Final Environmental Impact Report

Downtown Specific Plan Amendments and Specific Development Project

SCH# 2018052020

Prepared by the City of

Sunnyvale

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

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SECTION 1.0 INTRODUCTION

This document, together with the Draft Environmental Impact Report (Draft EIR), constitutes the Final Environmental Impact Report (Final EIR) for the Downtown Specific Plan (DSP) Amendments and Specific Developments project.

1.1 PURPOSE OF THE FINAL EIR

In conformance with the California Environmental Quality Act (CEQA) and CEQA Guidelines, this Final EIR provides objective information regarding the environmental consequences of the proposed project. The Final EIR also examines mitigation measures and alternatives to the project intended to reduce or eliminate significant environmental impacts. The Final EIR is intended to be used by the City and any responsible agencies in making decisions regarding the project.

Pursuant to CEQA Guidelines Section 15090(a), prior to approving a project, the lead agency shall certify that:

(1) The Final EIR has been completed in compliance with CEQA;
(2) The Final EIR was presented to the decision-making body of the lead agency, and that the decision-making body reviewed and considered the information contained in the Final EIR prior to approving the project; and
(3) The Final EIR reflects the lead agency's independent judgment and analysis.

1.2 CONTENTS OF THE FINAL EIR

CEQA Guidelines Section 15132 specify that the Final EIR shall consist of:

a) The Draft EIR or a revision of the Draft;
b) Comments and recommendations received on the Draft EIR either verbatim or in summary;
c) A list of persons, organizations, and public agencies commenting on the Draft EIR;
d) The Lead Agency's responses to significant environmental points raised in the review and consultation process; and
e) Any other information added by the Lead Agency.

1.3 PUBLIC REVIEW

In accordance with CEQA and the CEQA Guidelines (Public Resources Code Section 21092.5[a] and CEQA Guidelines Section 15088[b]), the City shall provide a written response to a public agency on comments made by that public agency at least 10 days prior to certifying the EIR. The Final EIR and all documents referenced in the Final EIR are available for public review at the City's One-Stop Permit Counter located at 456 West Olive Avenue on weekdays during normal business hours. The Final EIR is also available for review on the City's website: https://sunnyvale.ca.gov/news/topics/dsp/default.htm.

SECTION 2.0 DRAFT EIR PUBLIC REVIEW SUMMARY

The Draft EIR for the DSP Amendments and Specific Developments project, dated November 2019, was circulated to affected public agencies and interested parties for a 45-day review period from November 22, 2019 through January 6, 2020. The City undertook the following actions to inform the public of the availability of the Draft EIR:

- A Notice of Availability of Draft EIR was published on the City's website (https://sunnyvale.ca.gov/news/topics/dsp/default.htm) and in the Sunnyvale Sun;
- Notification of the availability of the Draft EIR was mailed to project-area residents and other members of the public who had indicated interest in the project;
- The Draft EIR was delivered to the State Clearinghouse on November 22, 2019, as well as sent to various governmental agencies, organizations, businesses, and individuals (see Section 3.0 for a list of agencies, organizations, businesses, and individuals that received the Draft EIR); and
- Copies of the Draft EIR were made available on the City's website (https://sunnyvale.ca.gov/news/topics/dsp/default.htm), library, One-Stop Permit Center, and Community Center.

SECTION 3.0 DRAFT EIR RECIPIENTS

CEQA Guidelines Section 15086 requires that a local 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.

The NOA for the Draft EIR was sent to owners and occupants within a 2,000 foot radius of the DSP area and to adjacent jurisdictions. The following agencies received a copy of the Draft EIR from the City or via the State Clearinghouse:

- Amah Mutsun Tribal Band
- California Air Resources Board
- California Department of Conservation
- California Department of Fish and Game, Bay Delta Region 3
- California Department of Forestry and Fire Protection
- California Department of Housing and Community Development
- California Department of Parks and Recreation
- California Department of Toxic Substances Control
- California Department of Transportation, District 4
- California Department of Transportation, Division of Aeronautics
- California Department of Water Resources
- California Governor's Office of Emergency Services
- California Highway Patrol
- California Native American Heritage Commission
- California Natural Resources Agency
- California Office of Historic Preservation
- California Public Utilities Commission
- California Regional Water Quality Control Board, San Francisco Bay Region 2
- California Water Service Company
- City of Cupertino
- City of Mountain View
- City of Santa Clara
- County of Santa Clara, Airport Land Use Commission
- County of Santa Clara, Department of Planning and Development
- County of Santa Clara, Department of Roads and Airports
- County of Santa Clara, Local Agency Formation Commission
- Coyote Valley Band of Pomo Indians
- Cupertino Union School District
- Manchester Band of Pomo Indians
- Muwekma Ohlone Indian Tribe of the SF Bay Area
- North Coastal Pomo Coast Yuki
- Pacific Gas and Electric
- Peninsula Corridor Joint Powers Board
- Potter Valley Tribe

- San Francisco Bay Conservation and Development Commission
- San Francisco Public Utilities Commission
- Santa Clara Unified School District
- Santa Clara Valley Transportation Authority
- Santa Clara Valley Water District
- Silicon Valley Clean Energy
- Specialty Solid Waste and Recycling
- State Water Resources Control Board, Division of Drinking Water
- Sunnyvale School District
- United States Department of Air Force, BRAC
- United States Department of the Navy, Naval Facilities Engineering Command

SECTION 4.0 RESPONSES TO DRAFT EIR COMMENTS

In accordance with CEQA Guidelines Section 15088, this document includes written responses to comments raising significant environmental issues received by the City of Sunnyvale on the Draft EIR. This section also summarizes and addresses verbal comments related to the Draft EIR received at the Planning Commission hearing on December 16, 2019 and at the Community Meeting on February 11, 2020.

Comments are organized under headings containing the source of the letter and its date. The specific comments from each of the letters and/or emails are presented with each response to that specific comment directly following. Copies of the letters and emails received by the City of Sunnyvale are included in their entirety in Appendix A of this document. Comments received on the Draft EIR are listed below.

Comment Letter and Commenter **Page of Response**

GOVERNMENTAL AGENCIES

A. Santa Clara Valley Transportation Authority (VTA) (dated January 6, 2020)

Comment A.1: Thank you for the opportunity to provide comments on DEIR for the Downtown Specific Plan for the City of Sunnyvale. VTA is excited about the opportunity that this project represents for Sunnyvale and the growth for transit ridership it will bring to the downtown area VTA has reviewed the DEIR and has the following comments:

Transit Vehicle Delay

VTA commends the City of Sunnyvale for committing feasible transit-priority measures to improve the reliability and speed of transit affected by auto congestion in downtown Sunnyvale. VTA recommends updating the Transit Vehicle Delay analysis (Chapter 74) and Appendix B in the Final Draft Environmental Impact Report to reflect VTA's current bus network that began on December 28, 2019. Routes 20 and 21 are new services that operate in the downtown and Route 54 has been discontinued. Accurately depicting the new VTA bus network will help identify transit-related amenities to increase the reliability of those services

For accurate information about VTA's new network please visit http://new service.vta.org VTA requests discussing potential transit improvements at a future VTA-City of Sunnyvale Coordination Meeting.

Response A.1: Pursuant to CEQA Guidelines Section 15125(a)(1), the EIR should describe the physical environmental conditions as they exist at the time the notice of preparation is published. The Notice of Preparation (NOP) for the EIR was published May 7, 2018. The bus network and service, as well as the transit delay analysis, described in *Section 3.17 Transportation/Traffic* of the Draft EIR reflect the bus network and service current at the time the NOP was published.

As stated in the comment above, on December 28, 2019 (subsequent to the publication of the NOP and Draft EIR for the project), the Santa Clara Valley Transportation Authority updated its bus network and service. It is not required under CEQA for the transit vehicle delay analysis in the EIR be updated, as the analysis was based on conditions as they existed at the time the NOP circulated. Nonetheless, for informational purposes the City has prepared an updated transit vehicle delay analysis based on the bus network and service system as of December 28, 2019.

The Draft EIR (see page 264) concluded that Routes 54 and 55 would see delay increases of 60 seconds or more with implementation of the project. The updated transit vehicle delay analysis concluded that with the discontinuation of Route 54, only Route 55 would have a delay of 60 seconds or more, and would have the same delay time as what was identified in the Draft EIR. The updated analysis also shows that the project would not add more than 60 seconds of delay to the new routes, Routes 20 and 21. Refer to Appendix B for a copy of the updated transit vehicle delay analysis prepared by Fehr & Peers on January 21, 2020.

B. County of Santa Clara Roads & Airports Department (dated January 6,2020)

Comment B.1: The County of Santa Clara Roads and Airports Department appreciates the opportunity to review the NOA EIR-Proposed Amendments to the Downtown Specific Plan and is submitting the following comments:

- The County agrees to **MM TRN1.3: All Project Sites pg. xxv**. That the County designates Lawrence-Homestead Road grade separation as priority 8B in the Measure B Expressway Project Implementation Plan, and this Downtown Specific Plan project shall pay a fair-share contribution to this improvement.

Response B.1: The above comment's summary of mitigation measure MM TRN-1.3 from page xxv of the Draft EIR is correct and consistent with the description of the measure in the Draft EIR. The comment does not raise any significant environmental issues under CEQA; therefore, no further response is required.

Comment B.2: It appears that Mathilda Square-Loop ramps at Central and Lawrence/Arques were excluded from the list of study intersections we recommended on the NOP. So please include these intersections.

Response B.2: Uncontrolled slip ramps on County expressways, including the Mathilda Avenue square loop ramps at Central Expressway and the Lawrence Expressway square loop ramps at Central Expressway, are not typically evaluated for Transportation Impact Analyses (TIAs) in Santa Clara County. The TRAFFIX analysis software used in TIAs is not able to evaluate these types of facilities accurately.

Under congested conditions, traffic operations at uncontrolled slip ramps are effected by downstream intersections. TRAFFIX evaluates each intersection individually and does not account for the effects of downstream intersections. Thus, TRAFFIX would not accurately report traffic operations at uncontrolled slip ramps and traffic operations analysis at uncontrolled slip ramps is not performed typically in Santa Clara County. In addition, neither Santa Clara County nor VTA have significance thresholds for uncontrolled slip ramps.

Instead of direct modeling of the slip ramps at Mathilda Avenue/Central Expressway (which is consistent with other TIAs completed in Santa Clara County), the technical TIA included in Appendix I of the Draft EIR evaluates the signalized intersections downstream of the Mathilda Avenue/Central Expressway slip ramps. The analysis of intersections downstream of the slip ramps has the effect of measuring the impact of the project on the Mathilda Avenue/Central Expressway slip ramps. Analysis of the project's impacts to intersections downstream of Mathilda Avenue/Central Expressway (e.g., Intersection 64. Central Expressway WB off-ramps/Arques Avenue) is included in *Section 3.17 Transportation/Traffic* of the Draft EIR. Intersections downstream of Lawrence Expressway/Central Expressway slip ramps

did not warrant analysis because the project would add a minimal amount of traffic (i.e., less than 10 peak hour trips) to those intersections.

ORGANIZATIONS, BUSINESSES, AND INDIVIDUALS

C. Steve Burke (dated December 1, 2019)

Comment C.1: As 30 year Sunnyvale residents, we continue to be very excited about the redevelopment. That said, we are experiencing a very high degree of through traffic on Lincoln Avenue where we live, as well as Bayview.

Per the Sunnyvale specific plan, these neighborhoods should be quiet and have "Residential gateways establish boundaries and convey a sense of "residents only" as expressed on Page 4 of the 2003 Sunnyvale Specific Plan.

Traffic flow through our neighborhood is chaotic. Drivers use the non-stop Bayview as a speedy alternative to Sunnyvale Ave which has multiple traffic signals. Lincoln Avenue is also an expeditious alternative to drivers who use it to avoid the one lane congestion on Evelyn during the morning, and use Lincoln Ave as a speedy alternative to congested one-lane Sunnyvale (between El Camino and McKinley) during the evening hours.

In your planning, we will greatly appreciate if you can devise methods to keep cars downtown instead of using residential streets as speedy alternatives. Neighbors have reached out and have expressed desires for bulbouts, roundabouts or any other traffic alternatives that will help drivers prefer main streets for through traffic.

Response C.1: The above comment describes existing cut-through traffic conditions on Lincoln Avenue and Bayview Avenue. While it is possible vehicles traveling to and from the project sites as a result of the project may use neighborhood streets (especially those of residents who are knowledgeable of local road conditions), the project would not result in a significant intersection impact on either Lincoln Avenue or Bayview Avenue. According to the Transportation Impact Analysis completed for the project and included in Appendix I of the Draft EIR, most vehicular traffic will access the downtown via Mathilda Avenue, Sunnyvale Avenue, and Evelyn Avenue. The project's transportation impacts and mitigation to reduce significant impacts are discussed in *Section 3.17 Transportation/Traffic* of the Draft EIR.

The City has a Neighborhood Traffic Calming Policy. Traffic calming measures may be implemented on streets classified as "residential." Bayview Avenue and Lincoln Avenue are both classified as residential streets and would qualify for traffic calming measures if specific criteria are met. According to the City Neighborhood Traffic Calming program, members of the public may initiate the traffic calming process by contacting the City's Transportation and Traffic staff at (408) 730-7415 or pubworks@sunnyvale.ca.gov.

D. Janet Caprini (dated December 31, 2019)

Comment D.1: Our family has lived in Sunnyvale since the early 1920's. a lot of changes have taken place but not all for the good, especially for the downtown area of Sunnyvale. Mistakes have been made in the past and the downtown area has been a mess, an eye sore and very inconvenient for its residents and visitors for many years. The malls built only to be torn down and left in rubble. Town and County Center, Murphy Estate etc.

Response D.1: The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

Comment D.2: Parking is a joke. You are proposing 7 story buildings and underground parking, but do not state how much parking will be available or how much is being eliminated. My father was in the underground parking in Sunnyvale during an earthquake and conveyed that it was a freighting experience and would not park underground ever again. Seven stories in an earthquake zone. Keep your fingers crossed!

Response D.2: Descriptions of the parking proposed for the six development projects are included in *Section 2.3.2 Six Development Projects* of the Draft EIR. A discussion of vehicle parking requirements for the project is provided in *Section 3.17.3.2 Vehicle Parking* on pages 280 through 281 in the Draft EIR. Pursuant to Senate Bill 743 (Steinberg, 2013), parking is not considered as a significant impact on the environment for transit-oriented infill projects such as the proposed project. For this reason, a parking analysis is not included in the EIR.

The Draft EIR discloses that the six project sites, along with the rest of the San Francisco Bay Area, are located in one of the most seismically active areas in the country (see page 112 of the Draft EIR). As discussed under Impact GEO-1 on pages 113 through 114 of the Draft EIR, all future buildings under the proposed project would be constructed pursuant to current California Building Standards Code to minimize the risk from seismic-related hazards.

Comment D.3: Sunnyvale is not San Francisco nor should it be. What a mess for the extreme amount of water sewer, and traffic issues way beyond anyone's comfort zones.

Response D.3: The project's impact on water and sewer systems are discussed in *Section 3.18 Utilities and Service Systems* of the Draft EIR. The Draft EIR concluded that the project, with the implementation of Capital Improvement Projects (CIPs), would not result in significant water or sewer impacts. Developers are also required to pay connection fees and fair-share contributions to CIPs, as appropriate.

The project's transportation impacts are discussed in *Section 3.17 Transportation/Traffic*, the project would result in Level of Service (LOS) deficiencies at one freeway segment and several intersections (refer to the discussion under Impact TRN-1 in *Section 3.17.2.1 Project Impacts* and Impact TRN-C in *Section 3.17.2.2 Cumulative Impacts* in the Draft EIR). Developers shall pay a fair-

share contribution towards planned improvements to improve the LOS at affected intersections. The project would not result in significant impacts to pedestrian, bicycle, transit facilities, or substantially alter vehicle miles traveled.

Comment D.4: Increased pollution, police and fire needed.

Response D.4: The air pollution emissions resulting from the project are discussed in *Section 3.3 Air Quality* of the Draft EIR. As concluded in the Draft EIR, the project would not result in significant air quality impacts with the implementation of the identified mitigation measures in *Section 3.3 Air Quality*.

The project's impact to police and fire are discussed in *Section 3.15 Public Services* of the Draft EIR. According to Appendix G, Environmental Checklist, of the CEQA Guidelines, the project would have a significant impact to police or fire protection services if it would result in *substantial adverse physical impacts* associated with the provision of new or physically altered police or fire protection facilities, the need for new or physically altered police or fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services. As discussed in *Section 3.15 Public Services* of the Draft EIR, the project would not require the construction of new or expanded police or fire facilities.

Comment D.5: I can understand the housing shortage but what if the high tech companies start leaving the area? Will these new buildings become slum areas?

Response D.5: CEQA requires the analysis of the environmental impacts of a project. CEQA does not require the analysis of other effects, such as the non-CEQA economic effects of a project. The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

Comment D.6: What about schools for all the new families. Big business, money is the bottom line for these projects, not for the good of Sunnyvale residents.

Response D.6: As discussed in *Section 3.15 Public Services* of the Draft EIR, there is sufficient capacity at the local schools to accommodate project-generated students. In addition, development projects are required to pay the established school impact fees to the impacted school districts to offset the increased demands on school facilities caused by the development, which is considered sufficient mitigation for such impacts under state law (Government Code Section 65996).

Comment D.7: The only project that makes sense is the residential unit on the 300 block of W. Washington. The quality of life as it is now will decline. What mitigation measures do you propose? None what so ever will ever remedy the damage done in all area of life in the City and its environment. Please don't rush to make another huge mistake. This is a lot of change all at once after a tremendous change already. How about one project at a time if you must. Not tear up the whole downtown area at once, once again. Then say oops! Sorry Folks. Please don't make the same mistakes over and over again.

Response D.7: Refer to the Summary section of the Draft EIR (pages vii through xxvii) for a summary of the project's significant impacts and mitigation measures to be implemented to reduce those effects. CEQA requires the analysis of the environmental impacts of a project and does not require the analysis of other effects, such as the social effects of a project. The comment does not raise any other significant environmental issues under CEQA, therefore, no further response is required.

E. Don Dubocq (dated November 30, 2019)

Comment E.1: As many years have passed with the Downtown Plan, it's quite obvious that confusion and mayhem have become a reality. Along with a bond between Sunnyvale Town Officials and Developers where the constructing of residential and commercial structures on any available land is the only priority, with no planning or thought of what may or may not be the effects to Sunnyvale's future needs. Such as economic shortfalls which may result in drastic losses of employment which in turn will cause an increase of unaffordable housing units along with a lack of revenue for small retail and other businesses. By overestimating present needs with unnecessary development is a recipe for disaster. Development can always be done when needed. Otherwise, considering the future of economic growth, Sunnyvale could be left a ghost town with empty structures and empty residential units by the thousands. So, to those few, who will profit now from no thought of the future and mindless greed I ask- Are you not Wiser than that?

Response E.1: CEQA requires the analysis of the environmental impacts of a project. CEQA does not require the analysis of other effects, such as the economic effects of a project. The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

F. Patricia E. Fox (dated December 6, 2019)

Comment F.1: For the reasons stated in the "Identified Potential Environmental Impacts" section of the Notice of Availability, I am opposed to the additional construction. Why not convert the space to a park?

Response F.1: A discussion of project alternatives is provided in *Section 7.0 Alternatives* of the Draft EIR (pages 308 through 325). As stated on page 308 of the Draft EIR, "the CEQA Guidelines state that the alternatives analysis in an EIR should be limited to alternatives that would avoid or substantially lessen any of the significant effects of the project and achieve most of the basic project objectives…. Factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (CEQA Guidelines Section 15126.6[f][1])."

A project alternative that would convert the project sites to parkland would not meet the City's basic objectives of building high quality, higher intensity buildings (Objectives 1, 5, 6) and maximizing employment and housing opportunities near

transit (Objectives 2-4, and 8). For these reasons, a project alternative that would develop the project sites as parkland is not considered a feasible alternative. An EIR is not required to consider alternatives which are infeasible.

Comment F.2: Furthermore, before additional construction is allowed, kindly explain to the current residents how this will improve our quality of life. People voting for the additional offices and residential boxes should drive Mathilda Avenue after 4PM through 8PM on weeknights to endure what we have been condemned to suffer thus far. Additional people coming into the area will only exacerbate the situation.

Response F.2: A description of the existing transportation conditions and the project's impact on the transportation system, including the level of service of intersections on Mathilda Avenue during the PM peak hour, is provided in *Section 3.17 Transportation/Traffic* of the Draft EIR. The comment does not raise any other significant environmental issues under CEQA, therefore, no further response is required.

G. Angel Hill (dated January 6, 2020)

Comment G.1: I am a resident who lives and works here in Sunnyvale and I'm opposed to the projects slated for downtown Sunnyvale for the reasons stated in EIR. I believe it would decrease the quality of life as well as increase traffic.

Response G.1: CEQA requires the analysis of the environmental impacts of a project. Refer to *Section 3.17 Transportation/Traffic* in the Draft EIR for a discussion of the project's impact on the transportation system. CEQA does not require the analysis of other effects, such as the social effects of a project. The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

H. Mark Holan (dated January 8, 2020)

Comment H.1: Thank you for the opportunity to comment on the EIR for the proposed changes to the Downtown Specific Plan. My concerns focus on transportation impact to the adjacent residential neighborhood.

Through the 1200+ pages of the Final Transportation Impact Analysis, there is no consideration of the impact to adjacent residential neighborhood traffic. Any degradation of LOS along either Sunnyvale Avenue or Fair Oaks – even slight and brief - will result in increased traffic along Central Ave, Bayview Ave and Carroll St.

Appendix I: Final Transportation Impact Analysis, page 19 states McKinley Avenue extends "from Sunset Avenue to Bayview Avenue" and Washington Avenue extends "to Evelyn Avenue."

Both of these statements are not accurate. McKinley extends from Sunset past Fair Oaks to Britton Ave. And there is no access from Washington to Evelyn.

Response H.1: The text of the Draft EIR and technical Transportation Impact Analysis included in Appendix I of the EIR has been revised to clarify that McKinley Avenue extends from Sunset Avenue to Bayview Avenue, and continues in an alignment approximately 190 feet south on Bayview Avenue to Britton Avenue; and to describe Washington Avenue as extending from Acalanes Drive and terminates at Evelyn Avenue, although there is no direct vehicular access to Evelyn Avenue. These clarifications, however, do not modify the analysis or conclusions of the Draft EIR.

Comment H.2: The statements on page 19 show several issues

1. The authors have not gone into the adjacent residential neighborhood.

2. The authors are only concerned about flow on major streets.

3. The authors are oblivious to Waz and how many people re-route thorough the neighborhood to avoid lights on Fair Oaks or Sunnyvale. It only takes one trip through the neighborhood to realize it is a "keeper" to avoid the 5 lights on Sunnyvale between El Camino and Evelyn.

Response H.2: The Transportation Impact Analysis (TIA) for the project was completed pursuant to the Santa Clara Valley Transportation Authority (VTA) TIA Guidelines and City of Sunnyvale standards. As discussed on page 230 of the Draft EIR, intersections are studied if the project adds 10 or more peak hour vehicles per lane to any intersection movement. These study intersections are summarized in Table 3.17-5 of the Draft EIR (pages 231 through 235). Refer to Response C.1 regarding the City's Neighborhood Traffic Calming Policy and process.

Comment H.3: I believe there are numerous traffic calming measure the City can and should take along Central, Bayview and Carroll to radically reduce through traffic. However, I have specific steps that should be taken as a result of changes to the DSP to propose.

DSP Changes recommended traffic remediation measures:

1 - install a traffic calming roundabout in the existing right of way at Washington and Bayview to reduce through-trips on Bayview (north or south bound).
2 - prohibit westbound McKinley and Washington traffic from going straight past Sunnyvale into the existing residential neighborhood – so that all westbound traffic must go north or south on Sunnyvale. This will cut down on trips along both Carroll and Bayview. Further it will prohibit access to Evelyn/Fair Oaks as the existing signage on Washington is clearly ineffective and unenforced.

Thank you for your thoughtful consideration and inclusion in the Final EIR. I would appreciate acknowledgment of receiving this, as well as notification of future actions on the Downtown Specific Plan.

Response H.3: Under CEQA, an EIR is required to evaluate the impacts of the project as proposed. The above suggested traffic calming measures are not proposed as part of the project. In addition, the two traffic measures recommended in

the above comment would not mitigate any of the significant transportation impacts identified in the EIR. For this reason, there is no nexus between the project's impacts and the above recommendations for the City to require their implementation under CEQA. Also refer to Response C.1 regarding the City's Neighborhood Traffic Calming Policy and process.

I. Diane Larrabee (dated December 20, 2019)

Comment I.1: My household is strongly in favor of this proposed project since it increases the density of housing and offices near transit: Caltrain and El Camino.

