24134		
May	126,684	120,654	105,528	142,153			6/6/2012	27546		
June	150,041	143,411	112,389	146,572			7/9/2012	40868		
July	212,017	196,574	164,741	212,639			8/7/2012	37580		
August	182,593	161,786	185,533	210,757			9/6/2012	33719		
Sept	161,140	152,610	192,530	181,394			10/4/2012	25169		
October	132,542	135,186	193,762	179,414			11/6/2012	29943		
November	159,061	112,209	136,207	149,208			12/5/2012	19168		
December	103,091	52,356	75,564	88,452			1/7/2013	28866		
	1,583,144	1,434,994	1,421,314	1,682,751	1,530,551		2/6/2013	14772		
						Existing average usage	3/7/2013	13728		
	Annual Natural Gas Usage (MMBTU)				66670800	CalEEMod	4/5/2013	20256		
Month	2015	2016			43.5600061	35,137	5/7/2013	33170		
January	417.53	451.86	1.082221637	1.820070395			6/6/2013	40882		
February	64.12	455.27	7.100280724				7/8/2013	62291	21423	
March	308.56	309.19	1.002041742				8/6/2013	58438	20858	Gold Striker operating
April	227.32	325.31	1.431066338				9/6/2013	50053	16334	
May	246.75	399.08	1.617345491				10/8/2013	41944	16775	
June	1,239.23	401.54	0.324023789				11/6/2013	34333	4390	
July	2,609.86	1,820.00	0.697355414				12/6/2013	15603	-3565	
August	1,393.70	1,820.49	1.306228026				1/8/2014	17233	-11633	
Sept	797.97	1,452.31	est.							
October	937.8	1,706.80	est.							
November	1,126.02	2,049.36	est.							
December	348.17	633.67	est.							
	9717.03	11,824.87	10,771	Existing average	247.27					
			469,185	usage	43.56023015					
		Diesel usage (gal.)								
Month	2014	2015	2016							
January	140	183.9	324.5	1.764545949	1.087					
February	399	430.6	518.8	1.204830469						
March	588.1	719.5	700.7	0.973870744						
April	1137.2	1041.9	1303	1.250599866						
May	1436	1298.5	1272	0.979591837						
June	1599	1377.8	1369.8	0.994193642						
July	1368.1	1248.4	1689.2	1.353091958						
August	1114.1	1420.1	1505.6	1.060207028						
Sept	828.4	1129.7	225.2	0.199344959						
October	1018.1	1475.6	1603.98	est						
November	28.9	367.9	399.91	est	Existing average					
December	0	474.1	515.35	est	usage					
	9,657	11,168	11,428	10,751	gallons	total fuel demand				
						current	151,583			

		Unleaded Gas usage (gal.)						
Month		2014	2015	2016				
January		732	953.8	1,643.70	1.723317257	0.960752619	Increase to Annual	94,312
February		1,355.00	1,297.30	1,612.10	1.242657828		Buildout Gas use	99,027.42
March		1,915.00	2,047.50	2,145.20	1.047716728			
April		2,496.00	2,420.00	2,062.70	0.852355372			
May		2,838.00	2,809.10	2,344.00	0.834430957			
June		3,431.80	3,495.20	2,835.50	0.811255436			
July		3,679.90	3,894.20	3,725.60	0.956704843			
August		3,444.10	3,398.00	3,004.00	0.884049441			
Sept		2,122.20	2,205.00	648.9	0.294285714			
October		2,370.10	2,256.40	2167.842211	est			
November		103.3	1,180.50	1134.168467	est			
December		-	795.1	763.8944078	est		Existing average	
		24487.4	26752.1	24,087.61	25109.03503		usage	

Parking	Parking spaces per day						
	3635						
	3574	1003	2684776.66	115723.1319			
	3207						
	3271						
	3337						
	3403						
	3472						
	3541						
	3612						
	3684						
	3577						
	3648						
	3721						
	3462						
	3531						
	3602						
	3674						
	3747						
	3720						
	3794	Peak employees = 1003					
	3769						
					Visitor/Emp. Fuel		
	3845		4848		use	Total Park Fuel Use	
	78826	3583	parking spaces/trips	10348152.96	446,041.08	545,068.50	

CalEEMod Annual VMT/365 days/Net Project trips = VMT per trip of 4.22 (Marketplace) and 5.89 VMT per trip (Theme Park)

Disposal Date	Source	Site Name	Ticket #	Material Code	Net Tons	Vol	Destination	
01/13/2016	903	Great America	1220081	GARBAGE	11.23	40.00	NEWBY	
01/13/2016	903	Great America	1220136	GARBAGE	8.94	40.00	NEWBY	
01/13/2016	903	Great America	1220230	GARBAGE	8.45	40.00	NEWBY	
01/14/2016	903	Great America	1220432	GARBAGE	3.87	40.00	NEWBY	
01/14/2016	903	Great America	1220487	GARBAGE	8.64	40.00	NEWBY	
01/14/2016	903	Great America	1220560	GARBAGE	9.70	40.00	NEWBY	
01/22/2016	903	Great America	1222423	GARBAGE	11.91	40.00	NEWBY	
01/22/2016	903	Great America	1222446	GARBAGE	10.70	40.00	NEWBY	
02/04/2016	903	Great America	1226446	GARBAGE	5.31	40.00	NEWBY	
02/04/2016	903	Great America	1226478	GARBAGE	5.51	40.00	NEWBY	
02/04/2016	903	Great America	1226505	GARBAGE	12.60	40.00	NEWBY	
02/04/2016	903	Great America	1226537	GARBAGE	3.42	40.00	NEWBY	
02/04/2016	903	Great America	1226614	GARBAGE	6.14	40.00	NEWBY	
02/04/2016	903	Great America	1226667	GARBAGE	6.31	40.00	NEWBY	
02/11/2016	903	Great America	1228308	GARBAGE	5.85	40.00	NEWBY	
02/11/2016	903	Great America	1228400	GARBAGE	8.18	40.00	NEWBY	
02/11/2016	903	Great America	1228481	GARBAGE	8.29	40.00	NEWBY	
02/24/2016	903	Great America	1231834	GARBAGE	5.40	40.00	NEWBY	140.45
03/03/2016	903	Great America	1234655	GARBAGE	4.95	40.00	NEWBY	
03/03/2016	903	Great America	1234699	GARBAGE	7.20	40.00	NEWBY	
03/03/2016	903	Great America	1234742	GARBAGE	6.57	40.00	NEWBY	
03/03/2016	903	Great America	1234803	GARBAGE	8.95	40.00	NEWBY	
03/18/2016	903	Great America	1240261	GARBAGE	8.14	40.00	NEWBY	
03/18/2016	903	Great America	1240283	GARBAGE	10.86	40.00	NEWBY	
03/18/2016	903	Great America	1240352	GARBAGE	5.53	40.00	NEWBY	
03/29/2016	903	Great America	1243357	GARBAGE	8.09	40.00	NEWBY	
03/29/2016	903	Great America	1243375	GARBAGE	8.89	40.00	NEWBY	
03/29/2016	903	Great America	1243393	GARBAGE	3.26	40.00	NEWBY	
03/29/2016	903	Great America	1243417	GARBAGE	8.68	40.00	NEWBY	
03/30/2016	903	Great America	1243672	GARBAGE	4.71	40.00	NEWBY	
03/30/2016	903	Great America	1243679	GARBAGE	5.81	40.00	NEWBY	
03/30/2016	903	Great America	1243694	GARBAGE	8.47	40.00	NEWBY	
03/30/2016	903	Great America	1243716	GARBAGE	7.35	40.00	NEWBY	
04/13/2016	903	Great America	1248263	GARBAGE	6.17	40.00	NEWBY	
04/13/2016	903	Great America	1248282	GARBAGE	6.44	40.00	NEWBY	
04/13/2016	903	Great America	1248295	GARBAGE	7.65	40.00	NEWBY	
04/13/2016	903	Great America	1248321	GARBAGE	8.25	40.00	NEWBY	
04/13/2016	903	Great America	1248337	GARBAGE	9.57	40.00	NEWBY	
04/13/2016	903	Great America	1248354	GARBAGE	7.44	40.00	NEWBY	
04/21/2016	903	Great America	1251204	GARBAGE	3.98	40.00	NEWBY	
04/21/2016	903	Great America	1251217	GARBAGE	10.40	40.00	NEWBY	
04/21/2016	903	Great America	1251228	GARBAGE	3.67	40.00	NEWBY	
04/21/2016	903	Great America	1251251	GARBAGE	9.07	40.00	NEWBY	
04/21/2016	903	Great America	1251278	GARBAGE	5.31	40.00	NEWBY	
04/28/2016	903	Great America	1253690	GARBAGE	6.50	40.00	NEWBY	
04/28/2016	903	Great America	1253727	GARBAGE	8.69	40.00	NEWBY	
04/28/2016	903	Great America	1253796	GARBAGE	8.25	40.00	NEWBY	
04/28/2016	903	Great America	1253854	GARBAGE	3.49	40.00	NEWBY	
05/05/2016	903	Great America	1255791	GARBAGE	6.66	40.00	NEWBY	
05/05/2016	903	Great America	1255817	GARBAGE	7.58	40.00	NEWBY	
05/05/2016	903	Great America	1255862	GARBAGE	5.25	40.00	NEWBY	
05/05/2016	903	Great America	1255914	GARBAGE	5.02	40.00	NEWBY	
05/19/2016	903	Great America	1260634	GARBAGE	10.32	40.00	NEWBY	
05/19/2016	903	Great America	1260651	GARBAGE	7.98	40.00	NEWBY	
05/19/2016	903	Great America	1260687	GARBAGE	8.36	40.00	NEWBY	
05/19/2016	903	Great America	1260720	GARBAGE	8.85	40.00	NEWBY	
06/01/2016	903	Great America	1264575	GARBAGE	8.99	40.00	NEWBY	
06/01/2016	903	Great America	1264581	GARBAGE	8.75	40.00	NEWBY	
06/01/2016	903	Great America	1264603	GARBAGE	7.02	40.00	NEWBY	
06/01/2016	903	Great America	1264623	GARBAGE	8.60	40.00	NEWBY	
06/01/2016	903	Great America	1264645	GARBAGE	5.57	40.00	NEWBY	
06/01/2016	903	Great America	1264656	GARBAGE	6.83	40.00	NEWBY	
06/01/2016	903	Great America	1264770	GARBAGE	10.82	40.00	NEWBY	
06/09/2016	903	Great America	1266981	GARBAGE	4.41	40.00	NEWBY	
06/09/2016	903	Great America	1266986	GARBAGE	5.36	40.00	NEWBY	
06/09/2016	903	Great America	1267010	GARBAGE	8.84	40.00	NEWBY	
06/09/2016	903	Great America	1267026	GARBAGE	9.31	40.00	NEWBY	
06/09/2016	903	Great America	1267048	GARBAGE	9.21	40.00	NEWBY	
06/09/2016	903	Great America	1267072	GARBAGE	6.28	40.00	NEWBY	
06/15/2016	903	Great America	1269047	GARBAGE	8.66	40.00	NEWBY	
06/15/2016	903	Great America	1269064	GARBAGE	9.20	40.00	NEWBY	
06/15/2016	903	Great America	1269100	GARBAGE	8.64	40.00	NEWBY	
06/23/2016	903	Great America	1271719	GARBAGE	8.19	40.00	NEWBY	
06/23/2016	903	Great America	1271732	GARBAGE	8.67	40.00	NEWBY	
06/23/2016	903	Great America	1271752	GARBAGE	8.42	40.00	NEWBY	
06/23/2016	903	Great America	1271773	GARBAGE	9.58	40.00	NEWBY	
06/29/2016	903	Great America	1274369	GARBAGE	7.80	40.00	NEWBY	
06/29/2016	903	Great America	1274407	GARBAGE	6.70	40.00	NEWBY	
06/29/2016	903	Great America	1274495	GARBAGE	7.64	40.00	NEWBY	
06/29/2016	903	Great America	1274535	GARBAGE	6.71	40.00	NEWBY	
06/29/2016	903	Great America	1274577	GARBAGE	6.73	40.00	NEWBY	
07/06/2016	903	Great America	1276077	GARBAGE	7.67	40.00	NEWBY	
07/06/2016	903	Great America	1276090	GARBAGE	7.53	40.00	NEWBY	
07/06/2016	903	Great America	1276101	GARBAGE	6.95	40.00	NEWBY	
07/06/2016	903	Great America	1276115	GARBAGE	8.29	40.00	NEWBY	
07/06/2016	903	Great America	1276131	GARBAGE	9.55	40.00	NEWBY	
07/06/2016	903	Great America	1276149	GARBAGE	7.57	40.00	NEWBY	
07/06/2016	903	Great America	1276165	GARBAGE	4.83	40.00	NEWBY	
07/06/2016	903	Great America	1276219	GARBAGE	8.47	40.00	NEWBY	
07/13/2016	903	Great America	1278934	GARBAGE	7.52	40.00	NEWBY	
07/13/2016	903	Great America	1278999	GARBAGE	9.09	40.00	NEWBY	
07/14/2016	903	Great America	1279874	GARBAGE	9.07	40.00	NEWBY	
07/14/2016	903	Great America	1279896	GARBAGE	7.26	40.00	NEWBY	
07/20/2016	903	Great America	1282012	GARBAGE	2.31	40.00	NEWBY	
07/20/2016	903	Great America	1282067	GARBAGE	8.31	40.00	NEWBY	
07/20/2016	903	Great America	1282078	GARBAGE	9.22	40.00	NEWBY	
07/20/2016	903	Great America	1282180	GARBAGE	7.15	40.00	NEWBY	
07/20/2016	903	Great America	1282186	GARBAGE	7.08	40.00	NEWBY	
07/20/2016	903	Great America	1282256	GARBAGE	8.90	40.00	NEWBY	
07/27/2016	903	Great America	1284550	GARBAGE	8.86	40.00	NEWBY	
07/27/2016	903	Great America	1284568	GARBAGE	4.30	40.00	NEWBY	
07/27/2016	903	Great America	1284579	GARBAGE	8.57	40.00	NEWBY	
07/27/2016	903	Great America	1284595	GARBAGE	7.21	40.00	NEWBY	
07/27/2016	903	Great America	1284618	GARBAGE	7.41	40.00	NEWBY	
07/27/2016	903	Great America	1284640	GARBAGE	7.45	40.00	NEWBY	
07/28/2016	903	Great America	1284932	GARBAGE	8.60	40.00	NEWBY	
07/28/2016	903	Great America	1284948	GARBAGE	3.76	40.00	NEWBY	
08/03/2016	903	Great America	1286711	GARBAGE	9.16	40.00	NEWBY	
08/03/2016	903	Great America	1286727	GARBAGE	6.99	40.00	NEWBY	
08/03/2016	903	Great America	1286747	GARBAGE	9.30	40.00	NEWBY	
08/04/2016	903	Great America	1287251	GARBAGE	8.08	40.00	NEWBY	
08/04/2016	903	Great America	1287266	GARBAGE	9.37	40.00	NEWBY	
08/04/2016	903	Great America	1287281	GARBAGE	7.16	40.00	NEWBY	
08/11/2016	903	Great America	1289419	GARBAGE	7.70	40.00	NEWBY	
08/11/2016	903	Great America	1289431	GARBAGE	8.84	40.00	NEWBY	
08/11/2016	903	Great America	1289451	GARBAGE	10.29	40.00	NEWBY	
08/11/2016	903	Great America	1289470	GARBAGE	8.74	40.00	NEWBY	
08/11/2016	903	Great America	1289489	GARBAGE	9.61	40.00	NEWBY	
08/16/2016	903	Great America	1291247	GARBAGE	8.69	40.00	NEWBY	
08/16/2016	903	Great America	1291288	GARBAGE	8.56	40.00	NEWBY	
08/16/2016	903	Great America	1291368	GARBAGE	8.02	40.00	NEWBY	
08/16/2016	903	Great America	1291426	GARBAGE	8.35	40.00	NEWBY	
08/23/2016	903	Great America	1293408	GARBAGE	5.62	40.00	NEWBY	
08/23/2016	903	Great America	1293424	GARBAGE	8.75	40.00	NEWBY	
08/23/2016	903	Great America	1293459	GARBAGE	7.54	40.00	NEWBY	
08/24/2016	903	Great America	1293817	GARBAGE	8.27	40.00	NEWBY	
08/24/2016	903	Great America	1293835	GARBAGE	4.29	40.00	NEWBY	
08/24/2016	903	Great America	1293868	GARBAGE	3.93	40.00	NEWBY	
08/24/2016	903	Great America	1293902	GARBAGE	8.11	40.00	NEWBY	
08/24/2016	903	Great America	1293998	GARBAGE	7.48	40.00	NEWBY	
08/31/2016	903	Great America	1296639	GARBAGE	8.26	40.00	NEWBY	
08/31/2016	903	Great America	1296659	GARBAGE	6.93	40.00	NEWBY	
08/31/2016	903	Great America	1296691	GARBAGE	2.54	40.00	NEWBY	
09/07/2016	903	Great America	1298888	GARBAGE	6.91	40.00	NEWBY	
09/07/2016	903	Great America	1298901	GARBAGE	7.16	40.00	NEWBY	
09/07/2016	903	Great America	1298919	GARBAGE	7.46	40.00	NEWBY	
09/20/2016	903	Great America	1304482	GARBAGE	9.09	40.00	NEWBY	
09/20/2016	903	Great America	1304500	GARBAGE	8.30	40.00	NEWBY	
09/20/2016	903	Great America	1304531	GARBAGE	7.63	40.00	NEWBY	
09/20/2016	903	Great America	1304602	GARBAGE	7.71	40.00	NEWBY	
09/20/2016	903	Great America	1304732	GARBAGE	5.29	40.00	NEWBY	
10/05/2016	903	Great America	1312740	GARBAGE	7.36	40.00	NEWBY	
10/05/2016	903	Great America	1312776	GARBAGE	7.55	40.00	NEWBY	
10/05/2016	903	Great America	1312825	GARBAGE	8.62	40.00	NEWBY	
10/05/2016	903	Great America	1312901	GARBAGE	8.37	40.00	NEWBY	
10/05/2016	903	Great America	1313041	GARBAGE	4.49	40.00	NEWBY	
10/12/2016	903	Great America	1316044	GARBAGE	8.15	40.00	NEWBY	
10/12/2016	903	Great America	1316055	GARBAGE	4.98	40.00	NEWBY	
10/12/2016	903	Great America	1316088	GARBAGE	7.63	40.00	NEWBY	
10/19/2016	903	Great America	1318508	GARBAGE	7.34	40.00	NEWBY	
10/19/2016	903	Great America	1318525	GARBAGE	7.56	40.00	NEWBY	
10/19/2016	903	Great America	1318592	GARBAGE	5.83	40.00	NEWBY	
10/19/2016	903	Great America	1318660	GARBAGE	5.67	40.00	NEWBY	
10/21/2016	903	Great America	1319913	GARBAGE	2.64	40.00	NEWBY	
10/27/2016	903	Great America	1322761	GARBAGE	8.12	40.00	NEWBY	
10/27/2016	903	Great America	1322774	GARBAGE	5.79	40.00	NEWBY	
10/27/2016	903	Great America	1322797	GARBAGE	6.83	40.00	NEWBY	
10/27/2016	903	Great America	1322818	GARBAGE	2.49	40.00	NEWBY	
10/27/2016	903	Great America	1322840	GARBAGE	7.69	40.00	NEWBY	
					1,179.91			
					1,320.36	adjusted for full year with Jan Feb amounts		