Response I.1: The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

J. David Lis (dated January 6, 2020)

Comment J.1: I have lived in Sunnyvale since 1980. Our little city is turning into downtown New York City.

I know we need progress and need to develop property to provide housing and to keep up with business needs that provides taxes for the city.

I am not happy with the city turning our streets from 2 lane to 1 car lane. I don't know if you noticed but there are more cars on the streets. And I am not the only person who thinks so but most people will not say anything because they say there is nothing they can do. We are getting grid locked. When I leave my home and get onto Fair Oaks and want to go toward El Camino, I have to turn right, then cross over and make a left hand turn and circle back.

I believe that over developing downtown Sunnyvale with office buildings is not the answer.
Where are they going to park?
How about visitors to these businesses?

Response J.1: Descriptions of the parking proposed for the six development projects are included in *Section 2.3.2 Six Development Projects* of the Draft EIR. A discussion of vehicle parking requirements for the project is provided in *Section 3.17.3.2 Vehicle Parking* of the Draft EIR (pages 280 through 281). The City's parking requirements reflect parking needs of office employees and visitors to the office use. Pursuant to Senate Bill 743 (Steinberg, 2013), parking is not considered as a significant impact on the environment for transit-oriented infill project such as the proposed project.

Comment J.2: How about the services these businesses need?
How about the sewer system?
How much is enough?

Response J.2: The project's impact on public services is discussed in *Section 3.15 Public Services* of the Draft EIR. As concluded in that section, the project would not have a significant impact on fire and police protection, schools, library services, or parks (see pages 206 through 210 of the Draft EIR).

The project's impact on the sewer system is discussed in *Section 3.18 Utilities and Service Systems* of the Draft EIR, specifically under Impact UTL-2 and Impact UTL-3 on pages 289 through 294. The EIR concluded that the project, with the implementation of Capital Improvement Projects (CIPs), would not result in significant impacts to the sewer system. Under cumulative (i.e., the buildout of the General Plan) plus project conditions, the EIR disclosed that the City's Wastewater Pollution Control Plant would need to be upgraded to treat future projected flows from the buildout of the General Plan and project (see the discussion under Impact UTL-C on pages 299 through 300 of the Draft EIR).

Comment J.3: If you cannot get to work because of the traffic, what is the benefit?
And I believe that forcing people to ride bikes is not the answer. How do you take your kids to school on a bike?
The train is not the answer either, it is getting close to full now.

Response J.3: The City's General Plan includes policies that support and promote a multi-modal transportation system for vehicles, bicyclists, and pedestrians (see policies on page 215 and 216 of the Draft EIR). The project's transportation impacts are discussed in *Section 3.17 Transportation/Traffic* of the Draft EIR. The trip generation for the project was calculated in accordance with the Santa Clara Valley Transportation Authority Transportation Impact Analysis Guidelines. Appropriate trip reductions were applied based on the project sites' proximity to transit. A summary of the project's trip generation is provided in Table 3.17-6 on page 237 of the Draft EIR. A more detailed trip generation table is included in Appendix C of the Transportation Impact Analysis and included in Appendix I of the Draft EIR. As shown in the detailed trip generation table, it was calculated that less than five percent of the project's estimated vehicle trips would be offset by transit use.

As discussed in *Section 3.17 Transportation/Traffic*, the project would result in Level of Service (LOS) deficiencies at one freeway segment and several intersections (refer to the discussion under Impact TRN-1 on pages 229 through 261 and Impact TRN-C on pages 266 through 279 of the Draft EIR). Developers shall pay a fair-share contribution towards planned improvements to improve the LOS at affected intersections. The EIR concluded that the project would not result in significant impacts to pedestrian, bicycle, or transit facilities or vehicle miles traveled.

Comment J.4: Related item: why is the city letting mobile home parks be converted from $800 – %1,000 month lot rents to $1.2 and $1.4 million town homes.
Where are the low income people going to live?
Who is going to work the minimum wage jobs like restaurants, grocery stores, retail, etc?
Sunnyvale is going to be for the high paying tech people and hope that never goes away. Do you see all the help wanted signs?
Are people going to drive an hour to work a retail or service job? Sunnyvale is going to collapse in on itself.

Response J.4: Converting mobile home parks is not part of the proposed project. CEQA requires the analysis of the environmental impacts of a project. In addition, CEQA does not require the analysis of other effects, such as the social or economic effects of a project. The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

K. Marshall and Elizabeth Loya (dated December 3, 2019)

Comment K.1: We have received the new plan for Downtown Sunnyvale. We have struggled with the changes in Sunnyvale over the last several years. We were once a home town, we have rapidly become a high rise village.

No consideration has been given to the residents. You have built additional parking for the train commuters, yet they still park on the streets preventing us from parking in front of our own homes. We have come to the city for permit parking and as usual we were ignored.

Response K.1: The City has a Preferential Parking Program, which is petition based, and described in Sunnyvale Municipal Code (SMC) Chapter 10.26 "Preferential Parking on Residential Streets." In addition, the Draft DSP (which is included in Appendix B of the Draft EIR) includes a regulatory framework for various implementation programs, including a parking management program. The program identifies actions to consider during implementation, such as reforming the parking permit program by moving permit parking to garages. The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

Comment K.2: Your newest plan for downtown has several negatives!

There is a severe housing crisis yet in your proposal there are many units listed, which will be high priced out of reach for our residents and cause horrendous traffic problem. Which already exists. Again no consideration to existing residents.

Response K.2: CEQA requires the analysis of the environmental impacts of a project. CEQA does not require the analysis of other effects, such as the economic effects of a project. Refer to *Section 3.17 Transportation/Traffic* in the Draft EIR for a discussion of the project's impact on the transportation system. The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

Comment K.3: Environmental Impacts, you stated all the hazards, temporary and ongoing. Yet you still want to proceed.

Response K.3: As described in *Section 1.1 Purpose of the Environmental Impact Report* on page 1 of the Draft EIR, an EIR is an informational document and it is not the intent of an EIR to recommend either approval or denial of a project. Pursuant to CEQA Guideline 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, 1) the public agency makes the findings that mitigation measures required for the project can be feasibly implemented and would mitigate or avoid the significant effects on the environment, and 2) if mitigation measures are infeasible, the public agency shall adopt a statement of Overriding Consideration that finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment. All mitigation measures required of the proposed project shall be monitored and verified for full compliance.

Comment K.4: At some point in time Target will no longer meet your esthetic parameters and will be pushed out of your high rise village.

We are not San Jose, Oakland or San Francisco. The high rise buildings we have now, look out of place. With your new project single story homes will be the ones out of place.

Response K.4: As described in *Section 3.1 Aesthetics* (page 47 of the Draft EIR), pursuant to Senate Bill 743 (Steinberg, 2013) (Public Resources Code section 21099[d][1]) "aesthetic and parking impacts of a residential, mixed-use residential, or employment center on an infill site within a transit priority area shall not be considered significant impacts on the environment." The project sites are considered infill sites within a transit priority area; therefore, the aesthetic impacts of the project are not considered significant.

Comment K.5: Living near Washington Park, the Broadcom building lights shine in our front room window at night, I can only imagine what your other skyscrapers will do.

On a personal note, this family has been in Sunnyvale since the 40's, born and raised. Bought their first home in the 60's, which we still live in. Handed down over the generations.

Please be more mindful of our town history.

Response K.5: Development under the proposed project shall be designed in conformance with applicable City standards related to light and glare, including the City's Municipal Code. Sunnyvale Municipal Code Chapter 19.42.050 provides restrictions on lighting to ensure that all lights, spotlights, floodlights, reflectors, and other means of illumination are shielded or equipped with special lenses in such a manner as to prevent any glare or direct illumination on any public street or other property. In addition, the Draft DSP (which is included in Appendix B of the Draft

EIR) includes design guidelines related to light and glare, such as equipping pole lighting with necessary cut-off fixtures. The comment does not raise any other significant environmental issues under CEQA, therefore, no further response is required.

L. Lidia Marchioni (dated January 6, 2020)

Refer to Comment Letter L in Appendix A of this Final EIR/Responses to Comments document for the pictures included with this comment letter.

Comment L.1: I'm writing with regards to the proposed development in our downtown. I'm very happy to hear that we will yet again have a cinema in our downtown area. I also welcome Whole Foods and the idea of having ground floor of all buildings devoted to commercial use.

However, I'm deeply concerned with the use and height of the proposed buildings, specifically the proposed **five office buildings,** three of which **7 story high**.

We have enough office buildings erected in downtown and elsewhere in Sunnyvale. We do not need any more office buildings in downtown. They can be built elsewhere in the city, just not in downtown. Otherwise, we are not building downtown but creating a business district and the city cannot afford it for many reasons. We do not have another area that can serve as downtown. We need to preserve and restore what we have, because once gone, it won't come back.

Response L.1: Refer to Response K.4 for a response to the commenter's concerns regarding the height of future development under the proposed project.

The project's impact to historic resources is discussed in *Section 3.5 Cultural Resources*. As discussed under Impact CR-1 (pages 94 and 95 of the Draft EIR), the proposed project would not impact the historic integrity or use of existing historic structures. The project could, however, impact one tree within the Heritage Grove (this has been corrected in the Final EIR to refer to "one" tree, not "one or more" trees, refer to *Section 5.0* of this document). As detailed on page 91 of the Draft EIR, the Heritage Grove (a group of heritage trees located on the Macy's and Redwood Square site) is included on the City's Historic Resources Inventory. The impacts of the project on these local historic resources is discussed in *Section 3.5 Cultural Resources* of the Draft EIR.

Comment L.2: We cannot afford it because people need a breathing space, specifically in our modern, busy and stressful lives. We need spaces where we can relax and unwind, where we can find peace. Such qualities are found in places of beauty and harmony, places that have charm and that's what we need to create and preserve in our downtown. We cannot afford it because tall office buildings drive people away: nobody wants to be around soulless, dwarfing buildings.

Response L.2: CEQA requires the analysis of the environmental impacts of a project and does not require the analysis of other effects, such as the social effects of a project. The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

Comment L.3: We cannot afford it, because it will completely choke Mathilda during rush hour traffic.

Response L.3: The project's impact at intersections on Mathilda Avenue was studied in the Draft EIR. As discussed in *Section 3.17 Transportation/Traffic*, under Impact TRN-1, the project would result in a significant unavoidable impacts to the following intersections on Mathilda Avenue:

- Intersection 26: Mathilda Avenue/Indio Avenue
- Intersection 27: Mathilda Avenue/California Avenue
- 29: Mathilda Avenue/Washington Avenue (even with the implementation of mitigation measure MM TRN-C.3).
- 30. Mathilda Avenue/McKinley Avenue (even with the implementation of mitigation measure MM TRN-C.3).

The project would result in a less than significant impact on the intersection of Mathilda Avenue/El Camino Real with implementation of mitigation measure MM TRN-C.4 described on page 277 of the Draft EIR. Refer to the discussion under Impact TRN-1 in *Section 3.17.2.1 Project Impacts* and Impact TRN-C in *Section 3.17.2.2 Cumulative Impacts* in the Draft EIR for additional details on intersection impacts and mitigation measures identified.

Comment L.4: Whenever current downtown development is brought up in public conversations, the reactions I see are those of anger and disgust. In the best case, indifference. Nobody I talked to yet was approving of the office buildings that have been erected in downtown to date. We cannot afford to evoke more of the negative emotions in people. We need to remedy the situation.

Response L.4: The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

Comment L.5: New architecture that was introduced in our downtown, does not follow style of the area. Any residential property owner needs to follow style of the surrounding area, why not downtown? The new style clashes with other buildings, and those it replaced. And it is devoid of beauty, does not offer anything to the eye that would be pleasing or relaxing. It does not relate in any way to Sunnyvale's history, nor the history of California. **It robs Sunnyvale residents of their identit**y. It's a crime.

Response L.5: Refer to Response K.4 regarding the project's aesthetic impacts and Response L.6 regarding the design guidelines included in the proposed DSP.

Comment L.6: We live in one of the richest areas of the USA, we should be able to afford beauty in our downtown. Beauty will attract more visitors and fuel businesses and taxes. We don't need to take chances on this - it has been done before. One example is Santana Row, another example - downtown Santa Barbara. A 6.3 magnitude earthquake hit Santa Barbara in 1925. "In an odd twist

of fate, by leveling much of Santa Barbara's commercial district, the earthquake proved a boon to Santa Barbara's businesses. City officials seized the opportunity that the earthquake gave them to enforce a stricter building code, requiring commercial buildings along State Street to conform to a Spanish-Moorish style of architecture. Thus the 1925 earthquake is responsible for the distinctive architecture in the city that has made Santa Barbara a popular tourist destination for over 70 years." (from The 1925 Santa Barbara Earthquake in Brief). Here is proof that **mandating a consistent, beautiful style** that relates to the history of the area, **is beneficial to commerce**.

We need more commerce in downtown, we need more beauty. We don't need an earthquake to enforce certain style in our downtown. If we enforce Spanish style it will only benefit the city by bringing much needed harmony and historical reference. It will create a lively downtown, a downtown that people will **want to visit**. And they will visit on the weekends, so it won't add as much to the rush hour traffic.

If we allow for more office buildings, more ugly, modern, indifferent architecture we are going to keep many people away. Business districts create depressing urban deserts - nobody wants to walk there unless they have to. Tall office buildings are destructive to the downtown life. Sunnyvale will be mostly avoided and people will go elsewhere, where beauty was preserved or created, Mountain View, Los Altos, and Santana Row. We should seize this opportunity we have and create a downtown that will be loved.

Architecture has an effect on how we feel and that aspect should be carefully considered. It can make us feel happier and more relaxed or anxious and depressed. Choice of architecture can also make us feel more safe, trusting and generous. This is not just my opinion, this is a result of scientific experiments and I highly recommend watching The Happy City Experiment talk on the topic.

We have examples of what people are drawn to - Santana Row, Santa Barbara and in our own town - Murphy Street. We need more of its charm, we need to extend it keeping the style. We need pedestrian only areas. We should not only extend Murphy Street, keeping its height (no more than 2 story buildings) and consistent style, we should close it to traffic, or at least make it a one way street with a very low speed limit.

We need a downtown. There is nowhere else to go. It cannot all be a jungle of dehumanized office buildings, with complete lack of grace, beauty and charm that become deserts in the evenings and on the weekends. We can't afford to create a downtown that nobody will care about. We need to create a downtown people will love.

I don't believe we are put on this planet to create ugliness. We are here to create beauty.

Since a picture is worth a thousand words, here are some illustrations. Current development that evokes negative emotions:

Response L.6: Future development on the six project sites would be subject to the design guidelines in the proposed DSP, if approved by the City Council. The DSP design guidelines are intended to encourage high quality design and development. The proposed DSP includes general design guidelines, and guidelines pertaining to site layout and design, building form and articulation, architectural

character and design, and other design issues (refer to Appendix B of the Draft EIR for a copy of the proposed DSP). Also, refer to Response K.4 regarding the project's aesthetic impacts and Response L.6 regarding the design guidelines included in the proposed DSP. The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

M. Lou Messina (date December 8, 2019)

Comment M.1: As a long time Sunnyvale resident since the mid-seventies, I'm against more building structures in downtown Sunnyvale.
Parking is at a premium and traffic congestions is overwhelming.

Have you given some thought to traffic on Mathilda, Iowa, Mary, Lawrence Expressway, El Camino, and Sunnyvale Ave?
They were not designed to handle the traffic load if more buildings for the office space and residential housing were to increase in the Sunnyvale Downtown area.

Response M.1: As discussed in Section 3.17.3.2 Vehicle Parking on page 280 of the Draft EIR, pursuant to Senate Bill 743 (Steinberg, 2013), parking is not considered a significant impact on the environment for transit-oriented infill projects such as the proposed project. For this reasons, a detailed parking analysis is not included in the Draft EIR. A brief description of the parking requirement for the project is provided on pages 280 and 281 of the Draft EIR.

Impacts of the project at intersections on the roadways listed were studied as part of the Draft EIR. In summary, with respect to the roadways referenced in the above comment, the project would result in level of service impacts at the following intersections:

- Mathilda Avenue/Indio Avenue
- Lawrence Expressway/Homestead
- Mathilda Avenue/California Avenue
- Mathilda Avenue/Washington Avenue
- Mathilda Avenue/McKinley Avenue
- Mathilda Avenue/El Camino Real

Section 3.17 Transportation/Traffic of the Draft EIR describes in detail the project's impacts on the above referenced intersections and includes feasible mitigation measures to reduce impacts.

N. Tonya Oravetz (dated December 31, 2019)

Comment N.1: I have a few deep concerns regarding the Downtown Specific Plan. They are as follows:

School crowding: I have been a substitute teacher at Cumberland Elementary school for over 15 years. During that time I have seen the school add several portable classrooms more than once to accommodate the ever increasing number of students. As well, there are more students in each classroom than even a few years ago. Schools already have had to start having multiple lunch and recess times to accommodate the number of students. One of my main concerns with the amended Downtown Specific Plan is the question of where all the children who may live in the residential units will be going to attend school? Ellis and Cumberland as well as the other Sunnyvale elementary schools are already crowded. I am well aware that Sunnyvale needs more housing, however, adding residential units without opening a new school or reclaiming the Stratford school across from Washington Park is a huge disservice to our children.

Response N.1: The project's impact on school facilities is discussed in *Section 3.15 Public Services* of the Draft EIR, specifically under Impact PS-3 on page 207 and Impact PS-C on pages 209 through 210. The six project sites are in the Sunnyvale Elementary School District and Fremont Union High School District and within the enrollment boundaries of Bishop Elementary School, Columbia Middle School, and Fremont High School. According to the elementary school district, the project sites will not be served by Ellis or Cumberland Elementary Schools. As described on pages 207 and 209 of the Draft EIR, the downtown project sites are served by Bishop Elementary School, Columbia Middle School, and Fremont High School. All three of these schools have sufficient capacity to accommodate the additional students generated by the project and cumulative projects, and would not require the expansion of their facilities. Also, development projects are required to pay the established school impact fees to impacted school districts to offset the increased demands on school facilities caused by the development, which is considered sufficient mitigation for such impacts under state law (Government Code Section 65996).

Comment N.2: Increased traffic: My husband and I have lived on Purisima Avenue for over 27 years. In the last several years the traffic in our area of Sunnyvale has increased exponentially. Increasing the number of people going to and from by increasing the office space and residential units will result in crushing traffic problems.

Response N.2: The above comment is referencing existing traffic conditions. Existing traffic conditions in the project area and the project's transportation impacts are discussed in *Section 3.17 Transportation/Traffic* of the Draft EIR. A summary of the project's trip generation is provided in Table 3.17-6 on page 237 of the Draft EIR.

Comment N.3: Seven story building: I am very opposed to the proposed seven story building! That tall of a building will diminish the feel of a welcoming downtown and turn it into a more high rise city feeling environment. I am afraid it will also begin a trend of taller and taller buildings that will forever harm the Sunnyvale environment which residents love.
Thank you for hearing the voice of a concerned resident.

Response N.3: Refer to Response K.4 regarding the project's aesthetic impacts.

O. Mera Tawfik-Oshana (dated January 6, 2020)

Comment O.1: I reviewed the plan and think it is unfortunate that the 45 day public review period was during the holidays…a very distracting time. I ask, how will this improve the quality of life for residents and business owners in Sunnyvale?? It is already congested beyond recognition and I think this will create more pollution, frustration, commute time, and overall crowds everywhere.

Response O.1: Per CEQA Guideline Section 15105, when a draft EIR is submitted to the State Clearinghouse for review by state agencies, the public review period shall not be less than 45 days (unless a shorter period is approved by the State Clearinghouse). The 45-day public review period for the Draft EIR meets the public review requirement under CEQA. The project's air quality and traffic impacts are discussed in *Sections 3.3 Air Quality* and *Section 3.17 Transportation/Traffic*. The comment does not raise any other significant environmental issues under CEQA, therefore, no further response is required.

P. Karen Reilly (dated November 29, 2019)

Comment P.1: Please consider my input regarding the downtown plan. I live in the heritage neighborhood and am open to development, however the school infrastructure is lacking in the proposed plan. Case in point Ellis Elementary. The school has doubled in size. The poor kids are crowded onto a playground that is not about half the size of what it was when there were half the children. The drop off area is dangerous for parents, children and neighbors and the portables keep growing. It is time for Sunnyvale to open more schools. The high schoolers that in the Lakewood area have to ride about an hour each way via bus. There is a neglect by the school district in that high schools are geographically clustered together in the wealthier areas. I never see this being addressed by the city or school board. In fact, when a former mayor was campaigning door to door, I asked him where all of the kids who occupy the new apartments would attend school and he replied "They won't had kids". I "kid" you not!!

Please accept my comments and consider the impact upon the schools.

Response P.1: Refer to Response N.1 regarding the project's impact on school facilities.

Q. Swaminathan Sundaramurthy (dated December 1, 2020)

Comment Q.1: Thanks for sharing the new downtown plan; the improvements to the downtown seem very exciting and forward looking.

However, vastly improving commercial regions and high density housing always comes with substantially increased vehicular traffic. The gridlocks we've been experiencing on Mathilda Ave and E Maude Ave due to the new Google and Apple campuses in N Sunnyvale are examples of this.

> **Response Q.1:** The project's transportation impacts including those on intersection on Mathilda Avenue and Maude Avenue, are discussed in *Section 3.17 Transportation/Traffic* of the Draft EIR. A summary of the project's trip generation is provided in Table 3.17-6 on page 237 of the Draft EIR.

Comment Q.2: My family and I are avid bicyclers. This was one the main reasons for us to decide to settle down in Sunnyvale. I used to bike with my kid to school and parks from around N Sunnyvale Ave x E Maude Ave to Washington Park. However, due to being stuck in traffic, drivers are frustrated, tend to drive rashly, run traffic lights and not wait for bikes at pedestrian crossing. I've sometimes had to wait for 10 mins just to cross the N Bayview Ave x E Maude Ave intersection. It also made my bike ride with kids extremely unsafe. Therefore, over the past 6 months I have had to stop doing that due to the increased traffic. I also use bike and Caltrain to commute to work, again, at peak times that sometimes becomes challenging. Biking back home in the evening/night isn't very safe on streets with shared bike lanes.

> **Response Q.2:** Under CEQA, bicycle impacts are considered significant if the project would potentially disrupt existing bicycle facilities, eliminate existing bicycle facilities, interfere with planned bicycle facilities, increase conflicts between drivers, pedestrians, and/or bicyclists, or create inconsistencies or conflicts with adopted bicycle plans, guidelines, policies, or standards. As concluded in *Section 3.17 Transportation/Traffic* of the Draft EIR, specifically under Impact TRN-6 on page 264, implementation of the project would not disrupt existing bicycle facilities, eliminate existing bicycle facilities, interfere with planned bicycle facilities, or result in conflicts with adopted bicycle plans, guidelines, policies, or standards. In addition, as described on page 219 of the Draft EIR and on page 7-1 of the Draft DSP, the City is currently in the process of updating its Active Transportation Plan (ATP). The ATP will recommend improvements that integrate pedestrian, bicycle, and safe routes to school needs throughout the City. Improvements identified in the upcoming ATP will supersede those in the City's 2006 Bicycle Plan.

Comment Q.3: I am quite dissatisfied with proposed bike improvements proposed as part of the downtown improvements - they do not seem to be substantial. In fact, I fear that the improvements are going to make it nearly impossible for more people to take sustainable means of transportations (bikes, electric scooters, etc) to downtown, since biking will be more unsafe than it is right now. Also, it may not support any increased bike ridership.

Please consider

- Increasing reach of bike lanes, so more families can bike downtown
- Create dedicated (not shared) bike lanes, to improve bike rider safety, and encourage more kids to bike to schools and parks (paths to schools and parks do pass through downtown)
- Adding more bike parking at important points (Caltrain station, Movie Theater, parks, etc)

Let us make Sunnyvale better designed for sustainable modes of transportations (day and night) and encourage greater usage of public transportation (Caltrain, buses). It would be awesome to be able to bike to and from movie theaters with family.

I would be happy to help in any way possible to provide feedback on bicycle route and safety improvements.

Response Q.3: Refer to Response Q.2 regarding the project's bicycle impacts. Because the project would not result in significant impacts to bicycle facilities, there is no nexus for the City to require the above bulleted suggestions by the commenter under CEQA. Bicycle parking for future development under the proposed project would be provided in accordance with the Santa Clara Valley Transportation Authority Standards (see Conditions of Approval COA TRN-7 on page 31 of the Draft EIR).

R. Lucille Woo (dated December 8, 2019)

Comment R.1: I have read the "Proposed Amendments to the Downtown Specific Plan and the Three Development Projects" and would like to express my concern and objections for the changes proposed.