Disposal Date	Source	Site ID	Site Name	Ticket #	Route	Vehicle	Driver Name	Material Code
01/21/2016	903	002085 - 0007	Great America	1222089	454	RO304	Arturo Alvarado	C&D
02/11/2016	903	002085 - 0007	Great America	1228538	453	RO323	Guadalupe Licea	C&D
02/11/2016	903	002085 - 0007	Great America	1228595	453	RO323	Guadalupe Licea	C&D
03/03/2016	903	002085 - 0007	Great America	1234675	452	RO324	Ruben Alvarado	C&D
04/21/2016	903	002085 - 0007	Great America	1251275	454	RO304	Arturo Alvarado	C&D
04/21/2016	903	002085 - 0007	Great America	1251314	454	RO304	Arturo Alvarado	C&D
04/28/2016	903	002085 - 0007	Great America	1253906	457	RO302	Clifford Miller	CONCRETE
04/28/2016	903	002085 - 0007	Great America	1253945	457	RO302	Clifford Miller	CONCRETE
04/29/2016	903	002085 - 0007	Great America	1254232	453	RO323	Guadalupe Licea	C&D
08/11/2016	903	002085 - 0007	Great America	1289415	454	RO303	Arturo Alvarado	C&D
10/19/2016	903	002085 - 0007	Great America	1318557	452	RO324	Ruben Alvarado	C&D

Net Tons	Vol	Destination	Work Order ID
6.05	40.00	NEWBY	0000082395
5.04	40.00	NEWBY	0000083513
4.98	40.00	NEWBY	0000083514
3.59	40.00	NEWBY	0000084630
11.94	10.00	NEWBY	0000086976
5.33	10.00	NEWBY	0000086977
6.40	10.00	NEWBY	0000087318
6.59	10.00	NEWBY	0000087319
2.50	40.00	NEWBY	0000087408
7.30	10.00	NEWBY	0000092722
4.67	40.00	NEWBY	0000096395
64.39			

Disposal Date	Source	Site ID	Site Name
01/26/2016	903	002085 - 0007	Great America
03/18/2016	903	002085 - 0007	Great America
06/23/2016	903	002085 - 0007	Great America

Ticket #	Route	Vehicle	Driver Name
1223366	454	RO304	Arturo Alvarado
1240313	454	RO303	Arturo Alvarado
1271713	454	RO304	Arturo Alvarado

Material Code	Net Tons	Vol	Destination
Yard Waste	6.10	40.00	NEWBY
Yard Waste	6.95	40.00	NEWBY
Yard Waste	7.99	40.00	NEWBY
	21.04		

Work Order ID
0000082612
0000085256
0000090113

Disposal Date

8/31/2016	27 Yards		
9/7/2016	27 Yards		
9/14/2016	27 Yards		
9/21/2016	27 Yards		
9/28/2016	27 Yards		
10/5/2016	27 Yards		
10/12/2016	27 Yards		
10/19/2016	27 Yards		
10/26/2016	27 Yards		
11/2/2016	27 Yards		
11/9/2012	27 Yards		
11/16/2016	27 Yards		
11/23/2016	27 Yards		
11/30/2016	27 Yards		
	27 Yards		
	405		
	405 Yards	**50.63**	**Tons**

****Estimated** tons at 250#'s per yard which is conservative

202.5 tons adjusted for full year (*4)

2012	2012 January		2012 February		2012 March		2012 April		2012 May		2012 June		2012 July		2012 August		2012 September		2012 October		2012 November		2012 December		Totals for the year	
Meter#		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)
9043556		38		372		3801		3340		7729		4513		5792		5162		4269		2991		3775		615		42397
9042555		197		307		2055		5255		4809		7169		9206		8316		6695		5561		5219		1242		56031
b8993601		3500		3590		3610		4720		4514		5354		6132		7163		7862		4139		4059		1050		55693
9170082		7		38		197		81		174		235		317		297		327		359		107		41		2180
13682367		0		0		0		0		0		0		0		0		0		0		0		0		0
13682368		0		0		0		0		0		0		0		0		0		0		0		0		0
	0	3742	0	4307	0	9663	0	13396	0	17226	0	17271	0	21447	0	20938	0	19153	0	13050	0	13160	0	2948	0	156301

2013	2013 January		2013 February		2013 March		2013 April		2013 May		2013 June		2013 July		2013 August		2013 September		2013 October		2013 November		2013 December		Totals for the year	
Meter#		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)
9043556		103		19		3334		4204		3783		4452		5596		4624		4215		3479		2588		63		36460
9042555		916		588		4831		6093		5990		7417		9832		8079		7633		5508		4442		984		62313
b8993601		583		930		2228		2331		4863		6032		7264		6240		6619		3773		2941		2386		46190
9170082		0		0		0		23		318		238		279				429		115		223		171		1796
13682367		0		0		0		0		0		0		0		0		0		0		0		0		0
13682368		0		0		0		0		0		0		0		0		0		0		0		0		0
	0	1602	0	1537	0	10393	0	12651	0	14954	0	18139	0	22971	0	18943	0	18896	0	12875	0	10194	0	3604	0	146759

2014	2014 January		2014 February		2014 March		2014 April		2014 May		2014 June		2014 July		2014 August		2014 September		2014 October		2014 November		2014 December		Totals for the year	
Meter#		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)
9043556		10		24		2718		3279		1616		0		0		0		0		0		0		0		7647
9042555		658		547		3483		4849		2639		0		0		0		0		0		0		0		12176
b8993601		2643		2930		1908		1942		2780		5215		5175		7149		6878		3065		2892		2247		44824
9170082		25		45		43		77		178		239		202		240		255		137		102		110		1653
13682367		0		0		0		0		2271		4767		5669		5551		5407		3397		2454		19		29535
13682368		0		0		0		0		3307		7935		8643		8721		8076		5085		4453		377		46597
	0	3336	0	3546	0	8152	0	10147	0	12791	0	18156	0	19689	0	21661	0	20616	0	11684	0	9901	0	2753	0	142432

2015	2015 January		2015 February		2015 March		2015 April		2015 May		2015 June		2015 July		2015 August		2015 September		2015 October		2015 November		2015 December		Totals for the year	
Meter#		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)	Cost	Usage (HCF)
9043556		0		0		0		0		0		0		0		0		0		0		0		0	0	0
9042555		0		0		0		0		0		0		0		0		0		0		0		0	0	0
b8993601		1543		1910		1771		2681		4073		4805		4479		4851		5150		3434		2861		1908	0	39466
9170082		18		69		39		102		180		155		1		0		1		10		105		51	0	731
13682367		11		40		2285		4208		4231		4674		4766		5016		4773		3454		130.56		955	0	34543.56
13682368		353		467		2690		6208		6594		7301		7991		7915		7629		5674		4922		1982	0	59726
	0	1925	0	2486	0	6785	0	13199	0	15078	0	16935	0	17237	0	17782	0	17553	0	12572	0	8018.56	0	4896	0	134466.56

2016	2016 January		2016 February		2016 March		2016 April		2016 May		2016 June		2016 July		2016 August		2016 September		2016 October		2016 November		2016 December		Totals for the year	
Meter#		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)		Usage (HCF)
9043556		0		0		0		0		0		0		0		0										0
9042555		0		0		0		0		0		0		0		0										0
b8993601		1896		1896		2059		1438		4646		6465		2618												21018
9170082		0		0		0		0		0		0		0		0										0
13682367		62		85		2275		3182		3729		4081		4315												17729
13682368		666		696		2925		5158		5923		7071		7701												30140
	0	2624	0	2677	0	7259	0	9778	0	14298	0	17617	0	14634	0	0	0	0	0	0	0	0	0	0	0	68887

HM1: 13682367 (& 9043556)
HM2: 13682368 (& 9042555)
RW: 9170082 & b8993601

2012 total domestic	98428	HCF			
2013 total domestic	98773	HCF			
2014 total domestic	95955	HCF			
2015 total domestic	94270	HCF		72.50	mGal
2016 total domestic	47869	HCF	***Thru July 2016		
2012 total reclaimed	57873	HCF			
2013 total reclaimed	47986	HCF			
2014 total reclaimed	46477	HCF			
2015 total reclaimed	40197	HCF		36.03	mGal
2016 total reclaimed	21018	HCF	***Thru July 2016		

Attachment 2

Bay Area Air Quality Management District

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

• County: Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.