It is apparent that the identified potential environmental impacts are significant. To ignore the impact of noise, transportation, systems, and emissions, even with the proposed mitigation efforts would be reckless.

Response R.1: See Response K.3.

Comment R.2: Already, for the size of Sunnyvale, Sunnyvale already has too many office buildings (height and density, especially) has contributed greatly to a degradation in the quality of life here.

I have lived in Sunnyvale around the block from city hall and the library for almost three decades. Mathilda and El Camino are heavily congested, leading to heavy traffic backups. Large retail stores, such as the Emporium, Montgomery Wards, JC Penney's, and now Macys have disappeared over time. To visit even a large retail store such Kohl's or Office Depot, we now need to drive to another city. If anything, instead of adding more office buildings, retail space development should be added, and the city should try to attract retailers back to the city. As a worker, I am in favor of office buildings, but not to the extent that Sunnyvale has pushed for the decade.

I also am opposed to the numerous amendments to existing development plans that have come before the city. What is the point of soliciting community comments where many have pushed against such amendments (for example, increasing building height to seven stories and density), only to have the proposed changes implemented?

Please consider the quality of life in Sunnyvale. We need to improve it and not by increasing the density and height of the buildings and traffic that has become the problem here.

Response R.2: CEQA requires the analysis of the environmental impacts of a project and does not require the analysis of other effects, such as the social effects of a project. The comment does not raise any significant environmental issues under CEQA, therefore, no further response is required.

PUBLIC HEARING/MEETING COMMENTS

S. Planning Commission Hearing (date December 16, 2019)

The City received public comments on the Draft EIR during a Planning Commission Hearing on December 16, 2019. The following is a summary of the verbal comments by the Planning Commissioners and by public members pertaining to the adequacy of the Draft EIR. Comments pertaining to the merits of the project were not included in the summary of comments below. Refer to the audio recording of the Planning Commission hearing on the City's website (https://sunnyvaleca.legistar.com/Calendar.aspx) for full details of the comments raised.

Comment S.1: In regards to the project description, the Altair Way building should have ground floor retail on Plaza Del Sol.

Response S.1: The purpose of the EIR is to evaluate the project as proposed. As summarized in Table 2.3-1 on page 9 and *Section 2.3.2.1 100 Altair Way* on page 10 of the Draft EIR, the development proposed on the 100 Altair Way site includes office uses only. No retail uses are proposed at this time.

Comment S.2: In regards to the proposed green building/sustainability measures:

- Why is Caltrain pass not listed as one of the Transportation Demand Management Plan measures?
- Why is Murphy Square development proposing LEED Silver instead of LEED Gold?
- Will buildings be constructed with 100 percent electric appliances? What about restaurants that want to have gas appliances?
- Is it possible to use pervious materials for lightly traveled streets in downtown?

Response S.2: Future development under the proposed project is required to implement a Transportation Demand Management (TDM) Plan, per mitigation measure MM AQ-2.4 on page 67 of the Draft EIR. The TDM measures listed in the Draft EIR are examples of what could be included in a TDM Plan. The text of the Draft EIR has been revised to identify Caltrain Go Pass as a potential TDM measure. All development projects under the proposed project will be required to prepare a site specific TDM Plan subject to City approval.

The purpose of the EIR is to describe and evaluate the project as proposed. The applicant for the Murphy Square proposes to achieve LEED Silver standards, as stated on page 25 of the Draft EIR.

In addition, the City's Climate Action Playbook encourages all-electric new construction by 2030. There is not currently a City plan, policy, or requirement for new development to have 100 percent electric appliances. The six development projects do not propose to have 100 percent electric appliances.

Under CEQA, mitigation measures can be required of a project if there is a reasonable and proportionate nexus. There is no significant impact identified for the project where the requirement for 100 percent electric appliances or pervious

materials would substantially reduce the impact. For this reason, 100 percent electric appliances and pervious materials cannot be required of future development projects under CEQA but may be required by the City through the approval process.

Comment S.3: In regards to the transportation/traffic:

- DSP needs to more actively support the provision of bike lanes
- Need more pedestrian bike space
- It is unclear why the Draft EIR talks about bike lanes on Evelyn Avenue
- Bike and pedestrian facilities should be located on the north side along the train line, because there's no sidewalks or roads there
- The Draft EIR should evaluate the traffic impacts from closure of Sunnyvale Avenue

Response S.3: The purpose of an EIR is to evaluate the project as proposed. As discussed in *Section 3.17 Transportation/Traffic* of the Draft EIR, under Impact TRN-6 on page 264, the project would not result in significant impacts to bicycle or pedestrian facilities. For this reason, there is no nexus for the City to require bicycle or pedestrian improvements (such as the above suggested bicycle and pedestrian facility on the north side of the railroad tracks) under CEQA. Also refer to Response Q.2 regarding the project's bicycle impacts.

Pursuant to CEQA Guidelines Section 15125(a), an EIR must include a description of the physical environmental conditions in the vicinity of the project. The bicycle lane on East Evelyn Avenue provides connection to the project sites. For this reason, its description is included in the Draft EIR.

Changes to Sunnyvale Avenue are not proposed as part of the project analyzed in the Draft EIR. The above comment regarding the closure of Sunnyvale Avenue refers to the Caltrain Grade Separation project. As discussed in *Section 3.0 Environmental Setting, Impacts, and Mitigation* (specifically on page 35 of the Draft EIR), the Caltrain Grade Separation project is for a possible new road overpass or underpass for Sunnyvale Avenue at the existing railroad crossing. The Caltrain Grade Separation project is still in the early planning stages and there are no definitive plans or funding sources for this potential cumulative project. For this reason, the Caltrain Grade Separation project was not considered further in the cumulative analysis. An explanation of cumulative impacts and cumulative projects is provided on pages 34 and 35 of the Draft EIR. The Caltrain Grade Separation project, when sufficiently defined and designed, would be subject to separate environmental review.

Comment S.4: In regards to hazardous materials, how and where will the groundwater be disposed of from dewatering activities during construction of the below-ground parking for the project?

Response S.4: Water discharge from construction dewatering would be handled and disposed differently depending on the character of the groundwater discharge. Water discharge produced from construction dewatering can be discharged into the City's sanitary sewer system through the City's groundwater discharge

permitting process if the applicant can prove that the discharge would not, (1) exceed the discharge limits in Sunnyvale Municipal Code Section 12.12.120; (2) create a nuisance or damage the sewer system; and (3) endanger workers in the sewer system or at the City's Water Pollution Control Plant. A copy of an analysis of a groundwater sample representative of the proposed discharge must be submitted with the permit application. If groundwater contains elevated levels of contaminates, the applicant may be required to treat the groundwater to reduce contaminant concentrations prior to discharge to the sanitary sewer system. Groundwater treatment and subsequent discharge of the treated groundwater to the storm drain system under a National Pollutant Discharge Elimination System (NPDES) permit is another possible alternative if discharge to the sanitary sewer system is not technically and economically feasible. NPDES permits are issued by the California Regional Water Quality Control Board pursuant to Order No. R2-2017-0048.

As discussed in *Section 3.9.1.2 Existing Conditions* (pages 134 to 136 of the Draft EIR), the groundwater beneath the Macy's and Redwood Square and Town Center Sub-block 6 sites contain elevated levels of tetrachloroethylene (PCE), and based on the groundwater flow direction, the release of PCE may have also impacted the groundwater at the Murphy Square site. As described in mitigation measure MM HAZ-1.2 (pages 140 to 141 of the Draft EIR), a Soil Management Plan (SMP) and Health Safety Plan (HSP) shall be prepared and implemented for construction-related earthwork activities under the proposed project at each of the project sites (except for 300 West Washington Avenue where the measure is not applicable). The purpose of the SMP and HSP is to establish appropriate management practices for handling impacted soil, soil vapor, and groundwater or other materials that may potentially be encountered during construction activities. With implementation of mitigation measure MM HAZ-1.2, the project's water discharge from construction dewatering would be disposed of appropriately (as detailed above) and would not result in a significant impact to the environment. No new environmental issues are raised in this comment.

Comment S.5: In regards to site drainage, the proposed DSP would have approximately three acres less pervious surfaces. Is it possible to make it as pervious as existing conditions?

Response S.5: The above comment that the project would result in three acres less of pervious surfaces is incorrect. As described on page 160 of the Draft EIR and summarized in Table 3.10-2 on page 161 of the Draft EIR, the six development projects would result in a net decrease of 0.36 acres of pervious surfaces. As discussed under Impact HYD-3 (pages 159 through 161) and Impact HYD-C (page 162) in *Section 3.10.2 Hydrology and Water Quality Impacts* of the Draft EIR, implementation of the project would not result in significant impacts to the storm drainage system. Because the project would not result in a significant impact where requirement of additional pervious surfaces would substantially mitigate the impact, there is no nexus for the City to require additional pervious surfaces as mitigation under CEQA. Furthermore, as described on page 151 of the Draft EIR, due to the location and drainage characteristics of the project sites, they are exempt from Municipal Regional Stormwater National Pollutant Discharge Elimination System

Permit hydromodification requirements that require development to have the same amount of pervious surfaces pre- and post-project.

Comment S.6: In regards to trees, the redwood trees proposed are old trees, which are harder to transplant. Is there a way to avoid removal of redwood trees?

Response S.6: The purpose of the Draft EIR is to analyze the impacts of the project. As proposed, the implementation of the project may impact one of the existing, heritage redwood trees on the Macy's and Redwood Square site. The Draft EIR discloses this impact in *Section 2.3.2.4 Macy's and Redwood Square* on page 17, under Impact BIO-4 on pages 84 and 85, and under Impact CR-1 on pages 94 and 95 (corrected in the Final EIR from "one or more trees" to "one tree", refer to *Section 5.0* of this document). As described on pages 84, 85, and 95 of the Draft EIR, future development shall comply with the Municipal Code and implement mitigation measures to reduce the loss of one of the heritage redwood trees.

Under CEQA, an EIR needs to identify alternatives to the project that could avoid or substantially lessen significant impacts of the project while still feasibly attaining most of the basic project objectives. One of the project alternatives considered is the Design Alternative, which is described in *Section 7.2.2.5 Design Alternative* on page 319 of the Draft EIR. The Design Alternative would require future development on the Macy's and Redwood Square site to be designed to avoid impacting the existing heritage redwood trees. A comparison of the environmental impacts of this alternative and its consistency with project objectives is described in detail in *Section 7.2.2.5 Design Alternative* of the Draft EIR. The City Council will ultimately determine whether this is a feasible alternative (e.g., economically feasible, etc.) when making a decision on the project.

Comment S.7: In regards to recreation, attention should be given to recreation needs when planning for development in downtown.

Response S.7: The project's impact on recreational facilities is discussed in *Section 3.16 Recreation* on pages 211 through 213 of the Draft EIR. As discussed on page 213 of the Draft EIR, the project would result in a net increase of new residents that would incrementally increase demand for recreational facilities (including parks). Future residential development projects consistent with the proposed project would include on-site amenity areas that would partially offset the project's demand on nearby recreation facilities. In addition, the future development projects shall comply with Sunnyvale Municipal Code Chapters 18.10 and 19.74 which require the construction of new park space, payment of in-lieu fees, and/or dedication of land to mitigate its impacts to parks and recreational facilitates to a less than significant level. No specific site has been identified for parkland construction, acquisition, or dedication in association with project's compliance with SMC Chapter 19.74. When specific sites are identified, separate environmental review would be required.

T. Community Meeting (date February 11, 2020)

The City received public comments on the Draft EIR during a Community Meeting for the project on February 11, 2020 at the Washington Park building at 840 West Washington Avenue. The following is a summary of the verbal comments by public members pertaining to the adequacy of the Draft EIR.

Comment T.1: In regards to the City's Active Transportation Plan, where is it discussed in the EIR and has it been approved?

Response T.1: The City's Active Transportation Plan (ATP) is briefly mentioned in *Section 3.17 Transportation/Traffic* on page 219 of the Draft EIR. As discussed in the Draft EIR, the City is in the process of developing the ATP. A draft of the ATP was published on March 4, 2020, subsequent to the publication of the Draft EIR in November 2019. A copy of the ATP is available on the City's website (https://sunnyvale.ca.gov/news/topics/atp/default.htm).

Comment T.2: In regards to the City's Climate Action Playbook, where is it discussed in the Draft EIR?

Response T.2: The City's Climate Action Playbook is discussed in *Sections 3.3 Air Quality, 3.6 Energy, 3.8 Greenhouse Gas Emissions, 5.0 Significant and Irreversible Environmental Changes* on pages 55, 100, 107, 119-120, 124-126, and 305 of the Draft EIR.

Comment T.3: In regards to the six development projects, where are the heights described?

Response T.3: The heights for each of the six development projects are described in Section 2.3.2 Six Development Projects of the Draft EIR, and as amended in Section 5.0 Revisions to the Draft EIR of this document.

Comment T.4: In regards to traffic impacts, how are the level of service impacts determined? Why are some of the level of service at intersections unchanged or improved with the project? Will all intersection level of service impacts be mitigated?

Response T.4: As described in *Section 3.17 Transportation/Traffic* on page 216 of the Draft EIR, the level of service (LOS) for intersections is calculated based on methodology of the 2000 Highway Capacity Manual (HCM), which was adopted by the City of Sunnyvale, VTA, and adjacent local agencies. The thresholds used to determine if the project would result in a significant LOS impact is described on pages 229 through 236 of the Draft EIR.

LOS is based on the average control delay at an intersection. The average control delay includes the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay for all movements (left- and right-turns and through lanes) at the intersection. For some intersections where the LOS does not change with the addition of project traffic (such as Intersections #1 Ellis Street/Middlefield Road and

#2 SR 237 Westbound/Middlefield Road), minimal project trips are anticipated through those intersections and, therefore, the LOS at that intersection did not change under project conditions. When the average control delay at intersections is shown to improve with the addition of project traffic (such as Intersections #37 Evelyn Avenue/Frances Street and #43 Sunnyvale Avenue/California Avenue under background conditions), it is because project traffic would use underutilized movements such that the average intersection delay decreases.

The project's transportation impacts, including LOS impacts, and mitigation are discussed in *Section 3.17 Transportation/Traffic* on pages 229 through 279 of the Draft EIR. In addition, the transportation impacts and mitigation are summarized in the Summary section of the Draft EIR on pages xxiv through xxvii. As discussed in detail in the Draft EIR, there is no feasible mitigation to fully mitigate the project's impact to a less than significant level on the following freeway segment and at the following intersections:

- SR-237 between Mathilda Avenue and Fair Oaks Avenue (existing conditions)
- Intersection 26: Mathilda Avenue/Indio Avenue (cumulative conditions)
- Intersection 27: Mathilda Avenue/California Avenue (cumulative conditions)
- Intersection 29: Mathilda Avenue/Washington Avenue (cumulative conditions)
- Intersection 30: Mathilda Avenue/McKinley Avenue (cumulative conditions)

For these reasons, the Draft EIR concluded that the project would result in significant, unavoidable LOS impacts to the above freeway segment and intersections.

In addition, the Draft EIR describes how the project would pay its fair-share towards mitigation that would reduce its impact at the following intersections to a less than significant level:

- Intersection 55: De Anza Boulevard/Homestead Road (background and cumulative conditions)
- Intersection 60: Fair Oaks Avenue/Duane Avenue (cumulative conditions)
- Intersection 76: Lawrence Expressway/Homestead Road (background and cumulative conditions)

The Draft EIR, however, conservatively concluded that the project's impact to these intersections would be significant and unavoidable because the implementation of the mitigation (or part of the mitigation) was outside of the City's jurisdiction.

SECTION 5.0 DRAFT EIR TEXT REVISIONS

This section contains revisions to the text of the Downtown Specific Plan Amendments and Specific Development Project Draft EIR dated November 2019. As provided in CEQA Guidelines Section 15088(d), responses to comments may take the form of a revision to a Draft EIR or may be a separate section in the Final EIR. This section complies with the latter of these two guidelines and provides changes as a result of clarifications to, and comments received on, the Draft EIR. It includes minor revisions to the Draft EIR resulting from minor corrections or updates to Draft EIR information, including minor revisions made in response to several public comments submitted on the Draft EIR. The following revisions are hereby made to the text of the Draft EIR. These changes do not add significant new information to the Final EIR that would require Draft EIR recirculation under State CEQA Guidelines Section 15088.5. For example, they do not disclose or suggest new or substantially more severe significant environmental impacts of the proposed project, nor do they disclose a new feasible mitigation measure or alternative considerably different than those analyzed in the Draft EIR that would clearly lessen the proposed project's significant effects. Revised or new language is underlined. All deletions are shown with a ~~line through the text~~.

Page vi Summary: **REVISE** the paragraph below the bulleted list as follows:

The project consists of two primary components: (1) amendments to the DSP to allow up to 843 residential units, ~~260,063~~ 253,054 square feet of commercial uses, and ~~860,624~~ 867,633 square feet of office uses on the six project sites; and (2) specific development proposals on the six project sites to develop 793 residential units, ~~164,906~~ 181,931 square feet of commercial uses, and ~~856,199~~ 863,234 square feet of office uses.

Page xi Summary: **ADD** the following text to mitigation measure MM AQ-2.4:

DSP Amendments and Six Development Projects:

MM AQ-2.4: All Project Sites (except 300 West Washington Avenue): Approval of a TDM Plan to reduced operational NO_x emissions consistent with City requirements. This Plan shall demonstrate a minimum six percent overall reduction in vehicle trips and shall be approved by the Public Works Director or designee. For buildings with an identified tenant, the project applicant(s) shall submit to the City, and the City approve, a TDM plan prior to issuance of building permits. For buildings without an identified tenant, the project applicant shall submit, and the City approve, the TDM Plan prior to the building occupancy. Potential measures in the TDM plan can include, but are not limited to, the following:

1. Unbundled parking
2. VTA SmartPass (formerly Eco Pass) for residents
3. On-site bicycle repair station
4. A bike share program
5. An on-site TDM coordinator that would provide rideshare matching services and coordinate walking/biking groups for residents

6. An on-site transportation kiosk that would provide information to residents and visitors about multi-model wayfinding and transit information
7. Caltrain Go Pass

Page xv Summary: **ADD** the following text to the mitigation for Impact EN-1:

Energy	
Impact EN-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation. **Less than Significant Impact with Mitigation Incorporated**	See mitigation measures MM AQ-2.1, MM AQ-2.2, MM AQ-2.3, and MM AQ-2.4 above

Page xv Summary: **ADD** the following text to the mitigation for Impact EN-C:

Impact EN-C: The project would not result in a cumulatively considerable contribution to a significant energy impact. **Less than Significant Cumulative Impact with Mitigation Incorporated**	See mitigation measures MM AQ-2.1, MM AQ-2.2, MM AQ-2.3, and MM AQ-2.4 above

Page xv Summary: **REVISE** the following text to the mitigation for Impact GHG-1:

Greenhouse Gas	
Impact GHG-1: The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **Less than Significant Impact with Mitigation Incorporated**	See mitigation measures MM AQ-2.1 through MM AQ-2.43 above

Page xvi Summary: **ADD** the following text to the mitigation for Impact GHG-C:

Impact GHG-C: The project would not result in a cumulatively considerable contribution to a GHG emissions impact. **Less than Significant Cumulative Impact with Mitigation Incorporated**	See mitigation measures MM AQ-2.1 through MM AQ-2.4 above

Page xxi Summary: **REVISE** the following text to the mitigation for Impact HAZ-C:

Impact HAZ-C: The project would not have a cumulatively considerable contribution to a significant cumulative hazardous materials impact. **Less than Significant Impact with Mitigation Incorporated**	See mitigation measures MM HAZ-1.1 through MM HAZ-1.~~10~~9, MM HAZ-4.1, and MM HAZ-4.2 above

Page xxvii Summary: **ADD** the following text to the mitigation for Impact UTL-4 and Impact UTL-C:

Utilities and Service Systems	
Impact UTL-4: The project would require the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which would not cause significant environmental effects. **Less than Significant Impact with Mitigation Incorporated**	**DSP Amendments:** See mitigation measure MM HYD-3.1 above
Impact UTL-C: The project would result in significant cumulative impacts to utilities and service systems. **Significant and Unavoidable Cumulative Impact with Mitigation Incorporated**	**DSP Amendments:** See mitigation measure MM HYD-3.1 above

Page xxix Summary; Summary of Project Alternatives; No Project Alternative: **REVISE** text of the second paragraph as follows:

Under the No Project Alternative, the six project sites could remain as they are (i.e., developed with a total of 20 residential units, 181,000 square feet of commercial uses, and 8,000 square feet of office uses) or the sites could be developed with uses consistent with the existing DSP zoning designation. The existing DSP zoning allows for the development of a total of 93 residential units, ~~181,000~~ 545,898 square feet of commercial uses, 17,896 square feet of office uses, and 200 hotel rooms. For these reasons, there are two logical No Project alternatives for the project: (1) a No Project/No New Development Alternative and (2) a No Project/New Development Alternative.

Page xxix Summary; Summary of Project Alternatives; No Project Alternative: **REVISE** text of the second bullet point as follows:

- **No Project/New Development Alternative** – The No Project/New Development Alternative assumes that the project is not approved and the project sites are redeveloped consistent with the adopted DSP. For the purposes of this analysis, it is assumed that under the No Project/New Development Alternative ~~Under the adopted DSP~~, a total of 93 residential units, 181,000 square feet of commercial uses, 17,896 square feet of office uses, and 200 hotel rooms could be developed on the sites.

Page xxx Summary; Summary of Project Alternatives; Hotel and Reduced Office Development Alternative: **REVISE** text of the first paragraph as follows:

In the event the City wanted to retain the ability to develop the 200 hotel rooms allowed by the adopted DSP, the amount of office development proposed by the project would need to be reduced ~~by 146,624 feet (from 860,624 square feet~~ to 714,000 square feet~~)~~ to result in the same or lesser transportation impacts as the proposed project. The Hotel and Reduced Office Alternative includes 200 hotel rooms, 843 residential units, 260,063 square feet of commercial space, 714,000 square feet of office space.

Page 8 Section 2.3.1 DSP Amendments: **REVISE** the text of the last two paragraphs on the page as follows:

The amount of existing, allowed, and proposed development on the six project sites are shown in Table 2.3-1. The six project sites have a total of 20 residential units, 181,000 square feet of commercial space, and 8,000 square feet of office space. In addition, a development of 50 residential units and 8,720 square feet of commercial uses is currently under construction at the 300 West Washington Avenue site. Full buildout of all six sites under the adopted DSP would result in a total of 93 residential units, ~~181,000~~ 545,898 square feet of commercial uses, 17,896 square feet of office uses, and 200 hotel rooms.

The proposed DSP amendments would allow for the development of a total of 843 residential units (an increase of 750 units compared to the adopted DSP), ~~260,063~~ 253,054 square feet of commercial uses (~~an increase~~ a decrease of ~~79,063~~ 292,844 square feet compared to the adopted DSP), ~~860,624~~

867,633 square feet of office uses (an increase of ~~842,728~~ 849,737 square feet compared to the adopted DSP), and no hotel rooms (a decrease of 200 hotel rooms compared to the adopted DSP).

Page 9 Section 2.3 Project Description: **REVISE** Table 2.3-1 as follows:

Table 2.3-1: Summary of Existing, Allowed, and Proposed Development on the Six Project Sites													
Project Site	**Existing**			**Allowed by Adopted DSP**				**Proposed Project**					
								Allowed by DSP with Proposed Amendments			**Six Development Proposals**		
	Housing (units)	**Commercial (SF)**	**Office (SF)**	**Housing (units)**	**Commercial (SF)**	**Office (SF)**	**Hotel (rooms)**	**Housing (units)**	**Commercial (SF)**	**Office (SF)**	**Housing (units)**	**Commercial (SF)**	**Office (SF)**
100 Altair Way (within DSP Block 1a/1)	20	4,000	8,000	43	4,000	8,000	0	0	0	~~134,324~~ 141,333	0	0	~~134,324~~ 141,333
300 Mathilda Avenue (within DSP Block 18, Sub-block 1)	0	0	0	0	~~0~~ 69,933	0	0	0	10,700	157,200	0	~~7,131~~ 8,732	~~153,000~~ 155,469
300 West Washington Avenue (within DSP Block 18, Sub-block 2)	0	0	0	50	~~0~~ 348,797	0	0	51	0	0	1	0	0
Macy's & Redwood Square (DSP Block 18, Sub-block 3)	0	177,000	0	0	~~177,000~~ 123,168	0	200	467	~~188,178~~ 181,169	500,000	467	~~121,775~~ 132,725	~~499,775~~ 497,332
Town Center Sub-block 6 (DSP Block 18, Sub-block 6)	0	0	0	0	0	0	0	325	61,185	0	325	~~36,000~~ 40,474	0
Murphy Square (within DSP Block 22)	0	0	0	0	0	9,896	0	0	0	69,100	0	0	69,100
Total	**20**	**181,000**	**8,000**	**93**	**~~181,000~~ 545,898***	**17,896**	**200**	**843**	**~~260,063~~ 253,054**	**~~860,624~~ 867,633**	**793**	**~~164,906~~ 181,931**	**~~856,199~~ 863,234**

* The amount of commercial development identified as allowed under the adopted DSP on the 300 Mathilda Avenue, 300 West Washington Avenue, and Macys & Redwood Square sites were corrected as shown in the Final EIR (June 2020). The corrected commercial development numbers total a greater number than identified in the Draft EIR. The incorrect assumptions in the Draft EIR resulted in a lower, cumulative no project traffic, noise, and utilities baseline conditions. The cumulative plus project conditions are correct as disclosed in the Draft EIR. As a result, given that the cumulative no project baseline condition should have been greater than assumed in the Draft EIR, the project's net increase in cumulative traffic, noise, and utilities impacts would be less than disclosed in the Draft EIR.