• Roadway Direction: Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.

• Side of the Roadway: Identify on which side of the roadway the project is located.

• Distance from Roadway: Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.

• Annual Average Daily Traffic (ADT): Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.

Notes and References listed below the Search Boxes

Search Parameters

County	Santa Clara
Roadway Direction	North-South
Side of the Roadway	East
Distance from Roadway	500 feet
Annual Average Daily Traffic (ADT)	1,722

Results

Santa Clara County

NORTH-SOUTH DIRECTIONAL ROADWAY

PM2.5 annual average

0.005 ($\mu g/m^3$)

Cancer Risk

0.22 (per million)

Parkinglot

Data for Santa Clara County based on meteorological data collected from San Jose Airport in 1997

Adjusted for 2015 OEHHA and EMFAC2014 for 2018

0.15

(per million)

Note that EMFAC2014 predicts DSL PM2.5 aggragate rates in 2018 that are 46% of EMFAC2011 for 2014. TOG gasoline rates are 56% of EMFAC2011 year 2014 rates. This is for light- and medium-duty vehciles traveling at 30 mph for Bay Area

Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using ~~CALINE4~~ Cal3qhcr air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHHA toxicity values adopted in 2013.

Bay Area Air Quality Management District

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

• County: Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.

• Roadway Direction: Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.

• Side of the Roadway: Identify on which side of the roadway the project is located.

• Distance from Roadway: Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.

• Annual Average Daily Traffic (ADT): Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.

Notes and References listed below the Search Boxes

Search Parameters

County	Santa Clara
Roadway Direction	North-South
Side of the Roadway	East
Distance from Roadway	500 feet
Annual Average Daily Traffic (ADT)	4,424

Results

Santa Clara County

NORTH-SOUTH DIRECTIONAL ROADWAY

PM2.5 annual average

0.013 ($\mu g/m^3$)

Cancer Risk

0.57 (per million)

Parkinglot

Data for Santa Clara County based on meteorological data collected from San Jose Airport in 1997

Adjusted for 2015 OEHHA and EMFAC2014 for 2018

0.39

(per million)

Note that EMFAC2014 predicts DSL PM2.5 aggragate rates in 2018 that are 46% of EMFAC2011 for 2014. TOG gasoline rates are 56% of EMFAC2011 year 2014 rates. This is for light- and medium-duty vehciles traveling at 30 mph for Bay Area

Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using ~~CALINE4~~ Cal3qhcr air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHHA toxicity values adopted in 2013.

Bay Area Air Quality Management District

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

• County: Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.

• Roadway Direction: Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.

• Side of the Roadway: Identify on which side of the roadway the project is located.

• Distance from Roadway: Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.

• Annual Average Daily Traffic (ADT): Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.

Notes and References listed below the Search Boxes

Search Parameters

County	Santa Clara
Roadway Direction	East-West
Side of the Roadway	South
Distance from Roadway	1000 feet
Annual Average Daily Traffic (ADT)	30,000

Results

Santa Clara County

EAST-WEST DIRECTIONAL ROADWAY

PM2.5 annual average

0.045 ($\mu g/m^3$)

Cancer Risk

1.83 (per million)

Great America Tasman Drive

Data for Santa Clara County based on meteorological data collected from San Jose Airport in 1997

Adjusted for 2015 OEHHA and EMFAC2014 for 2018

1.26

(per million)

Note that EMFAC2014 predicts DSL PM2.5 aggragate rates in 2018 that are 46% of EMFAC2011 for 2014. TOG gasoline rates are 56% of EMFAC2011 year 2014 rates. This is for light- and medium-duty vehciles traveling at 30 mph for Bay Area

Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using ~~CALINE4~~ Cal3qhcr air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHHA toxicity values adopted in 2013.

Bay Area Air Quality Management District

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD. This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

For guidance on conducting a risk & hazard screening, including for roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.

Table A: Requestor Contact Information	
Contact Name:	James Reyff
Affiliation:	Illingworth & Rodkin, Inc.
Phone:	707-794-0400
Email:	jreyff@illingworthrodkin.com
Date of Request	11/11/2016
Project Name:	Great America
Address:	Great America Parkway
City:	Santa Clara
County:	Santa Clara
Type (residential, commercial, mixed use, industrial, etc.):	Community Mixed Use
Project size (# of units, or building square feet):	
Comments:	

For Air District assistance, the following steps must be completed:

Complete all the contact and project information requested in Table A. Incomplete forms will not be processed. Please include a project site map.

Download and install the free program Google Earth, http://www.google.com/earth/download/ge/, and then download the county specific Google Earth stationary source application files from the District's website, http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.

The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.

Find the project site in Google Earth by inputting the site's address in the Google Earth search box.

Using the Google Earth ruler function, measure the distance in feet between the project's fenceline and the stationary source's fenceline for all the sources that are within 1,000 feet of the project's fenceline. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm that the source is within 1,000 feet of the project. Please report any mapping errors to the District (District contact information in Step 9).

If the stationary source is within 1,000 feet of the project's fenceline and the stationary source's information table does not list the cancer risk, hazard index, and PM2.5 concentration, and instead says to "Contact District Staff", list the stationary source information in Table B Section 1 below.

Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.

Email this completed form to District staff (Step 9). District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.

Submit forms, maps, and questions to Alison Kirk at 415-749-5169, or akirk@baaqmd.gov .

Table B: Stationary Sources within 1,000 feet of Receptor that say "Contact District Staff"

Table B Section 1: Requestor fills out these columns based on Google Earth data					Table B Section 2: BAAQMD returns form with additional information in these columns as needed							
Distance from Receptor (feet)	**Plant # or Gas Dispensary #**	**Facility Name**	**Street Address**	**Type**	**2011 Screening Level Cancer Risk (1)**	**2011 Screening Level Hazard Index (1)**	**2011 Screening Level PM2.5 (1)**	**2014 Screening Level Cancer Risk (1)**	**Screening Cancer risk at Receptor**	**Screening Level PM2.5 at Receptor**	**BAAQMD Comments**	**I&R Comments**
320	10647	California's Great Amercia	2401 Agnew road	see attachment	62.92	0.023	0.111				emissions attached; consider calculating engines separately and applying the diesel engine calculator to the diesel generators. Then add the adjusted diesel generator values back to the values for the remainder of the sources.	See Sources below
	s1	Dropzone generator at 1,300ft			0.37		0.00	0.51	<.01	0.00		Beta Calculator and Diesel engine distance multiplier 1000 ft
	s9	Skytower generator at 1,800ft			0.20		0.00	0.27	<.01	0.00		Beta Calculator and Diesel engine distance multiplier 1000 ft
	s10	Administration generator at 800ft			0.07		0.00	0.10	<.01	0.00		Beta Calculator and Diesel engine distance multiplier 1000 ft
	s11	Sewer lift station generator at 1,600ft			0.30		0.00	0.41	<.01	0.00		Beta Calculator and Diesel engine distance multiplier 1000 ft
	s12	Lake Pump station generator at 300ft			0.37		0.00	0.51	0.13	0.00		Beta Calculator and Diesel engine distance multiplier 1000 ft
	S3,4	Staff shop, spray paint booth over 1,000ft										No TACs or PM
>300	G9563	Paramount's Great Amercia	2401 Agnew Road	gas station	na	na	na	5.86292E-07	0.06	0.00	see 10647	Used beta calculator for gas dispensing
>2000	17385	Broadcom Corporation	2451 Mission College Blvd	1 Generator	45.92	0.016	0.011	63.09408	<2.52	0.00	Consider using screening data with diesel engine distance multiplier; new plant no. 23275	Diesel engine distance multiplier
>2000	19010	Quality Investment Properties	2807 Mission College Bvd	Generator	39.98	0.014	0.071	54.93	<2.20	0.00	consider using screening data with diesel engine distance mulipler	Diesel engine distance multiplier
>2000	16922	Santa Clara Mariott Hotel	2700 Mission College Blvd	2 Generator	61.12	0.022	0.014	83.98	<3.36	0.00	Consider using screening data with diesel engine distance multiplier	Diesel engine distance multiplier
>2000	14213	Nortel Networks	4655 Great Amercia Pkwy	closed.	15.8	0.006	0.028	0.00	0.00	0.00	closed. No risk.	
2000	20136	Avaya, Inc	4659 Great America Pkwy	1 Generator	No Data	No Data	No Data	2.02	<0.08	0.00	emissions attached; consider using emissions with beta calculator	Used beta calculator for diesel engine
>2000	19891	Brocade Communications Systems	4980 Great America Pkwy	3 generators	4.42	0.002	1.000	6.07	<0.24	<0.04	new plant no. 18155; Emissions datat for S-1 attached. Unfortunately, we don't seem to have emissions data for S-3, and S-4, the other 2 active diesel engines at this site. Consider using screening data with distance calculator.	Diesel engine distance multiplier
>2000	16611	Hilton Santa Clara	4949 Great America Rkwy	Generator	0.75	0.000	0.000	1.03	0.00	0.00	low risk/concentration. No further study needed.	Diesel engine distance multiplier
>2000	17366	Carr America Realty	5201 Great Amercia Pkwy	2 Generator	44.91	0.016	0.010	61.71	<2.47	0.00	new plant no. 23240; consider using screening values with beta calculator	Diesel engine distance multiplier
450	17392	City of Santa Clara, Gianera Storm Stanti	2337 Gianera Street	1 Generator	35.12	0.012	0.008	48.25	7.24	0.00	consider using screening values with diesel emissions distance multiplier.	Diesel engine distance multiplier
50-500	17250	City of Santa Clara	4526 Lakeshore Drive	1 Generator	13.1	0.005	0.003	18.00	18.00	0.00	consider using screening values with diesel emissions distance multiplier.	Near-source level

Bay Area Air Quality Management District

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD. This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

For guidance on conducting a risk & hazard screening, including for roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.

Table A: Requestor Contact Information	
Contact Name:	James Reyff
Affiliation:	Illingworth & Rodkin, Inc.
Phone:	707-794-0400
Email:	jreyff@illingworthrodkin.com
Date of Request	11/11/2016
Project Name:	Great America
Address:	Great America Parkway
City:	Santa Clara
County:	Santa Clara
Type (residential, commercial, mixed use, industrial, etc.):	Community Mixed Use
Project size (# of units, or building square feet):	
Comments:	

For Air District assistance, the following steps must be completed:

Complete all the contact and project information requested in Table A. Incomplete forms will not be processed. Please include a project site map.

Download and install the free program Google Earth, http://www.google.com/earth/download/ge/, and then download the county specific Google Earth stationary source application files from the District's website, http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.

The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.

Find the project site in Google Earth by inputting the site's address in the Google Earth search box.

Using the Google Earth ruler function, measure the distance in feet between the project's fenceline and the stationary source's fenceline for all the sources that are within 1,000 feet of the project's fenceline. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm that the source is within 1,000 feet of the project. Please report any mapping errors to the District (District contact information in Step 9).

If the stationary source is within 1,000 feet of the project's fenceline and the stationary source's information table does not list the cancer risk, hazard index, and PM2.5 concentration, and instead says to "Contact District Staff", list the stationary source information in Table B Section 1 below.

Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.

Email this completed form to District staff (Step 9). District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.

Submit forms, maps, and questions to Alison Kirk at 415-749-5169, or akirk@baaqmd.gov .

Version received from BAAQMD

Table B: Stationary Sources within 1,000 feet of Receptor that say "Contact District Staff"

Table B Section 1: Requestor fills out these columns based on Google Earth data					Table B Section 2: BAAQMD returns form with additional information in these columns as needed								
Distance from Receptor (feet)	**Plant # or Gas Dispensary #**	**Facility Name**	**Street Address**	**Type**	**2011 Screening Level Cancer Risk (1)**	**2011 Screening Level Hazard Index (1)**	**2011 Screening Level PM2.5 (1)**	**2014 Screening Level Cancer Risk (1)**	**2014 Screening Level Hazard Index (1)**	**2014 Screening Level PM2.5 (1)**			
	10647	California's Great Amercia	2401 Agnew road	see attachment	62.92	0.023	0.111				emissions attached; consider calculating engines separately and applying the diesel engine calculator to the diesel generators. Then add the adjusted diesel generator values back to the values for the remainder of the sources.		
	G9563	Paramount's Great Amercia	2401 Agnew Road	gas station	na	na	na				see 10647		
	17385	Broadcom Corporation	2451 Mission College Blvd	1 Generator	45.92	0.016	0.011				Consider using screening data with diesel engine distance multiplier; new plant no. 23275		
	19010	Quality Investment Properties	2807 Mission College Bvd	Generator	39.98	0.014	0.071				consider using screening data with diesel engine distance multiplier		
	16922	Santa Clara Mariott Hotel	2700 Mission College Blvd	2 Generator	61.12	0.022	0.014				Consider using screening data with diesel engine distance multiplier		
	14213	Nortel Networks	4655 Great Amercia Pkwy	closed.	15.8	0.006	0.028				closed. No risk.		
	20136	Avaya, Inc	4659 Great America Pkwy	1 Generator	No Data	No Data	No Data				emissions attached; consider using emissions with beta calculator		
	19891	Brocade Communications Systems	4980 Great America Pkwy	3 generators	4.42	0.002	1.000				new plant no. 18155; Emissions datat for S-1 attached. Unfortunately, we don't seem to have emissions data for S-3, and S-4, the other 2 active diesel engines at this site. Consider using screening data with distance calculator.		
	16611	Hilton Santa Clara	4949 Great America Rkwy	Generator	0.75	0.000	0.000				low risk/concentration. No further study needed.		
	17366	Carr America Realty	5201 Great Amercia Pkwy	2 Generator	44.91	0.016	0.010				new plant no. 23240; consider using screening values with beta calculator		
	17392	City of Santa Clara, Gianera Storm Stanti	2337 Gianera Street	1 Generator	35.12	0.012	0.008				consider using screening values with diesel emissions distance multiplier.		
	17250	City of Santa Clara	4526 Lakeshore Drive	1 Generator	13.1	0.005	0.003				consider using screening values with diesel emissions distance multiplier.		