Page 10 Section 2.3.2.1 100 Altair Way (within DSP Block 1a, but proposed to be part of DSP Block 1): **REVISE** the last paragraph on the page as follows:

The proposed development would demolish the existing buildings on-site and construct a seven-story (up to ~~116~~ 125 feet in height), ~~134,324~~ 141,333 square-foot office building with four levels of below ground parking. The proposed office building would include an approximately 9,500 square-foot rooftop terrace with passive recreational amenities such as walking paths, bocce ball area, and picnic tables. An approximately 37,000 cubic yards of soil would need to be excavated to a maximum depth of 43 feet for the below ground parking garage. A conceptual site plan and cross-section of the proposed 100 Altair Way development is shown in Figure 2.3-1 and Figure 2.3-2, respectively. The final design may vary from the conceptual design.

Page 13 Section 2.3.2.1 100 Altair Way (within DSP Block 1a, but proposed to be part of DSP Block 1); Site Access and Parking: **REVISE** the two paragraph under this heading as follows:

Vehicle access to the site would be provided via two driveways on Aries Way, connecting to the proposed below ground parking garage. A total of approximate ~~310~~ 305 parking spaces would be provided in the below ground parking garage, which would include mechanical lifts on the bottom level, and valet parking on-site. Any additional required spaces would be provided in nearby parking district facilities. A loading area is also proposed on Aries Way.

Bicycle parking on-site would be provided in accordance with the Santa Clara Valley Transportation Authority (VTA) Bicycle Technical Guidelines, which would require at least ~~17~~ 18 Class I and ~~five~~ six Class II bicycle parking spaces.[1] Pedestrian access to the development would be provided via 12-foot wide sidewalks along Aries Way, Altair Way, and Taaffe Street.

Page 13 Section 2.3.2.2 300 Mathilda Avenue (within DSP Block 18, Sub-block 1): **REVISE** the second sentence under this heading as follows:

The 300 Mathilda Avenue site is an approximately 1.8-acre, undeveloped and vacant site. The proposed development would construct a five-story (up to 108 feet in height to the top of the elevator shaft), mixed-use building with ~~7,131~~ 8,732 square feet of commercial uses and ~~153,000~~ 155,469 square feet of office uses with two levels of below ground parking.

[1] The VTA Bicycle Technical Guidelines require the following number of bicycle spaces based on land use:

- General, multi-dwelling residential – 1 Class I per 3 units + 1 Class II per 15 units
- Retail Sales – 1 Class I per 30 employees + Class II per 6,000 square feet
- Restaurants – 1 Class I per 30 employees + Class II per 3,000 square feet
- Office – 1 per 6,000 square feet (75% Class I and 25% Class II)

Class I bicycle parking is long-term parking for residents and employees. Class II bicycle parking is short-term parking for visitors. Source: Santa Clara Valley Transportation Authority. *VTA Bicycle Technical Guidelines Table 10-3*. December 13, 2007.

Page 16 Section 2.3.2.2 300 Mathilda Avenue (within DSP Block 18, Sub-block 1); Site Access and Parking: **REVISE** the second paragraph under this heading as follows:

A total of approximately ~~200~~ 260 parking spaces would be provided in the below and above ground parking garage and approximately an additional ~~50~~ nine parking spaces would be provided in the surface parking lot. Bicycle parking on-site would be provided in accordance with the VTA guidelines, which would require at least ~~22~~ 18 Class I and seven Class II parking spaces.

Page 16 Section 2.3.2.3 300 West Washington Avenue (DSP Block 18, Sub-block 2): **DELETE** the following word from the last sentence in this section as follows:

The 300 West Washington Avenue site is an approximately 0.9-acre site currently under construction for a five-story, mixed use building that includes approximately 5,400 square feet of ground floor commercial uses and 124 residential units. The proposed project would convert an existing ~~storage~~ space within the building to create an additional residential unit.

Page 17 Section 2.3.2.4 Macy's and Redwood Square (DSP Block 18, Sub-block 3): **REVISE** the text in the bullet points and the paragraph that follows as follows:

The proposed development would demolish the Macy's building and construct four new buildings on the site, as discussed below, while preserving most of the heritage redwood grove and creating an approximately one-acre plaza in the southwest corner of the site. The four proposed buildings would include the following:

- Two, seven-story (up to 124 feet in height) mixed-use buildings on the northern portion of the site with a total of 7~~7,617~~ 84,596 square feet of commercial uses[2] and ~~499,775~~ 497,332 square feet of office uses.
- Two, 12-story (up to ~~152~~ 157 feet in height) mixed-use buildings on the southern portion of the site with a total of ~~44,158~~ 48,129 square feet of ground floor commercial uses and up to 467 residential units. The ground floor would consist of mostly commercial uses emphasizing entertainment and restaurants.

In summary, this site would be developed with a total of 467 residential units, ~~121,775~~ 132,725 square feet of commercial uses, and ~~499,775~~ 497,332 square feet of office uses. Parking would be provided in a two-level, below-ground parking structure extending beneath all four buildings. The development would excavate a total of approximately 273,000 cubic yards of soil to a maximum excavation depth of 30 feet for the below ground parking garages.

[2] Of the approximately 77,600 square feet of commercial uses, approximately 38,000 square feet is proposed as "flex" space that could be used as either commercial or office.

Page 22 Section 2.3.2.4 Macy's and Redwood Square (DSP Block 18, Sub-block 3); Site Access and Parking: **REVISE** the second paragraph under this heading as follows:

The below ground parking garage on the northern portion of the site would include approximately 860 parking spaces. The below ground parking garage on the southern portion of the site would include approximately 480 parking spaces. Bicycle parking on-site would be provided in accordance with the VTA guidelines, which would require at least ~~202~~ 229 Class I and ~~54~~ 73 Class II parking spaces.

Page 22 Section 2.3.2.5 Town Center Sub-block 6 (DSP Block 18, Sub-block 6): **REVISE** the first paragraph under this heading as follows:

The Town Center Sub-block 6 site is approximately 3.9-acres in size and is developed with a large surface parking lot (Macy's parking lot). The development proposes to redevelop the site with a seven-story (up to ~~94~~ 97 feet in height) mixed use building with ~~36,000~~ 40,474 square feet of ground floor commercial uses and 325 residential units.

Page 25 Section 2.3.2.5 Town Center Sub-block 6 (DSP Block 18, Sub-block 6); Site Access and Parking: **REVISE** the first paragraph under this heading as follows:

Vehicle access to the proposed development would be provided via driveways on West McKinley Avenue and South Sunnyvale Avenue, which would lead to the parking structure. The parking structure would provide approximately ~~945~~ 950 vehicle parking spaces. Bicycle parking on-site would be provided in accordance with the VTA guidelines, which would require at least ~~109~~ 111 Class I and ~~33~~ 29 Class II parking spaces.

Page 28 Section 2.3.2.6 Murphy Square (within DP Block 22); Site Access and Parking: **REVISE** the first paragraph as follows:

Vehicle access to the proposed development would be provided via an existing shared driveway with the adjacent office building to the west of the project site on West Evelyn Avenue, which would lead to a proposed below ground parking garage. The parking garage would provide a total of 163 parking spaces (10 of which would be for EVs and 16 would be reserved for van pools). ~~Ten~~ Thirteen of the existing surface parking spaces would remain. All other parking would be provided in the proposed underground garage. Bicycle parking on-site would be provided in accordance with the VTA guidelines, which would require at least nine Class I and three Class II bicycle parking spaces.

Page 51 Section 3.3 Air Quality: **REVISE** the following text of the first paragraph under this section as follows:

The discussion in this section is based on an Air Quality and Greenhouse Gas Assessment and supplemental memo prepared by Illingworth & Rodkin, Inc. dated October 1, 2019 and March 30, 2020, respectively. ~~A copy~~ Copies of ~~this~~ these reports are ~~is~~ included in Appendix C of this EIR.

Page 63 Section 3.3.2 Air Quality Impact: Impact AQ-2; Six Development Projects; Construction Period Emissions: **REVISE** Table 3.3-4 as follows:

Table 3.3-4: Six Development Projects Average Daily Construction Period Emissions				
	ROG	**NO_x**	**PM_{10} Exhaust**	**$PM_{2.5}$ Exhaust**
	(pounds per day)			
Six Development Projects (unmitigated)	40.2	**103.2**	~~15.9~~ 16.0	6.7
BAAQMD Thresholds	54	54	82	54
Exceed Threshold (unmitigated)?	*No*	***Yes***	*No*	*No*
Six Development Projects (with mitigation measures MM AQ-2.2 and MM AQ-2.3)	---	~~53.6~~ 53.7	---	---
Exceed Threshold (with mitigation)?	---	*No*	---	---
Note: **Bold** emission indicates emission exceeding the threshold of significance.				

Page 63 Section 3.3.2 Air Quality Impact: Impact AQ-2; Six Development Projects; Construction Period Emissions: **REVISE** Table 3.3-5 as follows:

Table 3.3-5: Project Average Daily Overlapping Construction and Operation Period Emissions				
	ROG	**NO_x**	**PM_{10} Exhaust**	**$PM_{2.5}$ Exhaust**
	(pounds per day)			
A. Project Emissions (unmitigated)	46.5	110.9	~~22.4~~ 22.5	8.4
B. Existing Emissions	15.3	35.1	24.1	6.6
Net Project Emissions (A – B)	31.2	**75.8**	-1.6	1.8
BAAQMD Thresholds	54	54	82	54
Exceed Threshold (unmitigated)?	*No*	***Yes***	*No*	*No*
Net Project Emissions (with mitigation measures MM AQ-2.2 and MM AQ-2.3)	---	26.3	---	---
Exceed Threshold (with mitigation)?	---	*No*	---	---
Note: **Bold** emission indicates emission exceeding the threshold of significance.				

Pages 66-67 Section 3.3.2 Air Quality Impacts; Impact AQ-2; DSP Amendments and Six Development Projects; Operation Period Emissions: **REVISE** the last paragraph on page 66 and Table 3.3-6 on page 67 as follows:

As shown in Table 3.3-6, the project's operation emissions would not exceed the BAAQMD annual tons per year thresholds. The project's average daily operation emissions of ROG ~~and NO_x~~, however, would exceed the BAAQMD average daily significance thresholds. The project's average daily operation emissions of NO_x, PM_{10} exhaust, and $PM_{2.5}$ exhaust would be below the BAAQMD significance thresholds.

Since operational emissions primarily consists of mobile sources. A reduction in project trips would reduce operation emissions.

Table 3.3-6: Project Operation Period Emissions

	ROG	**NO_x**	**PM_{10} Exhaust**	**$PM_{2.5}$ Exhaust**
Annual				
A. Project Operational Emissions (unmitigated) (tons per year)	11.8	~~14.2~~ 14.0	~~13.1~~ 13.0	~~3.7~~ 3.6
B. Existing Operational Emissions (tons per year)	1.9	4.2	3.7	1.0
Net Project Operational Emissions (A – B) (tons per year)	9.9	~~10.0~~ 9.8	~~9.4~~ 9.2	~~2.7~~ 2.6
BAAQMD Thresholds (tons per year)	10	10	15	10
Exceed Threshold (unmitigated)(tons per year)?	*No*	*No*	*No*	*No*
Daily				
Net Project Operational Emissions (A – B) (pounds per day)	**54.4**	~~**55**~~ 53.9	51	15
BAAQMD Thresholds (pounds per day)	54	54	82	54
Exceed Threshold (unmitigated)(pounds per day)?	***Yes***	~~***Yes***~~ No	*No*	*No*
Net Project Operational Emissions (with mitigation measure MM AQ-2.4) (pounds per day)	53	~~52~~ ---	---	---
Exceed Threshold (with mitigation)(pounds per day)?	*No*	~~*No*~~ ---	---	---
Note: **Bold** emission indicates emission exceeding the threshold of significance.				

Page 67 Section 3.3.2 Air Quality Impacts; Impact AQ-2; DSP Amendments and Six Development Projects: **ADD** the following text to mitigation measure MM AQ-2.4:

DSP Amendments and Six Development Projects Mitigation Measures:

MM AQ-2.4: All Project Sites (except 300 West Washington Avenue): Approval of a TDM Plan to reduced operational NOx emissions consistent with City requirements. This Plan shall demonstrate a minimum six percent overall reduction in vehicle trips and shall be approved by the Public Works Director or designee. For buildings with an identified tenant, the project applicant(s) shall submit to the City, and the City approve, a TDM plan prior to issuance of building permits. For buildings without an identified tenant, the project applicant shall submit, and the City approve, the TDM Plan prior to the building occupancy. Potential measures in the TDM plan can include, but are not limited to, the following:

1. Unbundled parking
2. VTA SmartPass (formerly Eco Pass) for residents
3. On-site bicycle repair station
4. A bike share program
5. An on-site TDM coordinator that would provide rideshare matching services and coordinate walking/biking groups for residents
6. An on-site transportation kiosk that would provide information to residents and visitors about multi-model wayfinding and transit information
7. Caltrain Go Pass

Page 68 Section 3.3.2 Air Quality Impacts; Impact AQ-2; DSP Amendments and Six Development Projects; Operational Period Emissions: **REVISE** the first paragraph on the page as follows:

Modeling was completed to determine the effectiveness of mitigation measure MM AQ-2.4, the implementation of a TDM program, at reducing future project-related vehicle trips. The modeling results show that with the implementation of mitigation measure MM AQ-2.4, the project significant operation average daily ROG ~~and NO_x~~ emissions would be reduced the project's average daily operation emissions of ROG ~~and NO_x~~ to a less than significant level (see to Table 3.3-6). Refer to Appendix C for additional details about the modeling. **(Less than Significant Impact with Mitigation Incorporated)**

Page 94 Section 3.5.2 Cultural Resources Impacts; Impact CR-1; DSP Amendments and Six Development Projects; Direct Impacts: **REVISE** the second and third paragraphs on the page as follows:

As discussed above, the six project sites do not contain buildings that are historically significant and the historic buildings in the vicinity are not part of the project proposal. Heritage Grove, however, is located on the Macy's and Redwood Square site. The City considers the loss or relocation of ~~one or more of~~ any of the heritage trees in Heritage Grove to be a significant historic impact.

Future development of the Macy's and Redwood Square site could result in the removal or relocation of one ~~or more~~ of the heritage trees in Heritage Grove.

Page 95 Section 3.5.2 Cultural Resources Impacts; Impact CR-1; DSP Amendments and Six Development Projects; Direct Impacts: **REVISE** the second paragraph under the mitigation measures as follows:

The implementation of the above mitigation measures would reduce impacts to Heritage Grove by ensuring proper protection of existing trees to remain, requiring professional relocation and tree care for the relocated tree, and requiring a commemorative plaque for ~~each~~ the heritage tree removed/relocated. The impact would not be reduced to a less than significant level because the successful relocation of a heritage tree cannot be guaranteed and the change in the number or location of the heritage trees within the grove alters the original context in which they were designated. For these reasons, the impact is considered significant and unavoidable with mitigation incorporated. **(Significant and Unavoidable Impact with Mitigation Incorporated)**

Page 105 Section 3.6.2.1 Project Impacts; Impact EN-1; DSP Amendments and Six Development Projects; Operation: **REVISE** Table 3.6-1 as follows:

Table 3.6-1: Estimated Existing and Project Energy Usage

	Electricity (GWh)	Natural Gas (kBtu)	Gasoline (gallons)
A. Proposed Project	~~1.89~~ 2.5	~~21,987,810~~ 22,085,998	~~1,428,280~~ 1,374,846
B. Existing Uses	0.22	732,720	398,440
Project Net Increase (A – B)	~~*1.67*~~ *2.28*	~~*21,255,090*~~ *21,353,278*	~~*1,029,840*~~ *976,404*

Note: The estimated gasoline demand is based on the estimated VMT of 9,921,170 for existing uses and ~~35,564,185~~ 34,233,673 for the project, and an average fuel economy of 24.9 mpg.
kWh = kilowatt per hour
kBtu = kilo-British thermal unit

Page 105 Section 3.6.2.1 Project Impacts; Impact EN-1; DSP Amendments and Six Development Projects; Operation: **REVISE** the third paragraph under this heading as follows:

As shown in Table 3.6-2, the project's estimated per capita electricity and natural gas use is 15.0 MBtu for the proposed residential uses and ~~6.6~~ 5.4 MBtu for the commercial (including office) uses.[60] Compared to the state's electricity and natural gas use of 35.9 MBtu per capita for residential uses and 37.4 MBtu per capita for commercial and office uses, the project's electricity and natural gas use per capita is more efficient.[61]

Page 105 Section 3.6.2.1 Project Impacts; Impact EN-1; DSP Amendments and Six Development Projects; Operation: **REVISE** the Proposed Project Per Capita column in Table 3.6-2 as follows:

Table 3.6-2: State and Project Per Capita Energy Use		
Land Use	**State Per Capita Energy Use (MBtu)**	**Proposed Project Per Capita Energy Use (MBtu)**
Residential	35.9	15.0
Commercial	37.4	~~6.6~~ 5.4
Note: Energy use includes electricity and natural gas consumption.		

Page 105 Section 3.6.2.1 Project Impacts; Impact EN-1; Footnote 60: **REVISE** footnote 60 at the bottom of the page as follows:

[60] The proposed project would result in 1,796 residents and ~~4,093~~ 4,104 jobs. The net new jobs estimated include ~~197~~ 180 retail jobs and ~~3,410~~ 3,399 office jobs. Residents based on 2.13 residents per household in the DSP area (assuming no vacancies); jobs based on 400 square feet/retail employee and 250 square feet/office employee. (Source: Keyser Marston Associates. *Fiscal Impact Analysis of Requested Amendments to Downtown Specific Plan*. July 2018.)

Page 106 Section 3.6.2.1 Project Impacts; Impact EN-1; DSP Amendments and Six Development Projects; Operation: **REVISE** the Proposed Project row in Table 3.6-3 as follows:

Table 3.6-3: Energy Usage of the Proposed Project and Other Large Mixed-Use Projects				
Project Name	**Development**	**Electricity (GWh)**	**Natural Gas (kBtu)**	**Gasoline (gallons)**
Proposed Project	• 843 residential units • ~~260,063~~ 253,054 square feet of commercial uses • ~~860,624~~ 867,633 square feet of office uses	~~1.67~~ 2.28	21 million	1.0

Page 108 Section 3.6.2.1 Project Impacts; Impact EN-3; DSP Amendments and Six Development Projects; Electricity: **REVISE** the second paragraph under this heading as follows:

Electricity supply and demand data and reporting is provided at the state level. The project would result in a net increase in approximately ~~1,678,030~~ 2,288,502 kWh (or ~~1.7~~ 2.3 GWh) of electricity use on the sites, which is a 0.006 percent increase in the state's annual use. Also refer to the discussion under Impact EN-1 of why the project would not result in wasteful, inefficient, or unnecessary consumption of energy. The project's increase in electricity usage is not considered to have a substantial effect on the state's supply. **(Less than Significant Impact)**

Page 108 Section 3.6.2.1 Project Impacts; Impact EN-3; DSP Amendments and Six Development Projects; Natural Gas: **REVISE** the second paragraph under this heading as follows:

Natural gas supply and demand data and reporting is provided at the state level. Based on the relatively small increase in natural gas demand from the project (approximately ~~21,255,090~~ 22,085,998 kBtu per year or ~~21,255~~ 22,086 MMBtu, which is a 0.001 percent increase in the state's consumption), and compared to the growth trends in natural gas supply and the existing available supply in the country as discussed in Section 3.6.1.2, the proposed project would not result in a significant increase in natural gas demand relative to projected supply. Also refer to the discussion under Impact EN-1 of why the project would not result in wasteful, inefficient, or unnecessary consumption of energy. **(Less than Significant Impact)**

Page 108 Section 3.6.2.1 Project Impacts; Impact EN-3; DSP Amendments and Six Development Projects; Fuel for Motor Vehicles: **REVISE** the paragraph under this heading as follows:

The project would result in a net increase in gasoline demand of approximately ~~1,029,840~~ 976,404 gallons compared to existing conditions (see Table 3.6-1). This increase is not a substantial increase in the context of gasoline supply and demand for the State of California. New automobiles purchased by future occupants of the project would be subject to fuel economy and efficiency standards applied throughout the State of California, which means that over time the fuel efficiency of vehicles associated with the project would improve. In addition, the project is within walking distance of existing transit services (i.e., Caltrain and VTA bus service) and proposes to include a TDM program (refer to mitigation measure MM AQ-2.4 in Section 3.3 Air Quality) to vehicle trips. Reduction in vehicle trips reduces gasoline consumption. For these reasons, the proposed project would not result in a significant increase in gasoline demand relative to projected supply. Also refer to the discussion under Impact EN-1 of why the project would not result in wasteful, inefficient, or unnecessary consumption of energy. **(Less than Significant Impact with Mitigation Incorporated)**

Page 117 Section 3.8 Greenhouse Gas Emissions: **REVISE** the following text of the first paragraph under this section as follows:

This section is based on the Air Quality and GHG Assessment and supplemental memo prepared for the project by Illingworth & Rodkin, Inc. dated October 1, 2019 and March 30, 2020, respectively. ~~This~~ These report~~s~~ are ~~is~~ included in Appendix C of this EIR.

Page 121 Section 3.8.2.1 Project Impacts: **ADD** the following text to impact statement Impact GHG-1:

Impact GHG-1:	The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact with Mitigation Incorporated)**

Page 121 Section 3.8.2.1 Project Impacts; Impact GHG-1; DSP Amendments and Six Development Projects; Construction: **REVISE** the first paragraph under this heading as follows:

It is estimated that construction of the project would generate a total of approximately ~~9,575~~ 9,700 $MTCO_2e$ of GHG emissions.[74] These are the emissions from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. The construction GHG emissions for the project in comparison to construction GHG emissions for other large mixed-use projects is shown in Table 3.8-1. Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions.

Page 121 Section 3.8.2.1 Project Impacts; Impact GHG-1; DSP Amendments and Six Development Projects; Construction: **REVISE** the Proposed Project row in Table 3.8-1 as follows:

Table 3.8-1: Estimated Construction GHG Emissions for the Proposed Project and Other Large Mixed-Use Development Projects

Project Name	Development Summary	Estimated Construction GHG Emissions ($MTCO_2e$)
Proposed Project	• 843 residential units • ~~260,063~~ 253,054 square feet of commercial uses • ~~860,624~~ 867,633 square feet of office uses	~~9,575~~ 9,700

Page 122 Section 3.8.2.1 Project Impacts; Impact GHG-1; DSP Amendments and Six Development Projects; Construction: **ADD** the following text to the first paragraph on the page:

There is nothing atypical or unusual about the project's construction. In addition, the project would implement mitigation measures MM AQ-2.1 through MM AQ-2.3 to restrict idling of construction equipment, which would in turn reduce GHG emissions. For these reasons, the project's construction GHG emissions are less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

Page 123 Section 3.8.2.1 Project Impacts; Impact GHG-1; DSP Amendments and Six Development Projects; Operation: **REVISE** the Proposed Project columns in Table 3.8-2 as follows:

Table 3.8-2: Annual Existing and Project GHG Emissions ($MTCO_2e$)

Source Category	Year 2024		Year 2030	
	Existing Land Uses	Proposed Project	Existing Land Use	Proposed Project
Area (heating and cooling equipment or other individual appliances)	1	44	1	44
Energy Consumption	102	~~1,506~~ 1,517	102	~~1,506~~ 1,517
Mobile	3,546	~~12,087~~ 11,968	3,045	~~10,364~~ 10,261
Solid Waste Generation	104	~~735~~ 734	104	~~735~~ 734
Water Usage	46	~~335~~ 336	46	~~335~~ 336
Total ($MTCO_2e$)	3,799	~~14,707~~ 14,600	3,298	~~12,984~~ 12,893
Net Emissions (Project Emissions – Existing Emissions)		~~10,908~~ 10,801		~~9,685~~ 9,595
Metric Ton Significance Threshold	660			
Service Population Emissions ($MTCO_2e$/year/service population)		2.5		2.2
Per Capita Significance Threshold	2.8			
Exceed Both Thresholds?		*No*		*No*

Note: Assumes SVCE carbon-free electricity with 10 percent opt out for PG&E provided electricity. The service population emissions were calculated assuming a service population of ~~5,889~~ 5,900 individuals (1,796 residents, ~~650~~ 633 commercial employees, and ~~3,443~~ 3,471 office employees, refer to Section 4.0).

Page 126 Section 3.8.2.2 Cumulative Impacts; Impact GHG-C: **ADD** the following text to the paragraph under Impact GHG-C:

As discussed in Section 3.8.1, GHG emissions have a broader, global impact; therefore, if a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable. As discussed under Impact GHG-1 and Impact GHG-2, the project would not result in significant GHG impacts due to the density of development, proximity to public transit, implementation of measures to reduce idling of construction equipment (MM AQ-2.1 through MM AQ-2.3) and compliance with the City's Climate Action Playbook (which includes the implementation of mitigation measure MM AQ-2.4). Therefore, the project would not have a cumulatively considerable contribution to a significant cumulative GHG emissions impact. **(Less than Significant Cumulative Impact with Mitigation Incorporated)**

Page 146 Section 3.9.2 Hazards and Hazardous Materials Impacts; Impact HAZ-4; DSP Amendments and Six Development Projects; Federal Aviation Regulations Part 77: **ADD** the following text to the last paragraph of the page:

In addition to construction equipment, future buildings could exceed FAA Part 77 Surfaces. As shown in Table 3.9-3, under the six development projects, the proposed building on the Redwood Square site and 100 Altair Way site may exceed the FAA Part 77 Surface and the remaining proposed buildings are below their sites' respective FAA Part 77 Surface. The proposed development for the Redwood Square site and 100 Altair Way site, therefore, could cause a potential aviation hazard.

Page 147 Section 3.9.2 Hazards and Hazardous Materials Impacts; Impact HAZ-4; DSP Amendments and Six Development Projects; Federal Aviation Regulations Part 77: **REVISE** Table 3.9-3 as follows:

Table 3.9-3: Summary of Maximum Proposed Building Height and FAA Part 77 Surface

Project Site	**Maximum Proposed Building Height*** (feet above ground level)	**FAA Part 77 Surface** (approximate feet above ground level)
100 Altair Way	~~116~~ 125	118
300 West Washington Avenue	75	132
300 Mathilda Avenue	108	147-172
Macy's and Redwood Square	124 (Macy's) ~~152~~ 157 (Redwood Square)	137
Town Center Sub-block 6	~~94~~ 97	137
Murphy Square	76	118
*The maximum building height is measured from the ground to the top of the mechanical screening or elevator shaft, whichever is the tallest.		

Page 148 Section 3.9.2 Hazards and Hazardous Materials Impacts; Footnote 87: **REVISE** footnote as follows:

[87] ~~The proposed 100 Altair Way development is within eight feet of the FAA imaginary surface for the site. The development project was referred to the FAA as a precaution and t~~The FAA issued a "Determination of No Hazard" for the 100 Altair Way development ~~project~~ (Source: Federal Aviation Administration. *Determination of No Hazard to Air Navigation.* ~~February 1~~ June 5, 2019.). A Determination of No Hazard was issued for the buildings on Redwood Square on August 21, 2019 (Source: Source: Federal Aviation Administration. *Determination of No Hazard to Air Navigation.* August 21, 2019.)

Page 167 Section 3.11.2 Land Use and Planning Impacts; Impact LU-2; DSP Amendments and Six Development Projects; General Plan: **REVISE** the first paragraph under this heading as follows:

The six project sites are all designated TMU in the General Plan. The project proposes residential, commercial, and office uses. These proposed land uses are allowed in the TMU designation. The TMU designation allows for residential densities of 65 dwelling units per acre (du/ac) or greater and buildings may be up to eight stories in height. Densities, intensities, development standards, and design standards in each TMU area are further refined and implemented through a specific plan or area plan. Implementation of the project would result in residential densities of 100 to 137 du/ac and buildings between four and ~~10~~ 12 stories in height. The development projects, therefore, would be consistent with the TMU designation. As shown in Table 3.11-1, the project is consistent with applicable General Plan policies adopted for the purposes of avoiding or mitigating environmental effects. **(Less than Significant Impact)**

Page 171 Section 3.13 Noise and Vibration: **REVISE** the text of the first paragraph under this section as follows:

The discussion in this section is based on a Noise and Vibration Assessment and memo prepared by Illingworth & Rodkin, Inc. dated June 3, 2019 and ~~April 22, 2019~~March 17, 2020, respectively. Copies of these reports can be found in Appendix H of this EIR.

Page 197 Section 3.14.1.1 Population and Housing; Regulatory Framework; Downtown Specific Plan: **REVISE** the paragraph under this heading as follows:

The DSP contains specific land use and design standards for new development in downtown Sunnyvale. Under the adopted DSP, the six project sites are allowed to be developed with 93 residential units, ~~181,000~~ 545,898 square feet of commercial uses, 17,896 square feet of office uses, and 200 hotel rooms.

Page 198 Section 3.14.2 Population and Housing Impacts; Impact POP-1; DSP Amendments and Six Development Projects; Direct Impact: **REVISE** the paragraphs under this heading as follows:

The proposed project would allow for the development of up to 843 residential units, ~~260,063~~ 253,054 square feet of commercial uses, and ~~860,624~~ 867,633 square feet of office uses. Compared to existing conditions, the project would result in a net increase of up to 823 residential units, ~~79,063~~ 72,054 square feet of commercial uses, and ~~852,624~~ 849,737 square feet of office uses, which would result in approximately 1,753 new residents and ~~3,608~~ 3,579 new jobs/employees (see to Table 3.14-1).[117]

Under the adopted DSP, on the six project sites, 93 residential units, ~~181,000~~ 545,898 square feet of commercial uses, 17,896 square feet of office uses, and 200 hotel rooms are allowed. Compared to development allowed on the six project sites under the adopted DSP, the project would result in a net increase in 750 residential units~~, 79,063 square feet of commercial uses~~, and ~~842,728~~ 849,737 square feet of office uses; and a net decrease of 200 hotel rooms and 292,844 square feet of commercial

uses. This net change in development would result in 1,598 additional residents and ~~3,388~~ 2,487 additional jobs/employees (refer to Table 3.14-1).[118]

Page 198 Section 3.14.2 Population and Housing Impacts; Footnotes 117 and 118: **REVISE** footnotes 117 and 118 as follows:

[117] Compared to existing conditions, ~~T~~the net new jobs estimated include ~~197~~ 180 retail jobs and ~~3,410~~ 3,399 office jobs. Residents based on 2.13 residents per household in the DSP area (assuming no vacancies); jobs based on 400 square feet/retail employee and 250 square feet/office employee. (Source: Keyser Marston Associates. *Fiscal Impact Analysis of Requested Amendments to Downtown Specific Plan*. July 2018.)

[118] Compared to development allowed, ~~T~~the jobs estimated include a net increase in ~~198 retail jobs and 3,371~~ 3,399 office jobs, a net decrease in 732 retail jobs, and net decrease in 180 hotel jobs; jobs based on 400 square feet/retail employee, 250 square feet/office employee, and 0.9 employee per hotel room. (Source: Keyser Marston Associates. *Fiscal Impact Analysis of Requested Amendments to Downtown Specific Plan*. July 2018.)

Page 199 Section 3.14.2 Population and Housing Impacts; Impact POP-1; DSP Amendments and Six Development Projects; Direct Impacts; **REVISE** Table 3.14-1 as follows:

Table 3.14-1: Estimated Residents and Jobs/Employees On the Six Project Sites under Existing, Adopted DSP, and Project Conditions

	Residents	**Jobs/Employees**
A. Existing Conditions	43	485 (453 commercial jobs+32 office jobs)
B. Adopted DSP	198	~~705~~ 1,617 (~~453~~ 1,365 commercial jobs+72 office jobs+180 hotel jobs)
C. Proposed Project*	1,796	~~4,093~~ 4,104 (~~650~~ 633 commercial jobs+~~3,443~~ 3,471 office jobs)
Change between Existing and Project (C – A)	*+1,753*	*+~~3,608~~ 3,579 (~~197~~ 180 commercial jobs+~~3,411~~ 3,399 office jobs)*
Change between Adopted DSP and Project (C – B)	*+1,598*	*+~~3,388~~ 2,487 (~~197 commercial jobs+3,371~~ 3,399 office jobs-180 hotel jobs-732 commercial jobs)*

Note: *The estimated number of residents and jobs/employees reflects the development that would be allowed under the proposed DSP amendments. The six specific development projects propose 793 residential units, ~~164,906~~ 181,931 square feet of commercial space, and ~~856,199~~ 863,234 square feet of office space (50 fewer residential units, ~~95,157~~ 71,123 fewer square feet of commercial space, and ~~4,425~~ 4,399 fewer square feet of office space than what would be allowed under the proposed DSP amendments) and is estimated to generate 1,690 residents and ~~3,837~~ 3,908 jobs/employees.

Source: Residents based on 2.13 residents per household in the DSP area (assuming no vacancies); jobs based on 400 square feet/retail employee, 250 square feet/office employee, and 0.9 employee per hotel room. (Source: Keyser Marston Associates. *Fiscal Impact Analysis of Requested Amendments to Downtown Specific Plan*. July 2018.)

Page 199 Section 3.14.2 Population and Housing Impacts; Impact POP-1; DSP Amendments and Six Development Projects; Direct Impacts: **REVISE** the first paragraph on the page as follows:

Compared to what is allowed in the larger DSP area under the adopted DSP, the project's net increase of approximately 1,600 residents and ~~3,390~~ 3,400 jobs represents an approximately 34 percent increase in residential population and a 42 percent increase in jobs/employees within the DSP area.[119]

Page 214 Section 3.17 Transportation/Traffic: **REVISE** the following text to the first paragraph:

The discussion in this section is based on a TIA and land use update memorandum prepared by Fehr & Peers dated March 19, 2019 (revised) and March 6, 2020, respectively. ~~This~~ These reports ~~is~~ are included in Appendix I of this EIR.

Page 221 Section 3.17.1.2 Existing Conditions: **ADD** the following text to the description of McKinley Avenue:

McKinley Avenue is a two- to four-lane east-west roadway extending from Sunset Avenue to Bayview Avenue and continues in an alignment approximately 190 feet south on Bayview Avenue to Britton Avenue. McKinley Avenue runs parallel to Washington Avenue, and the roadway passes directly through the DSP area between Mathilda Avenue and Sunnyvale Avenue.

Page 222 Section 3.17.1.2 Existing Conditions: **REVISE** the following text to the description of Washington Avenue:

Washington Avenue is a two-lane east-west roadway that extends from Acalanes Drive ~~to~~ and terminates at Evelyn Avenue, although there is no direct vehicular access to Evelyn Avenue, and passes through the DSP area. Washington Avenue provides direct access to the 300 West Washington Avenue, Macy's and Redwood Square, and Town Center Sub-block 6 sites.

Page 236 Section 3.17.2.1 Project Impacts: **REVISE** the following text under project traffic estimates:

As outlined in Table 3.17-6, the project is estimated to generate ~~13,250~~ 13,051 net new daily trips, ~~1,186~~ 1,190 net new AM peak hour trips (~~870~~ 875 inbound and ~~316~~ 315 outbound), and ~~1,424~~ 1,404 PM peak hour trips (~~430~~ 418 inbound and ~~994~~ 986 outbound) under existing plus project conditions.

Page 237 Section 3.17.2.1 Project Impacts: **REPLACE** Table 3.17-6 with the following:

Table 3.17-6: Project Trip Generation Estimates								
Land Use	**Size**[4]	**Daily Trips**	**AM Peak Hour Trips**			**PM Peak Hour Trips**		
			In	**Out**	**Total**	**In**	**Out**	**Total**
Proposed Land Uses								
Apartment	843 du[1]	4,586	79	224	303	226	145	371
Mixed-Use and Transit Reduction		(1,239)	(23)	(50)	(73)	(61)	(39)	(100)
Apartment Subtotal (A)		3,347	56	174	230	165	106	271
Commercial	253 ksf	9,553	148	90	238	463	501	964
Mixed-Use Reduction		(688)	(22)	(14)	(36)	(22)	(34)	(56)
Commercial Subtotal (B)		8,865	126	76	202	441	467	908
Office	868 ksf	8,451	865	141	1,006	160	838	998
Mixed-Use and Transit Reduction		(645)	(59)	(10)	(69)	(14)	(57)	(71)
Office Subtotal (C)		7,806	806	131	937	146	781	927
Total Project Trips (D) = (A) + (B) +(C)		**20,018**	**988**	**382**	**1,370**	**752**	**1,354**	**2,106**
Existing Land Uses[2]								
Apartment Subtotal (E)	20 du	80	2	2	4	2	4	6
Commercial Subtotal (F)	181 ksf	6,817	105	64	169	331	358	689
Office Subtotal (G)	8 ksf	70	6	1	7	1	6	7
Total Existing Trips (H) = (E) + (F) + (G)		**6,967**	**113**	**67**	**180**	**334**	**368**	**702**
Net New Project Trips (I) = (D) – (H)		**13,051**	**875**	**315**	**1,190**	**418**	**986**	**1,404**

Notes:

[1] du = dwelling unit, ksf = 1,000 square feet

[2] Existing land uses include mixed-use and transit reductions.

Page 276 Section 3.17.2.2 Cumulative Impacts; Impact TRN-C; DSP Amendments and Six Development Projects; Plan, Ordinance, or Policy Measuring Effectiveness of the Circulation System; Level of Service – Cumulative and Cumulative Plus Project Conditions: **REVISE** the last paragraph on the page as follows:

With the implementation of MM TRN-C.3~~2~~, consistent with General Plan Goal LT-3 to prioritize investments in improvements to achieve greater mobility, bicycle mobility would be improved at this intersection. However, the project's significant LOS impact at this intersection would not be mitigated to a less than significant level. **(Significant and Unavoidable Cumulative Impact with Mitigation Incorporated)**

Page 289 Section 3.18.2 Utilities and Service Systems Impacts; Impact UTL-2; DSP Amendments and Six Development Projects; Existing Plus Project Conditions: **REVISE** the text in the second paragraph under this heading as follows:

The existing uses on the six project sites generate approximately 47,710 gpd of sewage. It is estimated the project would generate approximately ~~296,460~~ 293,796 gpd of sewage. The project, therefore, would generate a net increase of approximately ~~248,750~~ 246,086 gpd of sewage under existing plus project conditions. The project's net increase in sewage generation represents a ~~66~~ 65 percent increase in existing sewage generated from the DSP area as a whole.[3] The addition of project flows to existing flows would result in six additional pipe segments (approximately 840 feet of pipe) that would not meet the City's d/D performance criteria[4] and the same four pipes (approximately 880 feet of pipe) are at risk of surcharging.

Page 289 Footnote 172: **REVISE** footnote 172 as follows:

[172] The existing DSP area current generates approximately ~~47,705~~ 177,870 gpd (source: Schaaf & Wheeler Consulting Engineers. Draft Downtown Specific Plan Amendments Project Utility Impact Study. September 20, 2019. Page 4-2.).

Page 290 Section 3.18.2 Utilities and Service Systems Impacts; Impact UTL-2; DSP Amendments and Six Development Projects; Cumulative Plus Project Conditions: **REVISE** the text of the first paragraph as follows:

Buildout of the six project sites under the adopted DSP would generate 78,820 gpd of sewage. As mentioned above, the project would generate ~~296,460~~ 293,796 gpd of sewage. The project, therefore, would result in a net increase of ~~217,640~~ 214,976 gpd of sewage under cumulative plus project conditions. The project's net increase in sewage generation represents a represents a 27 percent

[3] The existing DSP area current generates approximately ~~47,705~~ 177,870 gpd (source: Schaaf & Wheeler Consulting Engineers. Draft *Downtown Specific Plan Amendments Project Utility Impact Study*. September 20, 2019. Page 4-2.).

[4] If a sewer line does not meet the City's d/D performance criteria, the pipe does not necessarily need to be upsized (Source: Evans, Eric. Senior Civil Engineer, City of Sunnyvale. Personal Communication. July 18, 2019.).

increase in projected sewage generated from the DSP area as a whole under cumulative conditions.[5] Under cumulative plus project conditions with the implementation of CIP 9, an additional four pipe segments for a total of 74 pipe segments (approximately 16,870 feet of pipe) downstream of the DSP area would not meet the City's d/D performance criteria and 26 of the 74 pipes would be at risk of surcharging.

Page 294 Section 3.18.2 Utilities and Service Systems Impacts; Impact UTL-3; DSP Amendments and Six Development Projects: **REVISE** the text of the paragraph under this heading as follows:

The WPCP has an existing, permitted capacity of 29.5 mgd for ADWF. The ADWF is approximately 12.2 mgd; therefore, the available treatment capacity at the WPCP is 17.3 mgd. As described above, the project is estimated to result in a net increase of approximately ~~248,750~~ 246,086 gpd (or approximately 0.25 mgd) of wastewater compared to existing conditions. Given the existing, available treatment capacity at the WPCP (17.3 mgd) and the project's net increase in ADWF (0.25 mgd), there is sufficient capacity at the WPCP to serve the project and existing treatment demand. **(Less than Significant Impact)**

Page 295 Section 3.18.2 Utilities and Service Systems Impacts; Impact UTL-5; DSP Amendments and Six Development Projects; Water Supply and Demand: **REVISE** the text in the second paragraph under this heading as follows:

Because the project is proposing development intensities above what was assumed in the adopted DSP for the six project sites, the project would result in water demands higher than those projected in the UWMP. The project would result in a net increase in water demand of 32~~9~~4 AFY.[6] The project's net increase (32~~9~~4 AFY) equates to an approximately one percent increase in the City's overall water demand from buildout of the General Plan from 26,896 to 27,220~~5~~ AFY.[7]

Page 299 Section 3.18.2 Utilities and Service Systems Impacts; Impact UTL-6; DSP Amendments and Six Development Projects: **REVISE** the text in the first sentence of the first paragraph as follows:

The project is estimated to generate approximately ~~5,800~~ 5,845 cubic yards of solid waste per year, which is a net increase of ~~4,900~~ 5,018 cubic yards compared to existing conditions.

[5] Under buildout conditions of the adopted DSP, it is estimated the DSP area would generate approximately 78,824 gpd (source: Schaaf & Wheeler Consulting Engineers. *Draft Downtown Specific Plan Amendments Project Utility Impact Study*. September 20, 2019. Page 4-3.).
[6] City of Sunnyvale and Schaaf & Wheeler. *Draft Water Supply Assessment for the Downtown Specific Plan (DSP) Amendments Project.* August 15, 2019. Page 8.
[7] Ibid, Page 15.

Page 303 Section 4.0 Growth-Inducing Impacts; Impact GRO-1; DSP Amendments and Six Development Projects: **REVISE** the last paragraph on the page as follows:

As discussed in Section 3.14 Population and Housing, the residential population growth from the project would not constitute substantial population growth in the area because it would occur on an urbanized infill site currently served by existing roads, transit, utilities, and public services, is consistent with General Plan goals for focused and sustainable growth, and supports the intensification of development in a PDA. The project proposes a greater number of residential units and ~~commercial/~~office square footage~~s~~, resulting in greater population and employees, than what is planned in the General Plan. The increase in development would change the City's jobs/housing ratio from 1.73 to 1.75 at buildout. The resulting increase in the City's jobs/housing ratio is not considered substantial.

Page 304 Section 4.0 Growth-Inducing Impacts; Impact GRO-1; DSP Amendments and Six Development Projects: **REVISE** Table 4.0-1 as follows:

Table 4.0-1: Estimated Residential Population and Employee Projections Citywide and on the Six Project Sites

	Estimated Dwelling Units	**Estimated Residential Population**	**Estimated Jobs/Employees**
Citywide*			
Sunnyvale General Plan 2035	72,100	174,500	124,410
Six Project Sites**			
Adopted DSP	93	198	~~705~~ 1,617
Proposed Project	843	1,796	~~4,093~~ 4,104

Notes: * City of Sunnyvale. *Land Use and Transportation Element Draft Environmental Impact Report. (SCH#2012032003). August 2016.* Table 3.2-5.

** Keyser Marston Associates. *Fiscal Impact Analysis of Requested Amendments to Downtown Specific Plan*. July 2018.

Page 310 Section 7.2.2 Alternative Selected: **REVISE** Table 7.2-1 as follows:

Table 7.2-1: Development Summary of Project and Alternatives Selected				
	Land Use			
	Residential (units)	**Commercial** (square footage)	**Office** (square footage)	**Hotel** (rooms)
Proposed Project (DSP Amendments)	843	~~260,063~~ 253,054	~~860,624~~ 867,633	0
Alternatives Selected				
No Project/No New Development Alternative	20	181,000	8,000	0
No Project/New Development Alternative	93	181,000	17,896	200
Reduced Housing and Office Alternative	520	260,063	~~452,624~~ 408,000	0
Design Alternative	843	260,063	860,624	0
Hotel and Reduced Office Development Alternative	843	260,063	714,000	200

Page 311 Section 7.2.2.1 No Project Alternatives; **REVISE** the text of the second sentence of the second paragraph under this heading as follows:

The existing DSP zoning allows for the development of a total of 93 residential units, ~~181,000~~ 545,898 square feet of commercial uses, 17,896 square feet of office uses, and 200 hotel rooms.

Page 312 Section 7.2.2.3 No Project/New Development: **REVISE** the text of the first paragraph under this heading as follows:

This alternative assumes that the project is not approved and the project sites are redeveloped consistent with the adopted DSP. For the purpose of this analysis, it is assumed the No Project/New Development Alternative would result in the development of ~~Under the adopted DSP,~~ a total of 93 residential units, 181,000 square feet of commercial uses, 17,896 square feet of office uses, and 200 hotel rooms ~~could be developed~~ on the sites.

Page 312 Section 7.2.2.3 No Project/New Development Alternative; Comparison of Environmental Impacts: **REVISE** the text of the second sentence of the first paragraph under this heading as follows:

While the No Project/Development Alternative would result in the development of 200 hotel rooms, it has less residential, commercial, and office development than the proposed project. The No Project/Development Alternative would have 750 fewer residential units, ~~79,063~~ 72,054 fewer commercial square feet, and ~~842,728~~ 849,737 fewer office square feet than the proposed project.

Page 313 Section 7.2.2.3 No Project/New Development Alternative; Relationship to Project Objectives: **REVISE** the text of the first sentence of the fourth paragraph under this heading as follows:

Compared to the proposed project, the No Project/New Development Alternative would result in 1,753 fewer residences, ~~3,411~~ 3,399 fewer office jobs, and ~~191 fewer~~ 912 more commercial jobs.

Page 314 Section 7.2.2.4 Reduced Housing and Office Alternative: **REVISE** the text of the second paragraph and table under this heading:

As shown in Table 7.2-2, the Reduced Housing and Office Alternative includes 323 fewer residential units, ~~the same amount of~~ 7,009 more commercial square feet, and ~~452,624~~ 459,633 fewer office square feet. The Reduced Housing and Office Alternative includes 62 percent of the project's residential units, almost the same amount of commercial square footage as the project, and about 47 percent of the project's office square footage.

Table 7.2-2: Development Under the Proposed Project and Reduced Housing and Office Alternative

	Residential Units	Commercial Square Feet	Office Square Feet
A. Proposed Project (DSP Amendments)	843	~~260,063~~ 253,054	~~860,624~~ 867,633
B. Reduced Housing and Office Alternative	520	260,063	408,000
Difference (A – B)	*323*	*~~0~~* *-7,009*	*~~452,624~~* *459,633*

Page 315 Section 7.2.2.4 Reduce Housing and Office Alternative; Comparison of Environmental Impacts: **REVISE** Table 7.2-3 and subsequent paragraph as follows:

Table 7.2-3: Summary of Project and Reduced Housing and Office Alternative Estimated Net Vehicle Trips

	Net Average Daily Trips	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
A. Proposed Project (DSP Amendments)	~~13,250~~ 13,051	~~870~~ 875	~~316~~ 315	~~1,186~~ 1,190	~~430~~ 418	~~994~~ 986	~~1,424~~ 1,404
B. Reduced Housing and Office Alternative	8,142	423	173	596	298	557	855
Difference (B-A)	~~-5,108~~ -4,909	~~-447~~ -452	~~-143~~ -142	~~-590~~ -594	~~-132~~ -120	~~-437~~ -429	~~-569~~ -549

Note: Existing uses generate 6,967 average daily trips, 180 average AM peak hour trips, and 702 average PM peak hour trips. Sources: 1) Fehr & Peers. *Sunnyvale Downtown Specific Plan Amendments Project Final Transportation Impact Analysis*. March 19, 2019 (revised). 2) Fehr & Peers. *Sunnyvale Downtown Specific Plan Amendments Project - Land Use Update Transportation Memorandum*. March 6, 2020.