Great America Diesel Fuel Consumption

Existing Fuel Usage	10750	gal/year
Existing fuel for non-generator equipment	7240	gal/year
Total Exist Horsepower, assuming 0.05 gal/hp =	144800	hp/year
Exist HP, assuming 8-hours/365 days	**50**	**hp**
Future Diesel Usage (exist *1.41)	15,158	gal
Future fuel for non-generator equipment	9,648	gal/year
Total Exist Horsepower, assuming 0.05 gal/hp =	192950	hp/year
Future HP, assuming 8-hours/365 days	**66**	**hp**

Existing Standby Emergency Generator Diesel Usage

Existing Generator Sizes (in HP)

700	80	31	317	276	1404

Horsepower Hours, assuming 50 hrs/year operation

35000	4000	1550	15850	13800

Total = 70200 Fuel use, assuming 0.05 gal/hp

Total = 3510 gal/year

Future Generator Sizes (in HP)

400	400

Horsepower Hours, assuming 50 hrs/year operation

20000	20000

Total = 40000 Fuel use, assuming 0.05 gal/hp

Total = 2000 gal/year

						PM2.5	
tons/yr (from CalEEMod) Exist						**0.0665**	
tons/yr (from CalEEMod) Project						**0.0810**	
Average annual lbs/day EXIST						0.364	
Average annual lbs/day FUTURE						0.444	

Community Risk	Source			Sensitive Receptor		Project Impact
	Exist	Project		Exist	Project	
Cancer Risk at Source =	5.32E-04	6.48E-04	from Cancer Risk			
Cancer Risk600ft				4.79E-05	5.83E-05	from Diesel BUG Distance Multiplier
Cancer Risk1000ft				2.13E-05	2.59E-05	
Cancer Risk2000ft				1.06E-05	1.30E-05	
			average:	2.66E-05	3.24E-05	**5.80E-06 Risk**
Annual PM2.5 at Source	0.7040	0.857	from PM2.5			
at 600 ft				0.07	0.09	from Diesel BUG Distance Multiplier
at 1000 ft				0.04	0.04	
at 2000ft				0.02	0.02	
			average:	0.04	0.09	**0.05 µg/m^3**

Great America Diesel Fuel Consumption

Santa Clara County, Annual

Existing

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	0.10	1000sqft	0.03	100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Use really small land use

Construction Phase -

Off-road Equipment -

Vehicle Trips - Simulating travel to represent 750,000 miles/year based on 25,100 gal of fuel used on site/year at ~30 mpg = 20.6 trip/day @ 100 mi/trip

Operational Off-Road Equipment - This equipment assumption would consume 10,700 gallons of diesel/year at 0.05 gal/hp-hr

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperHorsePower	172.00	50.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.42	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	CC_TL	7.30	100.00
tblVehicleTrips	CNW_TL	7.30	100.00
tblVehicleTrips	CW_TL	9.50	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	10.71	206.00
tblVehicleTrips	SU_TR	10.71	206.00
tblVehicleTrips	WD_TR	10.71	206.00

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	4.4000e-004	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.3863	0.3863	1.0000e-005	0.0000	0.3881
Mobile	0.0409	0.2750	0.9244	3.1900e-003	0.2789	3.6900e-003	0.2826	0.0747	3.4800e-003	0.0782	0.0000	291.1441	291.1441	9.1800e-003	0.0000	291.3738
Offroad	0.1881	0.8484	0.8918	8.7000e-004		0.0723	0.0723		0.0665	0.0665	0.0000	80.1451	80.1451	0.0250	0.0000	80.7688
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0137	0.0706	0.0843	1.4100e-003	3.0000e-005	0.1295
Total	**0.2294**	**1.1235**	**1.8163**	**4.0600e-003**	**0.2789**	**0.0760**	**0.3549**	**0.0747**	**0.0700**	**0.1447**	**0.0137**	**371.7461**	**371.7597**	**0.0356**	**3.0000e-005**	**372.6602**

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	4.4000e-004	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.3863	0.3863	1.0000e-005	0.0000	0.3881
Mobile	0.0409	0.2750	0.9244	3.1900e-003	0.2789	3.6900e-003	0.2826	0.0747	3.4800e-003	0.0782	0.0000	291.1441	291.1441	9.1800e-003	0.0000	291.3738
Offroad	0.1881	0.8484	0.8918	8.7000e-004		0.0723	0.0723		0.0665	0.0665	0.0000	80.1451	80.1451	0.0250	0.0000	80.7688
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0137	0.0706	0.0843	1.4100e-003	3.0000e-005	0.1295
Total	**0.2294**	**1.1235**	**1.8163**	**4.0600e-003**	**0.2789**	**0.0760**	**0.3549**	**0.0747**	**0.0700**	**0.1447**	**0.0137**	**371.7461**	**371.7597**	**0.0356**	**3.0000e-005**	**372.6602**

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

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	0.0409	0.2750	0.9244	3.1900e-003	0.2789	3.6900e-003	0.2826	0.0747	3.4800e-003	0.0782	0.0000	291.1441	291.1441	9.1800e-003	0.0000	291.3738
Unmitigated	0.0409	0.2750	0.9244	3.1900e-003	0.2789	3.6900e-003	0.2826	0.0747	3.4800e-003	0.0782	0.0000	291.1441	291.1441	9.1800e-003	0.0000	291.3738

4.2 Trip Summary Information

	Average Daily Trip Rate	Unmitigated	Mitigated

Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	20.60	20.60	20.60	749,840	749,840
Total	20.60	20.60	20.60	749,840	749,840

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	100.00	100.00	100.00	0.00	81.00	19.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.596719	0.040200	0.188056	0.111125	0.016796	0.004948	0.012194	0.019466	0.002007	0.001626	0.005410	0.000612	0.000841

5.0 Energy Detail

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	0.2450	0.2450	1.0000e-005	0.0000	0.2459
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.2450	0.2450	1.0000e-005	0.0000	0.2459
NaturalGas Mitigated	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1422
NaturalGas Unmitigated	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1422

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	2648	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1422
Total		**1.0000e-005**	**1.3000e-004**	**1.1000e-004**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.1413**	**0.1413**	**0.0000**	**0.0000**	**0.1422**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	2648	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1422
Total		**1.0000e-005**	**1.3000e-004**	**1.1000e-004**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.1413**	**0.1413**	**0.0000**	**0.0000**	**0.1422**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	842	0.2450	1.0000e-005	0.0000	0.2459
Total		**0.2450**	**1.0000e-005**	**0.0000**	**0.2459**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	842	0.2450	1.0000e-005	0.0000	0.2459
Total		**0.2450**	**1.0000e-005**	**0.0000**	**0.2459**