Compared to the proposed project, the Reduced Housing and Office Alternative would result in ~~5,108~~ 4,909 fewer average daily trips, 59~~0~~4 fewer AM peak hour trips, and 5~~6~~49 fewer PM peak hour trips. A summary of the significant LOS intersection impacts under the proposed project and Reduced Housing and Office Alternative is shown in Table 7.2-4.

Page 319 Section 7.2.2.5 Design Alternative: **REVISE** the test of the first paragraph as follows:

The purpose of the Design Alternative is to avoid the project's significant and unavoidable impact to a historic resource. As discussed in Section 3.5 Cultural Resources, under Impact CR-1, the project could result in the removal or relocation of one ~~or more~~ of the heritage trees on the Macy's and Redwood Square site. The Design Alternative would require future development of the Macy's and Redwood Square site be designed to avoid impacting the heritage trees. The total residential, commercial, and office development would be the same under this alternative as the proposed project.

Page 320 Section 7.2.2.6 Hotel and Reduced Office Development Alternative: **REVISE** the text of the first sentence under this heading as follows:

While not an alternative derived to minimize an identified impact, in the event the City wanted to retain the ability to develop the 200 hotel rooms allowed by the adopted DSP, the amount of office development proposed by the project would need to be reduced ~~by 146,624 feet (from 860,624 square feet~~ to 714,000 square feet~~)~~ to result in the same or lesser transportation impacts as the proposed project.

Page 320 Section 7.2.2.6 Hotel and Reduced Office Development Alternative; Comparison of Environmental Impacts: **REVISE** the text of the second paragraph, Table 7.2-5, and third paragraph under this heading as follows:

Compared to the proposed project, the Hotel and Reduced Office Alternative would result in ~~four fewer~~ 195 more average daily trips, ~~84~~88 fewer AM peak hour trips, and ~~63~~43 fewer PM peak hour trips. The Hotel and Reduced Office Alternative, therefore, generates similar average daily (though fewer peak hour) vehicle trips than the project and would result in the same transportation impacts as the proposed project.

Table 7.2-5: Project and Hotel and Reduced Office Alternative Estimated Net Vehicle Trips			
	Net Average Daily Trips	**AM Peak Hour Trips**	**PM Peak Hour Trips**
A. Proposed Project (DSP Amendments)	~~13,250~~ 13,051	~~1,186~~ 1,190	~~1,424~~ 1,404
B. Hotel and Reduced Office Alternative	13,246	1,102	1,361
Difference (A – B)	~~*-4*~~ *195*	~~*-84*~~ *-88*	~~*-63*~~ *-43*
Note: Existing uses generate 6,967 average daily trips, 180 average AM peak hour trips, and 702 average PM peak hour trips. Source: Fehr & Peers. *Trip Generation Estimates – Less Office.* May 2019.			

Since this alternative has a similar development intensity as the proposed project, the alternative would result in the same or similar impacts to most environmental resources (i.e., aesthetics, agriculture and forestry resources, air quality, biological resources, archaeological resource, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise and vibration, population and housing, public service, and recreation). Given the slightly different mix and intensity of uses proposed under the Hotel and Reduced Office Alternative compared to the proposed project, this alternative would result in less ~~greater~~ electricity demand and greater natural gas demand (approximately 2,120,370 kWh and 32,455,210 kBtu) than the project (approximately ~~1,894,040~~ 2,500,472 kWh and ~~21,987,810~~ 20,333,832 kBtu), and a greater GHG emissions per service population of 2.7 compared to the project's 2.5 GHG emissions per service population in operational year 2024.[8]

Page 321 Section 7.2.2.6 Hotel and Reduced Office Development Alternative; Relationship to Project Objectives: **REVISE** the following text in the second paragraph:

Compared to the proposed project, the Hotel and Reduced Office Development Alternative would result in an increase of 18 commercial jobs, a decrease in ~~586~~ 615 office jobs, and an increase in 180 hotel jobs. This alternative, therefore, would result in a net decrease in ~~406~~ 417 jobs compared to the proposed project. For this reason, while the Hotel and Reduced Office Development Alternative would allow for additional employment and housing opportunities in proximity to major transit stops compared to existing conditions, the employment opportunities would not be maximized (Objectives 3 and 8) as much as under the proposed project.

[8] CalEEMod modeling completed by Illingworth & Rodkin, Inc. The per capita assumption assumes 1,796 residents and 3,687 jobs/employees. Residents based on 2.13 residents per household in the DSP area (assuming no vacancies); jobs based on 400 square feet/retail employee, 250 square feet/office employee, and 0.9 employee per hotel room. (Source: Keyser Marston Associates. *Fiscal Impact Analysis of Requested Amendments to Downtown Specific Plan*. July 2018.).

Page 321 Footnote 194: **REVISE** footnote 194 as follows:

[194] Compared to the proposed project, this alternative would result in a net decrease in ~~146,624~~ 153,633 square feet of office space and a net increase in 200 hotel rooms. The number of jobs was calculated assuming the following: 250 office square feet/employee and 0.9 employee per hotel room.

Appendix C Insert the following pages before the first page in Appendix C:

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality

429 East Cotati Avenue
Cotati, California 94931

Tel: 707-794-0400 *Fax: 707-794-0405*
www.illingworthrodkin.com *illro@illingworthrodkin.com*

M E M O

Date: March 30, 2020

To: **Kristy L. Weis**
David J. Powers and Associates
1871 The Alameda, Suite 200
San José, CA 95126

From: **Mimi McNamara & James A. Reyff**
Illingworth & Rodkin, Inc.
429 East Cotati Avenue
Cotati, CA 94931

RE: Downtown Sunnyvale Projects – Sunnyvale, CA

SUBJECT: Revised Construction, Operation, and GHG Emissions from Project Land Use Changes
Job #18-010

This memorandum presents the results of the revised air quality (construction and operation) emissions and greenhouse gas (GHG) emissions Downtown Sunnyvale Projects (DSP) in Sunnyvale, California. Since the completion of the DEIR air quality report in October 2019, there have been several project land use changes. The California Emissions Estimator Model (CalEEMod) version 2016.3.2 was used to compute how emissions would be affected as a result of the project land use changes. CalEEMod was the same land use emissions model used in the air quality report. *Attachment 1* includes the CalEEMod outputs and the construction and operation emission calculations.

Project Land Use Changes

Four of the six individual projects (or sub projects) proposed under the DSP have revised original designs. Tables 1 through 4 show the land use changes for the 300 Mathilda project, the Macy's & Redwood Square project, the Sub-Block 6 (Town Center) project, and the 100 Altair project.[1] The total commercial square footage would increase from 164,906 sf to 181,931 sf, while the office square footage would increase from 787,099 sf to 863,234 sf. This is a ten percent increase for both land uses.

1 The construction schedule dates were also updated to reflect a 2020 start date. The phase durations, though, remain the same. However, to stay consistent with the construction timeline analyzed in the DEIR air quality report the construction schedule was not changed.

Table 1. Project Land Use Changes for the 300 Mathilda Project

300 Mathilda	Previous	Updated
Office (Square Feet)	162,396*	164,865*
Retail (Square Feet)	7,131	8,732
Parking Garage (Square Feet)	87,668	90,754
Parking Spaces	309	268**

*Includes 9,396 sf of BOH operations, **259 spaces in the garage and 9 surface lot spaces

Table 2. Project Land Use Changes for the Macy's & Redwood Square Project

Macy's & Redwood Square	Previous	Updated
Residential Units	467	-
Residential (Square Feet)	557,404	-
Office (Square Feet)	499,775	497,332
Retail (Square Feet)	121,775	132,725
Parking Garage (Square Feet)	511,197	-
Parking Spaces	1,336	-
Other Square footage	25,420	-

Table 3. Project Land Use Changes for the Sub-Block 6 Project

Town Center Sub-Block 6	Previous	Updated
Residential Units	325	-
Residential (Square Feet)	422,850	-
Retail (Square Feet)	36,000	40,474
Parking Garage (Square Feet)	348,000	-
Parking Spaces	950	-

Table 4. Project Land Use Changes for the 100 Altair Project

Town Center Sub-Block 6	Previous	Updated
Office (Square Feet)	134,324	141,333
Parking Garage (Square Feet)	71,303	-
Parking Spaces	305	-

Construction Period Emissions and Construction-Related Toxic Air Containments

Construction-related criteria air pollutants were computed using CalEEMod, along with project-specific construction assumptions. Projected construction equipment usage and schedule inputs remained the same for all four sub projects. The same mitigation measures applied in the technical air quality report (Mitigation Measures AQ-1 and AQ-2) were also applied in these revised models. Table 5 lists the updated and previous construction emissions from the October 2019 DEIR air quality technical report, as well as total project emissions (construction & operational period emissions). As shown in Table 5, construction period emissions and construction + operational period emissions are similar to the values calculated for the DEIR. The overall change in construction period emissions would be negligible since the values are either the same or only slightly higher. The recommended air quality mitigation measures to address this impact would not change.

The results of the construction-related community risk assessment would not change since the construction schedules and projected equipment quantities/usages are not changing. The recommended air quality mitigation measures to address this impact would not change.

Table 5. Updated and Previous Construction and Construction + Operation Period Emissions

	Previous Emissions				Updated Emissions			
Scenario	**ROG**	**NO_x**	**Total PM_{10}**	**Total $PM_{2.5}$**	**ROG**	**NO_x**	**Total PM_{10}**	**Total $PM_{2.5}$**
Construction Period Emissions (2019-2023)								
Total construction emissions (tons)								
Unmitigated	16.6	42.8	6.6	2.8	16.7	42.8	6.6	2.8
Mitigated	--	22.2	--	--	--	22.2	--	--
Average daily emissions (pounds/day)[1]								
Unmitigated	40.2	**103.2**	15.9	6.7	40.2	**103.2**	16.0	6.7
Mitigated	--	53.6	--	--	--	53.7	--	--
BAAQMD Thresholds (pounds/day)	*54* lbs./day	*54* lbs./day	*82* lbs./day	*54* lbs./day	54 lbs./day	54 lbs./day	82 lbs./day	54 lbs./day
Exceed Threshold?								
Unmitigated	No	**Yes**	No	No	No	**Yes**	No	No
Mitigated	--	No	--	--	--	No	--	--
Construction + Operational Period Emissions (2019-2023)								
Total Construction + Operational Emissions[1] (tons)								
Unmitigated	21.5	48.8	11.7	4.1	21.6	48.8	11.7	4.1
Mitigated	19.4	28.2	9.6	2.6	19.5	28.2	9.7	2.6
Existing Period Emissions (tons)	11.9	27.2	18.7	5.1	11.9	27.2	18.7	5.1
Total Construction + Operational Emissions (lbs./day)								
Unmitigated	46.5	110.9	22.4	8.4	46.5	110.9	22.5	8.4
Mitigated	41.3	53.9	17.5	4.7	41.5	56.0	17.6	4.8
Existing Period Emissions (lbs./day)	15.3	35.1	24.1	6.6	15.3	35.1	24.1	6.6
Net Emissions (lbs/day)[2]								
Unmitigated	31.2	**75.8**	-1.6	1.8	31.2	**75.8**	-1.6	1.8
Mitigated	26.0	26.3	-6.5	-1.9	26.2	26.3	-6.4	-1.9
BAAQMD Thresholds (pounds/day)	*54 lbs./day*	*54 lbs./day*	*82 lbs./day*	*54 lbs./day*	54 lbs./day	54 lbs./day	82 lbs./day	54 lbs./day
Exceed Threshold?								
Unmitigated	No	**Yes**	No	No	No	**Yes**	No	No
Mitigated	No	No	No	No	No	No	No	No

Notes: [1]Assumes 829 construction workdays and 365-day operation. [2]Assumes 365 days of operation.
Bold values signify over threshold.

Operational Period Emissions and Greenhouse Gas Emissions

In addition to project land uses changes at the development level, the maximum land use sizes have also changed. Table 6 compares the previous and the revised maximum full build-out land uses allowed by the Downtown Sunnyvale Project (DSP) with proposed amendments. The operational period emissions and greenhouse gas (GHG) emissions were updated to reflect the new maximum build-out land use sizes. The CalEEMod model was used to estimate emissions from operation of the proposed project assuming full build-out.

Table 6. Project Land Use Changes for the Maximum Build-Out Under the DSP with Proposed Amendments

Land Use Type	DEIR Air Quality Report Maximum Build Out	Updated Maximum Build Out
Residential	843 Dwelling Units	843 Dwelling Units
Commercial	260,063 sf	253,054 sf
Office	860,624 sf	867,633 sf
Enclosed Parking	2,792 spaces	3,013 spaces
Parking Lot	28 spaces	22 spaces

Operational Period Emissions

The inputs to for the maximum build-out operational model were the same as the ones described in the DEIR air quality report with the exception of trip generation rates. The inputs that remained the same include the model year (2024), the consumer products factor, the energy assumptions, the emergency generators, the default model assumption for solid waste generation, the water/wastewater treatment plant assumption, and the assumption that all hearths use natural gas.

Trip Generation Rates

The project-specific vehicle trip generation rates were input to the model using the daily trip generation rate provided in the project trip generation table with adjustments made for Saturday and Sundays, as described in the DEIR air quality report. The project traffic analysis provided trip generation values for the updated apartment, commercial, and office land uses.[2] Table 7 summarizes the previous and updated trip generation rates.

Table 7. Previous and Updated Trip Generation Rates

Land Use Type	Weekday		Saturday		Sunday	
	Previous	Updated	Previous	Updated	Previous	Updated
Residential	3.97	3.97	3.81	3.81	3.50	3.50
Commercial	35.26	35.03	33.45	33.23	16.25	16.15
Office	9.01	9.00	2.01	2.01	0.86	0.86
Notes: These trip generation rates account for reductions						

[2] 1) Fehr & Peers Transportation Consultants, *Sunnyvale Downtown Specific Plan Amendments Project – Land Use Update Transportation Memorandum.*6 March 2020.

Summary of Operational Period Emissions

Table 8 summarizes the updated operational period emissions and compares the previous and updated emissions. The net annual and average daily emissions are the same for ROG, while the emissions for NO_x, total PM_{10}, and total $PM_{2.5}$ are slightly lower. The updated NO_x emissions decrease enough for the net annual emissions in tons per year and pounds per day to be below the BAAQMD threshold of 10 tons per year and 54 pounds per day. The updated daily average of NO_x is approximately 53.9 pounds per day.

Table 8. Updated and Previous Full Build-Out Operation Period Emissions

	Previous				Updated			
Scenario	**ROG**	**NOx**	**Total PM_{10}**	**Total $PM_{2.5}$**	**ROG**	**NOx**	**Total PM_{10}**	**Total $PM_{2.5}$**
2024 Project Operational Emissions (*tons/year*)	11.8	14.2	13.1	3.7	11.8	14.0	13.0	3.6
2024 Existing Operational Emissions (*tons/year*)	1.9	4.2	3.7	1.0	1.9	4.2	3.7	1.0
Net Annual Emissions (*tons/year*)								
Unmitigated	9.9	10.0	9.4	2.7	9.9	9.8	9.2	2.6
Mitigated	9.7	9.4	--	--	9.7	9.4	--	--
Net Average Daily Emissions (*lbs/day*)[1]								
Unmitigated	**54**	**55**	51	15	**54**	54	51	15
Mitigated	53	52	--	--	53	--	--	--
BAAQMD Thresholds								
(annual)	*10 tons*	*10 tons*	*15 tons*	*10 tons*	*10 tons*	*10 tons*	*15 tons*	*10 tons*
(avg. daily)	*54 lbs./day*	*54 lbs./day*	*82 lbs./day*	*54 lbs./day*	*54 lbs./day*	*54 lbs./day*	*82 lbs./day*	*54 lbs./day*
Exceed Threshold?								
Unmitigated	**Yes**[2]	**Yes**	No	No	**Yes**[2]	No	No	No
Mitigated	No	No	No	No	No	No	No	No

Notes: [1]Assumes 365 days of operation. [2]Since ROG slightly exceeds 54 lbs/day (54.4 lbs/day), the impact is interpreted as significant.

Greenhouse Gas Emissions

CalEEMod was used to predict GHG emissions from operation of the site assuming full build-out of the project. The project land use types and size and other project-specific information were input to the model, as described above within the operational period emissions.

Service Population Emissions

The project service population efficiency rate is based on the number of future residents and future

employees. For this project, the number of future residents would be 1,796 residents, the number of future retail employees would be 633, and the number of future office employees would be 3,471 employees. The total service population would be 5,900 individuals.

Construction Emissions

The DEIR air quality GHG emissions associated with construction were computed to be 9,695 MT of CO_2e for the total construction period. The revised construction GHG emissions were estimated to be 9,700 MT CO_2e.

Summary of GHG Emissions

As shown in Table 9, the revised service population emissions for years 2024 (opening year) and 2030 (future year) still do not exceed the "Substantial Progress" efficiency metric of 2.8 MT CO_2e/year/service population. Therefore, the project would have a *less-than-significant* impact regarding GHG emissions.

Table 9. Annual Project GHG Emissions (CO_2e) in Metric Tons & Per Capita

Source Category	Existing Land Use in 2024	Previous Proposed Project in 2024	Updated Proposed Project in 2024	Existing Land Use in 2030	Previous Proposed Project in 2030	Updated Proposed Project in 2030
Area	1	44	44	1	44	44
Energy Consumption	102	1,506	1,517	102	1,506	1,517
Mobile	3,546	12,087	11,968	3,045	10,364	10,261
Solid Waste Generation	104	735	734	104	735	734
Water Usage	46	335	336	46	335	336
Total Emissions (MT CO_2e)	3,799	14,707	14,600	3,298	12,984	12,893
Net Emissions		**10,908**	**10,801**		**9,685**	**9,595**
Metric Ton Significance Threshold		***660 MT CO_2e/year***			***660 MT CO_2e/year***	
Service Population Emissions (MT CO_2e/year/service population)		2.5	2.5		2.2	2.2
Per Capita Significance Threshold		***2.8 in 2030***			***2.8 in 2030***	
Significant (Exceeds both thresholds)?		*No*	***No***		*No*	***No***
**Assumes SVCE carbon-free electricity with 10 percent opt out for PG&E provided electricity.*						

Attachment 1: CalEEMod Outputs, Construction Activity Assumptions, and Emission Calculations

Project Name: 100 Altair REVISED

Project Size	0 Dwelling Units	0.55 total project acres disturbed	
	0 s.f. residential	0 s.f. retail	
	141,333 s.f. office/commercial	0 s.f. other, specify:	
	0 s.f. other, specify:		
	71,303 s.f. parking garage	305 spaces	
	0 s.f. parking lot	0 spaces	
Construction Hours	6:00 am to	3:00 pm	

Complete ALL Portions in Yellow

Qty	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP hours	Relative Contribution	Comments
	Demolition	**Start Date:**	**6/1/2020**	**Total phase:**	**43**				**Overall Import/Export Volumes**
		End Date:	**8/1/2020**						
2	Concrete/Industrial Saws	81	0.73	4	10	0.93	4,730	1%	**Demolition Volume**
1	Excavators	162	0.38	6	25	3.49	9,234	1%	Square footage of buildings to be demolished
1	Rubber-Tired Dozers	255	0.4	0	0	0.00	-		(*or* total tons to be hauled)
2	Tractors/Loaders/Backhoes	97	0.37	6	35	4.88	15,074	2%	25,370 square feet *or*
									? Hauling volume (tons)
	Site Preperation	**Start Date:**	**8/1/2020**	**Total phase:**	**10**				Any pavement demolished and hauled? NA **tons**
		End Date:	**8/15/2020**						**Soil Hauling Volume**
1	Graders	174	0.41	8	8	6.40	4,566	1%	
1	Rubber Tired Dozers	255	0.4	4	4	1.60	1,632	0%	Export volume = 1,575 cubic yards
2	Tractors/Loaders/Backhoes	97	0.37	4	4	1.60	1,148	0%	Import volume = NA cubic yards
	Grading / Excavation	**Start Date:**	**8/16/2020**	**Total phase:**	**40**				
		End Date:	**10/16/2020**						**Soil Hauling Volume**
0	Scrapers	**361**	**0.48**		0	0.00	-		
1	Excavators	162	0.38	8	40	8.00	19,699	2%	Export volume = 37,019 cubic yards
0	Graders	174	0.41	0	0	0.00	-		Import volume = NA cubic yards
0	Rubber Tired Dozers	255	0.4	0	0	0.00	-		
2	Tractors/Loaders/Backhoes	97	0.37	8	40	8.00	22,970	3%	
	Other Equipment?								
	Trenching	**Start Date:**	**8/16/2020**	**Total phase:**	**108**				
		End Date:	**12/16/2020**						
2	Tractor/Loader/Backhoe	97	0.37	6	20	1.11	8,614	1%	
0	Excavators	162	0.38	0	0	0.00			
	Other Equipment?								
	Building - Exterior	**Start Date:**	**10/16/2020**	**Total phase:**	**463**				**Cement Trucks? 975 Total Round-Trips**
		End Date:	**8/1/2022**						
1	Cranes	226	0.29	8	420	7.26	220,214	25%	Electric? (Y/N) _N__ Otherwise assumed diesel
1	Forklifts	89	0.2	2	400	1.73	14,240	2%	Liquid Propane (LPG)? (Y/N) _N_ Otherwise Assumed diesel
1	Generator Sets	84	0.74	8	463	8.00	230,241	26%	Or temporary line power? (Y/N) _N_
2	Tractors/Loaders/Backhoes	97	0.37	6	300	3.89	129,204	15%	otherwise, assume diesel generator
6	Welders	46	0.45	8	120	2.07	119,232	14%	
	Other Equipment?					0.00			
Building - Interior/Architectural Coating		**Start Date:**	**9/1/2021**	**Total phase:**	**260**				
		End Date:	**8/1/2022**						
2	Air Compressors	78	0.48	8	129	3.97	77,276	9%	
0	Aerial Lift	62	0.31	0	0	0.00			
	Other Equipment?								
	Paving	**Start Date:**	**5/1/2025**	**Total phase:**	**17**				
		End Date:	**6/1/2022**						
0	Cement and Mortar Mixers	9	0.56	0	0	0.00			
0	Pavers	125	0.42	0	0	0.00			**Asphalt? 296 cubic yards or ____ round trips?**
1	Paving Equipment	130	0.36	8	2	0.06	749	0%	
1	Rollers	80	0.38	8	2	0.06	486	0%	
2	Tractors/Loaders/Backhoes	97	0.37	0	0	0.00	-		
	Other Equipment?								

Equipment listed in this sheet is to provide an example of inputs
It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate
Modify horepower or load factor, as appropriate

Typical Equipment Type & Load Factors

OFFROAD Equipment Type	HP	Load Factor
Aerial Lifts	62	0.31
Air Compressors	78	0.48
Bore/Drill Rigs	205	0.5
Cement and Mortar Mixers	9	0.56
Concrete/Industrial Saws	81	0.73
Cranes	226	0.29
Crawler Tractors	208	0.43
Crushing/Proc. Equipment	85	0.78
Dumpers/Tenders	16	0.38
Excavators	162	0.38
Forklifts	89	0.2
Generator Sets	84	0.74
Graders	174	0.41
Off-Highway Tractors	122	0.44
Off-Highway Trucks	400	0.38
Other Construction Equipment	171	0.42
Other General Industrial Equipment	150	0.34
Other Material Handling Equipment	167	0.4
Pavers	125	0.42
Paving Equipment	130	0.36
Plate Compactors	8	0.43
Pressure Washers	13	0.2
Pumps	84	0.74
Rollers	80	0.38
Rough Terrain Forklifts	100	0.4
Rubber Tired Dozers	255	0.4
Rubber Tired Loaders	199	0.36
Scrapers	361	0.48
Signal Boards	6	0.82
Skid Steer Loaders	64	0.37
Surfacing Equipment	253	0.3
Sweepers/Scrubbers	64	0.46
Tractors/Loaders/Backhoes	97	0.37
Trenchers	80	0.5
Welders	46	0.45

Project Name: STC CityLine - Block 1 (Building B) REVISED

Project Size	0	Dwelling Units	2.0	total project acres disturbed
	0	s.f. residential	8,732	s.f. retail
Includes BOH--->	155,469	s.f. office/commercial	9,396	s.f. other, specify:
	N/A	s.f. other, specify:		
	90,754	s.f. parking garage	259	spaces
	N/A	s.f. parking lot	9	spaces
Construction Hours	7:00 am	to	4:00 pm	

Complete ALL Portions in Yellow

Qty	Description	HP	Load Factor	Hours/day	Total Work Days	HP hours	Relative Contribution	Avg. Hours per day	Comments
	Demolition	**Start Date:**	**10/7/2019**	**Total phase:**	**15**				**Overall Import/Export Volumes**
		End Date:	**10/25/2019**						
1	Concrete/Industrial Saws	81	0.73	2	15	1,774	1%	2	**Demolition Volume**
1	Excavators	162	0.38	4	15	3,694	1%	4	Square footage of buildings to be demolished
1	Rubber-Tired Dozers	255	0.4	1	15	1,530	0%	1	(*or* total tons to be hauled)
2	Tractors/Loaders/Backhoes	97	0.37	3	15	1,615	0%	3	**0** square feet *or*
									0 Hauling volume (tons)
	Site Preperation	**Start Date:**	**10/28/2019**	**Total phase:**	**15**				Any pavement demolished and hauled? Y, **348 tons**
		End Date:	**11/15/2019**						**Soil Hauling Volume**
1	Graders	174	0.41	8	15	8,561	3%	8	
1	Rubber Tired Dozers	255	0.4	3	15	4,590	1%	3	Export volume = **0** cubic yards
1	Tractors/Loaders/Backhoes	97	0.37	4	15	2,153	1%	4	Import volume = **0** cubic yards
	Grading / Excavation	**Start Date:**	**11/18/2019**	**Total phase:**	**100**				
		End Date:	**4/10/2020**						**Soil Hauling Volume**
2	Scrapers	361	0.48	2	80	27,725	8%	1.6	
2	Excavators	162	0.38	2	100	12,312	4%	2	Export volume = **42,607** cubic yards
2	Graders	174	0.41	4	20	5,707	2%	0.8	Import volume = **0** cubic yards
1	Rubber Tired Dozers	255	0.4	2	80	16,320	5%	1.6	
1	Tractors/Loaders/Backhoes	97	0.37	4	100	14,356	4%	4	
1	Sweepers/Scrubbers	64	0.46	2	100	5,888	2%	2	
	Trenching	**Start Date:**	**4/13/2020**	**Total phase:**	**30**				
		End Date:	**5/22/2020**						
2	Tractor/Loader/Backhoe	97	0.37	2	30	2,153	1%	2	
2	Excavators	162	0.38	4	30	7,387	2%	4	
	Other Equipment?								
	Building - Exterior	**Start Date:**	**5/25/2020**	**Total phase:**	**170**				**Cement Trucks? Y, 55 Total Round-Trips**
		End Date:	**1/31/2021**						
1	Cranes	226	0.29	8	170	89,134	27%	8	Electric? (Y/N) N, Otherwise assumed diesel
2	Forklifts	89	0.2	3	170	9,078	3%	3	Liquid Propane (LPG)? (Y/N) N, Otherwise Assumed diesel
0	Generator Sets	84	0.74	0	0	-	0%	0	Or temporary line power? (Y/N) Y
2	Tractors/Loaders/Backhoes	97	0.37	3	170	18,304	5%	3	otherwise, assume diesel generator
4	Welders	46	0.45	8	110	18,216	5%	5.1764706	
1	Concretre Pumps	171	0.42	4	80	22,982	7%	1.8823529	
Building - Interior/Architectural Coating		**Start Date:**	**2/3/2021**	**Total phase:**	**100**				
		End Date:	**6/30/2021**						
4	Air Compressors	78	0.48	4	100	14,976	4%	4	
2	Aerial Lift	62	0.31	6	100	11,532	3%	6	
	Other Equipment?								
	Paving	**Start Date:**	**5/25/2020**	**Total phase:**	**40**				
		End Date:	**7/21/2020**						
1	Cement and Mortar Mixers	9	0.56	6	10	302	0%	1.5	
2	Pavers	125	0.42	6	40	12,600	4%	6	
2	Paving Equipment	130	0.36	6	40	11,232	3%	6	**Asphalt 178 cubic yards ~~or____ round trips?~~**
2	Rollers	80	0.38	4	40	4,864	1%	4	
1	Tractors/Loaders/Backhoes	97	0.37	3	40	4,307	1%	3	
	Other Equipment?								

Equipment listed in this sheet is to provide an example of inputs
It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate
Modify horepower or load factor, as appropriate

Typical Equipment Type & Load Factors

OFFROAD Equipment Type	HP	Load Factor
Aerial Lifts	62	0.31
Air Compressors	78	0.48
Bore/Drill Rigs	205	0.5
Cement and Mortar Mixers	9	0.56
Concrete/Industrial Saws	81	0.73
Cranes	226	0.29
Crawler Tractors	208	0.43
Crushing/Proc. Equipment	85	0.78
Dumpers/Tenders	16	0.38
Excavators	162	0.38
Forklifts	89	0.2
Generator Sets	84	0.74
Graders	174	0.41
Off-Highway Tractors	122	0.44
Off-Highway Trucks	400	0.38
Other Construction Equipment	171	0.42
Other General Industrial Equipment	150	0.34
Other Material Handling Equipment	167	0.4
Pavers	125	0.42
Paving Equipment	130	0.36
Plate Compactors	8	0.43
Pressure Washers	13	0.2
Pumps	84	0.74
Rollers	80	0.38
Rough Terrain Forklifts	100	0.4
Rubber Tired Dozers	255	0.4
Rubber Tired Loaders	199	0.36
Scrapers	361	0.48
Signal Boards	6	0.82
Skid Steer Loaders	64	0.37
Surfacing Equipment	253	0.3
Sweepers/Scrubbers	64	0.46
Tractors/Loaders/Backhoes	97	0.37
Trenchers	80	0.5
Welders	46	0.45

Project Name: STC CityLine - Block 3 (3A and 3B) REVISED — Macy's & Redwood Square

Project Size 467 Dwelling Units — 7.6 total project acres disturbed

Includes BOH---> 557,404 s.f. residential — 132,725 s.f. retail

Includes Flex & BOH---> 497,332 s.f. office/commercial — 25420 s.f. other, specify:

N/A s.f. other, specify:

511,197 s.f. parking garage — 1,336 spaces

N/A s.f. parking lot — N/A spaces

Construction Hours 7:00 am to 4:00 pm

Complete ALL Portions in Yellow

Qty	Description	HP	Load Factor	Hours/day	Total Work Days	HP hours	Relative Contribution	Avg. Hours per day	Comments
	Demolition	**Start Date:**	**10/7/2019**	**Total phase:**	**90**				**Overall Import/Export Volumes**
		End Date:	**2/7/2020**						
3	Concrete/Industrial Saws	81	0.73	4	45	31,930	1%	2	**Demolition Volume**
4	Excavators	162	0.38	4	90	88,646	3%	4	Square footage of buildings to be demolished
4	Rubber-Tired Dozers	255	0.4	2	90	73,440	2%	2	(*or* total tons to be hauled)
2	Tractors/Loaders/Backhoes	97	0.37	4	90	25,841	1%	4	**175,000** square feet *or*
									~~-?- Hauling volume (tons)~~
	Site Preperation	**Start Date:**	**2/10/2020**	**Total phase:**	**20**				Any pavement demolished and hauled? Y **615 tons**
		End Date:	**3/6/2020**						**Soil Hauling Volume**
2	Graders	174	0.41	8	20	22,829	1%	8	
1	Rubber Tired Dozers	255	0.4	6	20	12,240	0%	6	Export volume = **0** cubic yards
1	Tractors/Loaders/Backhoes	97	0.37	6	20	4,307	0%	6	Import volume = **0** cubic yards
	Grading / Excavation	**Start Date:**	**3/9/2020**	**Total phase:**	**220**				
		End Date:	**1/8/2021**						**Soil Hauling Volume**
4	Scrapers	361	0.48	4	200	554,496	18%	3.6363636	
6	Excavators	162	0.38	6	220	487,555	15%	6	Export volume = **273,022** cubic yards
2	Graders	174	0.41	8	40	45,658	1%	1.4545455	Import volume = **0** cubic yards
2	Rubber Tired Dozers	255	0.4	4	200	163,200	5%	3.6363636	
2	Tractors/Loaders/Backhoes	97	0.37	4	220	63,166	2%	4	
1	Sweepers/Scrubbers	64	0.46	3	100	8,832	0%		
	Trenching	**Start Date:**	**1/11/2021**	**Total phase:**	**30**				
		End Date:	**2/19/2021**						
2	Tractor/Loader/Backhoe	97	0.37	2	30	4,307	0%	2	
2	Excavators	162	0.38	4	30	14,774	0%	4	
	Other Equipment?								
	Building - Exterior	**Start Date:**	**2/22/2021**	**Total phase:**	**400**				**Cement Trucks? Y, 230 Total Round-Trips**
		End Date:	**9/2/2022**						
3	Cranes	226	0.29	8	240	377,510	12%	4.8	Electric? (Y/N) N, Otherwise assumed diesel
5	Forklifts	89	0.2	4	400	142,400	4%	4	Liquid Propane (LPG)? (Y/N) N, Otherwise Assumed diesel
3	Generator Sets	84	0.74	8	180	268,531	8%	3.6	Or temporary line power? (Y/N) Y
4	Tractors/Loaders/Backhoes	97	0.37	4	400	229,696	7%	4	otherwise, assume diesel generator
4	Welders	46	0.45	8	260	172,224	5%	5.2	
2	Concretre Pumps	171	0.42	6	180	155,131	5%	2.7	
Building - Interior/Architectural Coating		**Start Date:**	**9/5/2022**	**Total phase:**	**165**				
		End Date:	**4/21/2023**						
4	Air Compressors	78	0.48	4	165	98,842	3%	4	
4	Aerial Lift	62	0.31	6	165	76,111	2%	6	
	Other Equipment?								
	Paving	**Start Date:**	**2/22/2021**	**Total phase:**	**40**				
		End Date:	**4/16/2021**						
1	Cement and Mortar Mixers	9	0.56	6	10	302	0%	1.5	
2	Pavers	125	0.42	4	40	16,800	1%	4	**Asphalt 160 cubic yards ~~or____ round trips?~~**
2	Paving Equipment	130	0.36	4	40	14,976	0%	4	
2	Rollers	80	0.38	4	40	9,728	0%	4	
1	Tractors/Loaders/Backhoes	97	0.37	3	40	4,307	0%	3	
	Other Equipment?								

Equipment listed in this sheet is to provide an example of inputs — **Add or subtract phases and equipment, as appropriate**

It is assumed that water trucks would be used during grading — **Modify horepower or load factor, as appropriate**

Typical Equipment Type & Load Factors

OFFROAD Equipment Type	HP	Load Factor
Aerial Lifts	62	0.31
Air Compressors	78	0.48
Bore/Drill Rigs	205	0.5
Cement and Mortar Mixers	9	0.56
Concrete/Industrial Saws	81	0.73
Cranes	226	0.29
Crawler Tractors	208	0.43
Crushing/Proc. Equipment	85	0.78
Dumpers/Tenders	16	0.38
Excavators	162	0.38
Forklifts	89	0.2
Generator Sets	84	0.74
Graders	174	0.41
Off-Highway Tractors	122	0.44
Off-Highway Trucks	400	0.38
Other Construction Equipment	171	0.42
Other General Industrial Equipment	150	0.34
Other Material Handling Equipment	167	0.4
Pavers	125	0.42
Paving Equipment	130	0.36
Plate Compactors	8	0.43
Pressure Washers	13	0.2
Pumps	84	0.74
Rollers	80	0.38
Rough Terrain Forklifts	100	0.4
Rubber Tired Dozers	255	0.4
Rubber Tired Loaders	199	0.36
Scrapers	361	0.48
Signal Boards	6	0.82
Skid Steer Loaders	64	0.37
Surfacing Equipment	253	0.3
Sweepers/Scrubbers	64	0.46
Tractors/Loaders/Backhoes	97	0.37
Trenchers	80	0.5
Welders	46	0.45

Project Name: STC CityLine - Block 6, Alternate #1 REVISED

Project Size	325 Dwelling Units	4.4 total project acres disturbed	
Includes BOH--->	422,850 s.f. residential	40,474 s.f. retail	
	N/A s.f. office/commercial	N/A s.f. other, specify:	
	N/A s.f. other, specify:		
	348,000 s.f. parking garage	950 spaces	
	N/A s.f. parking lot	N/A spaces	
Construction Hours	7:00 am to	4:00 pm	

Complete ALL Portions in Yellow

Qty	Description	HP	Load Factor	Hours/day	Total Work Days	HP hours	Relative Contribution	Avg. Hours per day	Comments
	Demolition	**Start Date:**	**1/20/2020**	**Total phase:**	**15**				**Overall Import/Export Volumes**
		End Date:	**2/7/2020**						
2	Concrete/Industrial Saws	81	0.73	2	15	3,548	0%	2	**Demolition Volume**
2	Excavators	162	0.38	5	15	9,234	1%	5	Square footage of buildings to be demolished
2	Rubber-Tired Dozers	255	0.4	1	15	3,060	0%	1	(*or* total tons to be hauled)
2	Tractors/Loaders/Backhoes	97	0.37	4	15	4,307	0%	4	**0** square feet *or*
									0 Hauling volume (tons)
	Site Preperation	**Start Date:**	**2/10/2020**	**Total phase:**	**10**				Any pavement demolished and hauled? Y **2,960 tons**
		End Date:	**2/21/2020**						**Soil Hauling Volume**
2	Graders	174	0.41	8	10	11,414	1%	8	
1	Rubber Tired Dozers	255	0.4	3	10	3,060	0%	3	Export volume = **0** cubic yards
2	Tractors/Loaders/Backhoes	97	0.37	4	10	2,871	0%	4	Import volume = **0** cubic yards
	Grading / Excavation	**Start Date:**	**2/24/2020**	**Total phase:**	**180**				
		End Date:	**10/30/2020**						**Soil Hauling Volume**
4	Scrapers	361	0.48	2	160	221,798	14%	1.7777778	
4	Excavators	162	0.38	2	180	88,646	6%	2	Export volume = **36,400** cubic yards
2	Graders	174	0.41	4	20	11,414	1%	0.4444444	Import volume = **0** cubic yards
1	Rubber Tired Dozers	255	0.4	2	160	32,640	2%	1.7777778	
2	Tractors/Loaders/Backhoes	97	0.37	4	180	51,682	3%	4	
1	Sweepers/Scrubbers	64	0.46	2	100	5,888	0%		
	Trenching	**Start Date:**	**11/2/2020**	**Total phase:**	**30**				
		End Date:	**12/18/2020**						
2	Tractor/Loader/Backhoe	97	0.37	2	30	4,307	0%	2	
2	Excavators	162	0.38	4	30	14,774	1%	4	
	Other Equipment?								
	Building - Exterior	**Start Date:**	**12/21/2020**	**Total phase:**	**360**				**Cement Trucks? Y, 140 Total Round-Trips**
		End Date:	**7/1/2022**						
2	Cranes	226	0.29	8	200	209,728	14%	4.4444444	Electric? (Y/N) N, Otherwise assumed diesel
4	Forklifts	89	0.2	4	360	102,528	7%	4	Liquid Propane (LPG)? (Y/N) N, Otherwise Assumed diesel
3	Generator Sets	84	0.74	8	140	208,858	13%	3.1111111	Or temporary line power? (Y/N) Y
4	Tractors/Loaders/Backhoes	97	0.37	4	360	206,726	13%	4	otherwise, assume diesel generator
4	Welders	46	0.45	8	220	145,728	9%	4.8888889	
2	Concretre Pumps	171	0.42	4	70	40,219	3%	0.7777778	
Building - Interior/Architectural Coating		**Start Date:**	**7/4/2022**	**Total phase:**	**145**				
		End Date:	**2/17/2023**						
4	Air Compressors	78	0.48	4	145	86,861	6%	4	
4	Aerial Lift	62	0.31	6	145	66,886	4%	6	
	Other Equipment?								
	Paving	**Start Date:**	**12/21/2020**	**Total phase:**	**20**				
		End Date:	**1/15/2021**						
1	Cement and Mortar Mixers	9	0.56	6	10	302	0%	3	
1	Pavers	125	0.42	6	20	6,300	0%	6	**Asphalt 90 cubic yards ~~or____ round trips?~~**
1	Paving Equipment	130	0.36	6	20	5,616	0%	6	
1	Rollers	80	0.38	4	20	2,432	0%	4	
1	Tractors/Loaders/Backhoes	97	0.37	3	20	2,153	0%	3	
	Other Equipment?								

Equipment listed in this sheet is to provide an example of inputs
It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate
Modify horepower or load factor, as appropriate

Typical Equipment Type & Load Factors

OFFROAD Equipment Type	HP	Load Factor
Aerial Lifts	62	0.31
Air Compressors	78	0.48
Bore/Drill Rigs	205	0.5
Cement and Mortar Mixers	9	0.56
Concrete/Industrial Saws	81	0.73
Cranes	226	0.29
Crawler Tractors	208	0.43
Crushing/Proc. Equipment	85	0.78
Dumpers/Tenders	16	0.38
Excavators	162	0.38
Forklifts	89	0.2
Generator Sets	84	0.74
Graders	174	0.41
Off-Highway Tractors	122	0.44
Off-Highway Trucks	400	0.38
Other Construction Equipment	171	0.42
Other General Industrial Equipment	150	0.34
Other Material Handling Equipment	167	0.4
Pavers	125	0.42
Paving Equipment	130	0.36
Plate Compactors	8	0.43
Pressure Washers	13	0.2
Pumps	84	0.74
Rollers	80	0.38
Rough Terrain Forklifts	100	0.4
Rubber Tired Dozers	255	0.4
Rubber Tired Loaders	199	0.36
Scrapers	361	0.48
Signal Boards	6	0.82
Skid Steer Loaders	64	0.37
Surfacing Equipment	253	0.3
Sweepers/Scrubbers	64	0.46
Tractors/Loaders/Backhoes	97	0.37
Trenchers	80	0.5
Welders	46	0.45

Project Name: Murphy Square (Guirland) UNCHANGED

Project Size

0 Dwelling Units | 0.78 ct acres disturbed

0 s.f. residential | 0 s.f. retail

69,100 s.f. office/commercial | s.f. other, specify:

0 s.f. other, specify:

67,800 s.f. parking garag | 163 spaces

11,380 s.f. parking lot | 13 spaces

Construction Hours 7 am to 6 pm

Complete ALL Portions in Yellow

Qty	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per	Comments
	Demolition	**Start Date:**	2/10/2020	**Total phase:**	**15**		**Overall Import/Export Volumes**
		End Date:	2/28/2020				
	Concrete/Industrial Saws	81	0.73			0	**Demolition Volume**
1	Excavators	162	0.38	**4**	**5**	1.33333	Square footage of buildings to be demolished
1	Rubber-Tired Dozers	255	0.4	**3**	**5**	1	(*or* total tons to be hauled)
1	Tractors/Loaders/Backhoes	97	0.37	**4**	**5**	1.33333	**_20,000_** square feet *or*
							_800 Hauling volume (tons)
	Site Preperation	**Start Date:**	3/2/2020	**Total phase:**	**15**		Any pavement demolished and hauled? **_?_ tons**
		End Date:	3/20/2020				**Soil Hauling Volume**
	Graders	174	0.41	**4**	**5**	1.33333	
	Rubber Tired Dozers	255	0.4	**3**	**5**	1	0 cy export
	Tractors/Loaders/Backhoes	97	0.37	**3**	**5**	1	0 cy import
	Grading / Excavation	**Start Date:**	3/23/2020	**Total phase:**	**160**		
		End Date:	6/22/2020				**Soil Hauling Volume**
	Scrapers	**361**	**0.48**			0	
1	Excavators	162	0.38	**8**	**60**	3	Export volume = **_85,378** cubic yards?
1	Graders	174	0.41	**4**	**20**	0.5	0 cy import
	Rubber Tired Dozers	255	0.4	**4**	**30**	0.75	
1	Tractors/Loaders/Backhoes	97	0.37	**3**	**50**	0.9375	
	Other Equipment?						
	Trenching	**Start Date:**	6/22/2020	**Total phase:**	**10**		
		End Date:	7/3/2020				
	Tractor/Loader/Backhoe	97	0.37	**3**	**5**	1.5	
	Excavators	162	0.38	**3**	**5**	1.5	
	Other Equipment?						
	Building - Exterior	**Start Date:**	7/6/2020	**Total phase:**	**150**		**Cement Trucks 100 round trips**
		End Date:	7/6/2021				
	Cranes	226	0.29	**4**	**80**	2.13333	Dieswl Crane
	Forklifts	89	0.2	**2**	**20**	0.26667	Diesel Forklift
	Generator Sets	84	0.74	**0**	**0**	0	Temp Power
	Tractors/Loaders/Backhoes	97	0.37	**2**	**25**	0.33333	Diesel Power
	Welders	46	0.45	**4**	**25**	0.66667	
	Other Equipment?					0	
	Building - Interior/Architectural Coating	**Start Date:**	7/6/2021	**Total phase:**	**35**		
		End Date:	8/7/2021				
	Air Compressors	78	0.48	**4**	**15**	1.71429	
	Aerial Lift	62	0.31	**4**	**20**	2.28571	
	Other Equipment?						
	Paving	**Start Date:**	8/10/2021	**Total phase:**	**40**		
		End Date:	9/14/2021				
	Cement and Mortar Mixers	9	0.56	**2**	**8**	0.4	
	Pavers	125	0.42	**4**	**8**	0.8	**Asphalt 100_ cubic yards +10__ round trips**
1	Paving Equipment	130	0.36	**4**	**8**	0.8	
1	Rollers	80	0.38	**4**	**8**	0.8	
1	Tractors/Loaders/Backhoes	97	0.37	**4**	**8**	0.8	
	Other Equipment?						

Equipment listed in this sheet is to provide an example of inputs — **Add or subtract phases and equipment, as appropriate**

It is assumed that water trucks would be used during grading — **Modify horepower or load factor, as appropriate**

Typical Equipment Type & Load Factors

OFFROAD Equipment Type	HP	Load Factor
Aerial Lifts	62	0.31
Air Compressors	78	0.48
Bore/Drill Rigs	205	0.5
Cement and Mortar Mixers	9	0.56
Concrete/Industrial Saws	81	0.73
Cranes	226	0.29
Crawler Tractors	208	0.43
Crushing/Proc. Equipment	85	0.78
Dumpers/Tenders	16	0.38
Excavators	162	0.38
Forklifts	89	0.2
Generator Sets	84	0.74
Graders	174	0.41
Off-Highway Tractors	122	0.44
Off-Highway Trucks	400	0.38
Other Construction Equipment	171	0.42
Other General Industrial Equipment	150	0.34
Other Material Handling Equipment	167	0.4
Pavers	125	0.42
Paving Equipment	130	0.36
Plate Compactors	8	0.43
Pressure Washers	13	0.2
Pumps	84	0.74
Rollers	80	0.38
Rough Terrain Forklifts	100	0.4
Rubber Tired Dozers	255	0.4
Rubber Tired Loaders	199	0.36
Scrapers	361	0.48
Signal Boards	6	0.82
Skid Steer Loaders	64	0.37
Surfacing Equipment	253	0.3
Sweepers/Scrubbers	64	0.46
Tractors/Loaders/Backhoes	97	0.37
Trenchers	80	0.5
Welders	46	0.45

Typical Equipment Type & Load Factors		
OFFROAD Equipment Type	**Horsepower**	**Load Factor**
Aerial Lifts	62	0.31
Air Compressors	78	0.48
Bore/Drill Rigs	205	0.5
Cement and Mortar Mixers	9	0.56
Concrete/Industrial Saws	81	0.73
Cranes	226	0.29
Crawler Tractors	208	0.43
Crushing/Proc. Equipment	85	0.78
Dumpers/Tenders	16	0.38
Excavators	162	0.38
Forklifts	89	0.2
Generator Sets	84	0.74
Graders	174	0.41
Off-Highway Tractors	122	0.44
Off-Highway Trucks	400	0.38
Other Construction Equipment	171	0.42
Other General Industrial Equipment	150	0.34
Other Material Handling Equipment	167	0.4
Pavers	125	0.42
Paving Equipment	130	0.36
Plate Compactors	8	0.43
Pressure Washers	13	0.2
Pumps	84	0.74
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Rubber Tired Dozers	255	0.4
Rubber Tired Loaders	199	0.36
Scrapers	361	0.48
Signal Boards	6	0.82
Skid Steer Loaders	64	0.37
Surfacing Equipment	253	0.3
Sweepers/Scrubbers	64	0.46
Tractors/Loaders/Backhoes	97	0.37
Trenchers	80	0.5
Welders	46	0.45

Traffic Consultant Trip Gen					CalEEMod Default		
Land Use	**Size**	**Daily Trips**	**New Trips**	**Weekday Trip Gen**	**Weekday**	**Sat**	**Sun**
General Office Building	867,633		7,806	***9.00***	11.03	2.46	1.05
					Rev	***2.01***	***0.86***
Residential	843		3,347	***3.97***	6.65	6.39	5.86
					Rev	***3.82***	***3.50***
Retail	253,054		8,865	***35.03***	44.32	42.04	20.43
					Rev	***33.23***	***16.15***

REVISED PROJECT DESCRIPTION - TRIP GENERATION ESTIMATES

Land Use	ITE Code	Size	Units	Daily		AM Peak Hour				PM Peak Hour			
				Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
(A) Existing													
Multi-Family Housing (Mid-Rise)	221	20	du	5.44	109	0.36	2	5	7	0.44	5	4	9
Transit Reduction (Housing near Employment)				*3%*	*-3*	*3%*	*0*	*(1)*	*(1)*	*3%*	*(1)*	*0*	*(1)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*-10*	*9%*	*0*	*(1)*	*(1)*	*9%*	*(1)*	*0*	*(1)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*-16*	*15%*	*0*	*(1)*	*(1)*	*15%*	*(1)*	*0*	*(1)*
Existing Housing Subtotal (E)					**80**	-	**2**	**2**	**4**		**2**	**4**	**6**
Shopping Center	820	181	ksf	37.75	6,833	0.94	106	64	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(16)*	-	*(1)*	*0*	*(1)*	-	*0*	*(1)*	*(1)*
Existing Retail Subtotal (F)					**6,817**	-	**105**	**64**	**169**		**331**	**358**	**689**
General Office Building	710	8	ksf	9.74	78	1.16	8	1	9	1.15	1	8	9
Transit Reduction (Housing near Employment)				*3%*	*(3)*	*3%*	*(1)*	*0*	*(1)*	*3%*	*0*	*(1)*	*(1)*
Transit Reduction (Employment near Caltrain Station)				*6%*	*(5)*	*6%*	*(1)*	*0*	*(1)*	*6%*	*0*	*(1)*	*(1)*
Existing Office Subtotal (G)				-	**70**	-	**6**	**1**	**7**		**1**	**6**	**7**
Net Existing Project Trips (H) = (E) + (F) + (G)				-	**6,967**	-	**113**	**67**	**180**		**334**	**368**	**702**
(B) Existing Plus Approved But Not Yet Constructed or Occupied													
Multi-Family Housing (Mid-Rise)	221	70	du	5.44	381	0.36	7	18	25	0.44	19	12	31
Transit Reduction (Housing near Employment)				*3%*	*(11)*	*3%*	*0*	*0*	*0*	*3%*	*0*	*0*	*0*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(34)*	*9%*	*(1)*	*(2)*	*(3)*	*9%*	*(2)*	*(1)*	*(3)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(57)*	*15%*	*(1)*	*(2)*	*(3)*	*15%*	*(2)*	*(2)*	*(4)*
Approved Housing Subtotal (I)				-	**279**	-	**5**	**14**	**19**		**15**	**9**	**24**
Shopping Center	820	181	ksf	37.75	6833	0.94	106	64	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(57)*	-	*(2)*	*(1)*	*(3)*	-	*(2)*	*(2)*	*(4)*
Approved Retail Subtotal (J)				-	**6,776**	-	**104**	**63**	**167**	-	**329**	**357**	**686**
General Office Building	710	8	ksf	9.74	78	1.16	8	1	9	1.15	1	8	9
Transit Reduction (Housing near Employment)				*3%*	*(11)*	*3%*	*0*	*0*	*0*	*3%*	*0*	*0*	*0*
Transit Reduction (Employment near Caltrain Station)				*6%*	(5)	*6%*	0	0	0	*6%*	0	0	0
Approved Office Subtotal (K)				-	**62**	-	**8**	**1**	**9**		**1**	**8**	**9**
Net Approved Project Trips (L) = (I) + (J) + (K)				-	**7,117**	-	**117**	**78**	**195**		**345**	**374**	**719**
(C) Allowed by Adopted DSP													
Multi-Family Housing (Mid-Rise)	221	93	du	5.44	506	0.36	9	24	33	0.44	25	16	41
Transit Reduction (Housing near Employment)				*3%*	*(15)*	*3%*	*0*	*(1)*	*(1)*	*3%*	*(1)*	*0*	*(1)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(46)*	*9%*	*(1)*	*(2)*	*(3)*	*9%*	*(2)*	*(1)*	*(4)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(76)*	*15%*	*(1)*	*(4)*	*(5)*	*15%*	*(4)*	*(2)*	*(6)*
Allowed Housing Subtotal (M)				-	**369**	-	**7**	**17**	**24**		**18**	**13**	**30**
Shopping Center	820	181	ksf	37.75	6833	0.94	105	65	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(76)*	-	*(4)*	*(1)*	*(5)*	-	*(2)*	*(4)*	*(6)*
Mixed-Use Development Reduction (Hotel and Retail Reduction)				-	*(167)*	-	*(4)*	*(5)*	*(9)*	-	*(6)*	*(6)*	*(12)*
Allowed Retail Subtotal (N)				-	**6,590**	-	**97**	**59**	**156**	-	**323**	**349**	**672**
General Office Building	710	18	ksf	9.74	174	1.16	18	3	21	1.15	3	18	21
Transit Reduction (Housing near Employment)				*3%*	*(15)*	*3%*	*(1)*	*0*	*(1)*	*3%*	*0*	*(1)*	*(1)*
Transit Reduction (Employment near Caltrain Station)				*6%*	(10)	*6%*	(1)	0	(2)	*6%*	0	(1)	(1)
Allowed Office Subtotal (O)				-	**149**	-	**16**	**3**	**18**	-	**3**	**16**	**19**
Hotel	310	200	rm	8.36	1,672	0.47	55	39	94	0.60	61	59	120
Mixed-Use Development Reduction (Hotel and Retail Reduction)				*10%*	*(167)*	*10%*	*(5)*	*(4)*	*(9)*	*10%*	*(6)*	*(6)*	*(12)*
Allowed Hotel Subtotal (P)				-	**1,505**	-	**50**	**35**	**85**	-	**55**	**53**	**108**
Net Allowed Project Trips (Q) = (M) + (N) + (O) + (P)					**8,613**		**170**	**114**	**283**		**399**	**431**	**829**
(D) Allowed by DSP w/ Proposed Amendments													
Multi-Family Housing (Mid-Rise)	221	843	du	5.44	4,586	0.36	79	224	303	0.44	226	145	371
Transit Reduction (Housing near Employment)				*3%*	*(138)*	*3%*	*(2)*	*(7)*	*(9)*	*3%*	*(7)*	*(4)*	*(11)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(413)*	*9%*	*(7)*	*(20)*	*(27)*	*9%*	*(20)*	*(13)*	*(33)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(688)*	*15%*	*(14)*	*(22)*	*(36)*	*15%*	*(34)*	*(22)*	*(56)*
Proposed Housing Subtotal (R)				-	**3,347**	-	**56**	**175**	**231**	-	**165**	**106**	**271**
Shopping Center	820	253	ksf	37.75	9,553	0.94	148	90	238	3.81	463	501	964
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(688)*	*15%*	*(22)*	*(14)*	*(36)*	*15%*	*(22)*	*(34)*	*(56)*
Proposed Retail Subtotal (S)				-	**8,865**	-	**126**	**76**	**202**	-	**441**	**467**	**908**
General Office Building	710	868	ksf	9.74	8,451	1.16	865	141	1,006	1.15	160	838	998
Transit Reduction (Housing near Employment)				*3%*	*(138)*	*3%*	*(7)*	*(2)*	*(9)*	*3%*	*(4)*	*(7)*	*(11)*
Transit Reduction (Employment near Caltrain Station)				*6%*	*(507)*	*6%*	*(52)*	*(8)*	*(60)*	*6%*	*(10)*	*(50)*	*(60)*
Proposed Office Subtotal (T)				-	**7,806**	-	**806**	**131**	**937**	-	**146**	**781**	**927**
Net Proposed Project Trips (U) = (R) + (S) + (T)				-	**20,018**	-	**988**	**382**	**1,370**	-	**752**	**1,354**	**2,106**
Cityline TIA Analysis Net New Trip Generation													
Net New Office = (T) - (G) = Proposed - Existing					7,736		800	130	930		145	775	920
Net New Residential= (R) - (E) = Proposed - Existing					3,267		54	173	227		163	102	265
Net New Retail = (S) - (F) = Proposed - Existing					2,048		21	12	33		110	109	219
Net New Total					**13,051**		**875**	**315**	**1,190**		**418**	**986**	**1,404**

Uncontrolled Emissions (tons/year)

Revised March 2020

Year	Scenario	ROG	NOx	Controlled Nox	Total PM10	Total PM2.5
2019	100 Altair Way Const	0.032	0.496	0.258	0.077	0.029
	300 Mathilda Ave Const	0.042	0.639	0.332	0.200	0.061
	Macy's and Redwood Square Const	0.076	0.785	0.408	0.111	0.047
	Existing	*2.632*	*6.361*		*3.746*	*1.041*
2020	100 Altair Way Const	0.239	2.522	1.311	0.230	0.119
	300 Mathilda Ave Const	0.258	2.680	1.394	0.373	0.161
	Macy's and Redwood Square Const	0.689	10.697	5.563	1.347	0.732
	Sub-block 6 Const	0.256	3.526	1.833	0.720	0.247
	Murphy Sqaure Const	0.091	2.036	1.058	0.196	0.071
	Existing	*2.482*	*5.885*		*3.738*	*1.033*
2021	100 Altair Way Const	0.948	2.027	1.054	0.203	0.109
	300 Mathilda Ave Const	0.971	0.348	0.181	0.031	0.020
	Macy's and Redwood Square Const	0.725	6.395	3.325	1.297	0.468
	Sub-block 6 Const	0.503	3.973	2.066	0.631	0.265
	Murphy Sqaure Const	0.402	0.250	0.130	0.038	0.014
	Existing	*2.357*	*5.487*		*3.731*	*1.027*
2022	100 Altair Way Op	0.837	1.050		0.834	0.235
	300 Mathilda Ave Op	1.187	1.616		1.269	0.356
	Macy's and Redwood Square Const	4.354	4.498	2.339	0.837	0.308
	Sub-block 6 Const	3.120	1.641	0.853	0.270	0.113
	Murphy Sqaure Op	0.453	0.593		0.432	0.124
	Existing	*2.253*	*5.201*		*3.729*	*1.025*
2023	100 Altair Way Op	0.819	0.879		0.833	0.234
	300 Mathilda Ave Op	1.158	1.349		1.267	0.354
	Macy's and Redwood Square Const	3.632	0.213	0.111	0.057	0.022
	Sub-block 6 Const	0.341	0.039	0.020	0.006	0.003
	Murphy Sqaure Op	0.444	0.505		0.431	0.012
	Existing	*2.146*	*4.314*		*3.725*	*1.021*

Total Construction Emissions (Tons/Year)	16.7	42.8	22.2	6.6	2.8	# of Workdays
Average Daily Emissions (lbs/day)	40.2	103.2	53.6	16.0	6.7	829
Total Operational Emissions (Tons/Year)	4.9	6.0	6.0	5.1	1.3	# of Operational Days
Average Daily Emissions (lbs/day)	6	8	7.7	7	2	1552
Total Existing Emissions (Tons/Year)	11.9	27.2	27.2	18.7	5.1	
Average Daily Emissions (lbs/day)	15.3	35.1	35.1	24.1	6.6	
Total Construction + Operational Emissions (tons/year)	21.6	48.8	28.2	11.7	4.1	
Total Construction + Operational Emissions (lbs/day)	46.5	110.9	61.4	22.5	8.4	
Existing Operational Emissions (lbs/day)	15.3	35.1	35.1	24.1	6.6	
Total Net Emissions (lbs/day)	**31.2**	**75.8**	**26.3**	**-1.6**	**1.8**	
BAAQMD Thresholds	*54*	*54*		*82*	*54*	

*Controlled NOx for mitigation

Mitigated (Tier 4 Final + NOX Reduction + 100 Hour Limit)

Revised March 2020

Year	Scenario	ROG	Total PM10	Total PM2.5
2019	100 Altair Way Const	0.01	0.05	0.01
	300 Mathilda Ave Const	0.02	0.11	0.02
	Macy's and Redwood Square Const	0.02	0.04	0.01
	Existing	*2.63*	*3.75*	*1.04*
2020	100 Altair Way Const	0.09	0.15	0.05
	300 Mathilda Ave Const	0.09	0.21	0.05
	Macy's and Redwood Square Const	0.25	0.69	0.21
	Sub-block 6 Const	0.09	0.35	0.07
	Murphy Sqaure Const	0.07	0.16	0.05
	Existing	*2.48*	*3.74*	*1.03*
2021	100 Altair Way Const	0.80	0.13	0.04
	300 Mathilda Ave Const	0.94	0.02	0.00
	Macy's and Redwood Square Const	0.42	1.12	0.31
	Sub-block 6 Const	0.25	0.50	0.14
	Murphy Sqaure Const	0.39	0.03	0.01
	Existing	*2.36*	*3.73*	*1.03*
2022	100 Altair Way Op	0.837	0.834	0.235
	300 Mathilda Ave Op	1.187	1.269	0.356
	Macy's and Redwood Square Const	4.16	0.74	0.22
	Sub-block 6 Const	3.01	0.22	0.06
	Murphy Sqaure Op	0.45	0.43	0.12
	Existing	*2.25*	*3.73*	*1.02*
2023	100 Altair Way Op	0.82	0.83	0.23
	300 Mathilda Ave Op	1.16	1.27	0.35
	Macy's and Redwood Square Const	3.63	0.06	0.02
	Sub-block 6 Const	0.34	0.00	0.00
	Murphy Sqaure Op	0.44	0.43	0.01
	Existing	*2.15*	*3.72*	*1.02*

Total Construction Emissions (Tons/Year)	14.6	4.6	1.3	# of Workdays
Average Daily Emissions (lbs/day)	35.2	11.1	3.1	829
Total Operational Emissions (Tons/Year)	4.9	5.1	1.3	# of Operational Days
Average Daily Emissions (lbs/day)	6	7	2	1552
Total Existing Emissions (Tons/Year)	11.9	18.7	5.1	
Average Daily Emissions (lbs/day)	15.3	24.1	6.6	
Total Construction + Operational Emissions (tons/year)	19.5	9.7	2.6	
Total Construction + Operational Emissions (lbs/day)	41.5	17.6	4.8	
Existing Operational Emissions	15.3	24.1	6.6	
Total Net Emissions (lbs/day)	**26.2**	**-6.4**	**-1.9**	
BAAQMD Thresholds	*54*	*82*	*54*	

Operational Criteria Air Pollutants						
Unmitigate	ROG	NOX	Total PM10	Total PM2.5		
Year	Tons					
Total	11.8	14.0	13.0	3.6		
	Existing Use Emissions					
Total	1.9	4.2	3.7	1.0		
	Net Annual Operational Emissions					
Tons/year	9.9	9.8	9.2	2.6		
	Average Daily Emissions					
Annual Pounds	**54.2**	**53.9**	51	14		

GHG Emissions				
Category	**CO2e**			
	Project	**Existing**	**Project 2030**	**Existing 2030**
Area	44	1	44	1
Energy	1,517	102	1,517	102
Mobile	11,968	3,546	10,261	3,045
Waste	734	104	734	104
Water	336	46	336	46
TOTAL	14,600	3,799	12,893	3,298
Net GHG Emissions		10,801		9,595
Service Population	5,900			
Per Capita Emissions	2.47		2.19	

Construction GHG	CO2e
100 Altair	96
	503
	414
300 Mathilda	108
	496
	71
Macys-Redwood	103
	2,001
	1,757
	1,364
	82
Subblock 6	638
	1,017
	455
	12
Murphy Square	512
	67
	9,695

DSP - 100 Altair Way (Rev March 2020) 2022 Model

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	141.33	1000sqft	0.55	141,333.00	0
Enclosed Parking with Elevator	305.00	Space	0.00	71,303.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 Rates = 290

Land Use - Applicant provided Land Uses. Rev 3.4.2020

Construction Phase - Applicant provided construction schedule

Off-road Equipment - Applicant provided construction equipment and hours, rev. 5.2.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev. 5.2.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev. 5.2.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev. 5.2.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev. 5.2.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev. 5.2.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev. 5.2.2019

Trips and VMT - demolition: 90 tons of pavemnet hauling = about 18 one-way trips, Building Ext = 1,500 one-way cement truck trips, paving = 138cy = 33 one-way asphalt truck trips

Demolition - Existing building demo = 25,370sf

Grading - Site prep = 1,575cy export, grading = 37,019cy export

Vehicle Trips - Vehicle Trips - After reuctions Office = 9.01, 2.01, 0.86

Energy Use -

Water And Wastewater - WTP treatment 100% aerobic

Construction Off-road Equipment Mitigation - BMPs, Tier 4 Interim Mitigation

Energy Mitigation - Green Building Measures - energy efficient lighting

Water Mitigation - Green Building Measures - water efficient fixtures and landscaping

Stationary Sources - Emergency Generators and Fire Pumps - 150kW diesel gen = 185 hp, 50 hr/yr

Area Coating -

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	70,667.00	67,162.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	212,000.00	201,486.00
tblArchitecturalCoating	ConstArea_Parking	4,278.00	4,698.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	260.00
tblConstructionPhase	NumDays	100.00	463.00
tblConstructionPhase	NumDays	10.00	43.00
tblConstructionPhase	NumDays	2.00	40.00
tblConstructionPhase	NumDays	5.00	17.00
tblConstructionPhase	NumDays	1.00	10.00
tblGrading	AcresOfGrading	3.13	3.75
tblGrading	MaterialExported	0.00	37,019.00
tblGrading	MaterialExported	0.00	1,575.00
tblLandUse	LandUseSquareFeet	141,330.00	141,333.00
tblLandUse	LandUseSquareFeet	122,000.00	71,303.00
tblLandUse	LotAcreage	3.24	0.55
tblLandUse	LotAcreage	2.74	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	3.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	4.00	6.00
tblOffRoadEquipment	UsageHours	6.00	2.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	1.00
tblOffRoadEquipment	UsageHours	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblOffRoadEquipment	UsageHours	7.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	185.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	115.00	133.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	33.00
tblTripsAndVMT	WorkerTripNumber	75.00	76.00

tblVehicleTrips	ST_TR	2.46	2.01
tblVehicleTrips	SU_TR	1.05	0.86
tblVehicleTrips	WD_TR	11.03	9.01
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0317	0.4957	0.2554	1.0200e-003	0.0629	0.0138	0.0767	0.0166	0.0128	0.0294	0.0000	96.1018	96.1018	0.0109	0.0000	96.3752
2020	0.2389	2.5215	1.7408	5.5100e-003	0.1476	0.0826	0.2302	0.0397	0.0789	0.1185	0.0000	501.2518	501.2518	0.0517	0.0000	502.5436
2021	0.9478	2.0273	1.7823	4.6400e-003	0.1250	0.0775	0.2025	0.0338	0.0747	0.1086	0.0000	413.2368	413.2368	0.0435	0.0000	414.3246
Maximum	**0.9478**	**2.5215**	**1.7823**	**5.5100e-003**	**0.1476**	**0.0826**	**0.2302**	**0.0397**	**0.0789**	**0.1185**	**0.0000**	**501.2518**	**501.2518**	**0.0517**	**0.0000**	**502.5436**

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					
2019	0.0130	0.2842	0.2701	1.0200e-003	0.0496	1.5300e-003	0.0511	0.0115	1.4800e-003	0.0130	0.0000	96.1017	96.1017	0.0109	0.0000	96.3751
2020	0.0898	1.3134	1.7880	5.5100e-003	0.1465	7.7300e-003	0.1542	0.0394	7.5200e-003	0.0469	0.0000	501.2516	501.2516	0.0517	0.0000	502.5434
2021	0.7965	0.8213	1.8477	4.6400e-003	0.1250	5.2500e-003	0.1303	0.0338	5.1500e-003	0.0390	0.0000	413.2365	413.2365	0.0435	0.0000	414.3243
Maximum	**0.7965**	**1.3134**	**1.8477**	**5.5100e-003**	**0.1465**	**7.7300e-003**	**0.1542**	**0.0394**	**7.5200e-003**	**0.0469**	**0.0000**	**501.2516**	**501.2516**	**0.0517**	**0.0000**	**502.5434**

	ROG	NOx	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	**26.19**	**52.05**	**-3.37**	**0.00**	**4.31**	**91.65**	**34.12**	**5.93**	**91.50**	**61.45**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2019	12-31-2019	0.5069	0.2847
2	1-1-2020	3-31-2020	0.8813	0.6107
3	4-1-2020	6-30-2020	0.6193	0.2559
4	7-1-2020	9-30-2020	0.6167	0.2575
5	10-1-2020	12-31-2020	0.6209	0.2617
6	1-1-2021	3-31-2021	0.7889	0.4239
7	4-1-2021	6-30-2021	0.7939	0.4249
8	7-1-2021	9-30-2021	0.8160	0.4351
		Highest	0.8813	0.6107

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	0.6322	4.0000e-005	4.1100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.9800e-003	7.9800e-003	2.0000e-005	0.0000	8.5000e-003

Energy	0.0125	0.1134	0.0953	6.8000e-004		8.6200e-003	8.6200e-003		8.6200e-003	8.6200e-003	0.0000	509.9075	509.9075	0.0410	0.0103	513.9899
Mobile	0.2270	0.9686	2.6737	9.3000e-003	0.8598	7.8800e-003	0.8677	0.2302	7.3600e-003	0.2375	0.0000	851.7049	851.7049	0.0286	0.0000	852.4196
Stationary	7.5900e-003	0.0212	0.0194	4.0000e-005		1.1200e-003	1.1200e-003		1.1200e-003	1.1200e-003	0.0000	3.5224	3.5224	4.9000e-004	0.0000	3.5347
Waste						0.0000	0.0000		0.0000	0.0000	26.6811	0.0000	26.6811	1.5768	0.0000	66.1014
Water						0.0000	0.0000		0.0000	0.0000	8.8872	24.9672	33.8543	0.0331	0.0198	40.5948
Total	**0.8792**	**1.1033**	**2.7924**	**0.0100**	**0.8598**	**0.0176**	**0.8774**	**0.2302**	**0.0171**	**0.2473**	**35.5683**	**1,390.1099**	**1,425.6782**	**1.6800**	**0.0301**	**1,476.6489**

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	0.6322	4.0000e-005	4.1100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.9800e-003	7.9800e-003	2.0000e-005	0.0000	8.5000e-003
Energy	0.0125	0.1134	0.0953	6.8000e-004		8.6200e-003	8.6200e-003		8.6200e-003	8.6200e-003	0.0000	465.6337	465.6337	0.0366	9.3400e-003	469.3324
Mobile	0.2270	0.9686	2.6737	9.3000e-003	0.8598	7.8800e-003	0.8677	0.2302	7.3600e-003	0.2375	0.0000	851.7049	851.7049	0.0286	0.0000	852.4196
Stationary	7.5900e-003	0.0212	0.0194	4.0000e-005		1.1200e-003	1.1200e-003		1.1200e-003	1.1200e-003	0.0000	3.5224	3.5224	4.9000e-004	0.0000	3.5347
Waste						0.0000	0.0000		0.0000	0.0000	26.6811	0.0000	26.6811	1.5768	0.0000	66.1014
Water						0.0000	0.0000		0.0000	0.0000	8.8872	21.4231	30.3103	0.0327	0.0198	37.0200
Total	**0.8792**	**1.1033**	**2.7924**	**0.0100**	**0.8598**	**0.0176**	**0.8774**	**0.2302**	**0.0171**	**0.2473**	**35.5683**	**1,342.2921**	**1,377.8604**	**1.6752**	**0.0291**	**1,428.4166**

	ROG	NOx	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**	**3.44**	**3.35**	**0.29**	**3.29**	**3.27**

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	10/1/2019	11/28/2019	5	43	
2	Site Preparation	Site Preparation	12/1/2019	12/13/2019	5	10	
3	Grading	Grading	12/16/2019	2/7/2020	5	40	
4	Trenching	Trenching	12/16/2019	5/13/2020	5	108	
5	Building Construction	Building Construction	2/16/2020	11/24/2021	5	463	
6	Architectural Coating	Architectural Coating	1/1/2021	12/30/2021	5	260	
7	Paving	Paving	9/1/2021	9/23/2021	5	17	

Acres of Grading (Site Preparation Phase): 3.75

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 201,486; Non-Residential Outdoor: 67,162; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	1.00	81	0.73
Demolition	Excavators	1	4.00	158	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	5.00	97	0.37
Site Preparation	Graders	1	5.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	2.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	2.00	97	0.37
Grading	Concrete/Industrial Saws	0	0.00	81	0.73
Grading	Excavators	1	7.00	158	0.38
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Tractors/Loaders/Backhoes	2	1.00	97	0.37

Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	2.00	89	0.20
Building Construction	Generator Sets	1	7.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Building Construction	Welders	6	2.00	46	0.45
Architectural Coating