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	4.4000e-004	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	4.4000e-004	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	5.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-004**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	5.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-004**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0843	1.4100e-003	3.0000e-005	0.1295
Unmitigated	0.0843	1.4100e-003	3.0000e-005	0.1295

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0.043077 / 0.0027496	0.0843	1.4100e-003	3.0000e-005	0.1295
Total		**0.0843**	**1.4100e-003**	**3.0000e-005**	**0.1295**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Arena	0.043077 / 0.0027496	0.0843	1.4100e-003	3.0000e-005	0.1295
Total		**0.0843**	**1.4100e-003**	**3.0000e-005**	**0.1295**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Other Construction Equipment	1	8.00	365	50	1.00	Diesel

UnMitigated/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
Equipment Type	tons/yr										MT/yr					
Other Construction	0.1881	0.8484	0.8918	8.7000e-004		0.0723	0.0723		0.0665	0.0665	0.0000	80.1451	80.1451	0.0250	0.0000	80.7688
Total	**0.1881**	**0.8484**	**0.8918**	**8.7000e-004**		**0.0723**	**0.0723**		**0.0665**	**0.0665**	**0.0000**	**80.1451**	**80.1451**	**0.0250**	**0.0000**	**80.7688**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Great America Diesel Fuel Consumption

Santa Clara County, Annual

Future

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	0.10	1000sqft	0.03	100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Use really small land use

Construction Phase -

Off-road Equipment -

Operational Off-Road Equipment - This equipment assumption would consume 10,700 gallons of diesel/year at 0.05 gal/hp-hr - generators and x1.41

Stationary Sources - Emergency Generators and Fire Pumps -

Vehicle Trips - Simulating travel to represent 750,000 miles/year based on 25,100 gal of fuel used on site/year at ~30 mpg = 20.6 trip/day @ 100 mi/trip increase x1.41

Table Name	Column Name	Default Value	New Value
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperHorsePower	172.00	66.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.42	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	CC_TL	7.30	100.00
tblVehicleTrips	CNW_TL	7.30	100.00
tblVehicleTrips	CW_TL	9.50	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	10.71	291.00
tblVehicleTrips	SU_TR	10.71	291.00
tblVehicleTrips	WD_TR	10.71	291.00

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	4.4000e-004	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.3863	0.3863	1.0000e-005	0.0000	0.3881
Mobile	0.0578	0.3885	1.3058	4.5100e-003	0.3940	5.2100e-003	0.3992	0.1055	4.9200e-003	0.1104	0.0000	411.2764	411.2764	0.0130	0.0000	411.6008
Offroad	0.1270	1.1559	0.8070	1.0300e-003		0.0885	0.0885		0.0814	0.0814	0.0000	94.4363	94.4363	0.0294	0.0000	95.1713
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0137	0.0706	0.0843	1.4100e-003	3.0000e-005	0.1295
Total	**0.1852**	**1.5445**	**2.1129**	**5.5400e-003**	**0.3940**	**0.0937**	**0.4877**	**0.1055**	**0.0864**	**0.1919**	**0.0137**	**506.1696**	**506.1832**	**0.0438**	**3.0000e-005**	**507.2896**

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	4.4000e-004	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.3863	0.3863	1.0000e-005	0.0000	0.3881
Mobile	0.0578	0.3885	1.3058	4.5100e-003	0.3940	5.2100e-003	0.3992	0.1055	4.9200e-003	0.1104	0.0000	411.2764	411.2764	0.0130	0.0000	411.6008
Offroad	0.1270	1.1559	0.8070	1.0300e-003		0.0885	0.0885		0.0814	0.0814	0.0000	94.4363	94.4363	0.0294	0.0000	95.1713
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0137	0.0706	0.0843	1.4100e-003	3.0000e-005	0.1295
Total	**0.1852**	**1.5445**	**2.1129**	**5.5400e-003**	**0.3940**	**0.0937**	**0.4877**	**0.1055**	**0.0864**	**0.1919**	**0.0137**	**506.1696**	**506.1832**	**0.0438**	**3.0000e-005**	**507.2896**

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

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	0.0578	0.3885	1.3058	4.5100e-003	0.3940	5.2100e-003	0.3992	0.1055	4.9200e-003	0.1104	0.0000	411.2764	411.2764	0.0130	0.0000	411.6008
Unmitigated	0.0578	0.3885	1.3058	4.5100e-003	0.3940	5.2100e-003	0.3992	0.1055	4.9200e-003	0.1104	0.0000	411.2764	411.2764	0.0130	0.0000	411.6008

4.2 Trip Summary Information

	Average Daily Trip Rate	Unmitigated	Mitigated

Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	29.10	29.10	29.10	1,059,240	1,059,240
Total	29.10	29.10	29.10	1,059,240	1,059,240

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	100.00	100.00	100.00	0.00	81.00	19.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.596719	0.040200	0.188056	0.111125	0.016796	0.004948	0.012194	0.019466	0.002007	0.001626	0.005410	0.000612	0.000841

5.0 Energy Detail

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	0.2450	0.2450	1.0000e-005	0.0000	0.2459
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.2450	0.2450	1.0000e-005	0.0000	0.2459
NaturalGas Mitigated	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1422
NaturalGas Unmitigated	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1422

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	2648	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1422
Total		**1.0000e-005**	**1.3000e-004**	**1.1000e-004**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.1413**	**0.1413**	**0.0000**	**0.0000**	**0.1422**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	2648	1.0000e-005	1.3000e-004	1.1000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1422
Total		**1.0000e-005**	**1.3000e-004**	**1.1000e-004**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.1413**	**0.1413**	**0.0000**	**0.0000**	**0.1422**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	842	0.2450	1.0000e-005	0.0000	0.2459
Total		**0.2450**	**1.0000e-005**	**0.0000**	**0.2459**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	842	0.2450	1.0000e-005	0.0000	0.2459
Total		**0.2450**	**1.0000e-005**	**0.0000**	**0.2459**

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	4.4000e-004	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	4.4000e-004	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	5.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-004**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	5.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-004**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0843	1.4100e-003	3.0000e-005	0.1295
Unmitigated	0.0843	1.4100e-003	3.0000e-005	0.1295

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0.043077 / 0.0027496	0.0843	1.4100e-003	3.0000e-005	0.1295
Total		**0.0843**	**1.4100e-003**	**3.0000e-005**	**0.1295**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Arena	0.043077 / 0.0027496	0.0843	1.4100e-003	3.0000e-005	0.1295
Total		**0.0843**	**1.4100e-003**	**3.0000e-005**	**0.1295**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Other Construction Equipment	1	8.00	365	66	1.00	Diesel

UnMitigated/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
Equipment Type	tons/yr										MT/yr					
Other Construction	0.1270	1.1559	0.8070	1.0300e-003		0.0885	0.0885		0.0814	0.0814	0.0000	94.4363	94.4363	0.0294	0.0000	95.1713
Total	**0.1270**	**1.1559**	**0.8070**	**1.0300e-003**		**0.0885**	**0.0885**		**0.0814**	**0.0814**	**0.0000**	**94.4363**	**94.4363**	**0.0294**	**0.0000**	**95.1713**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation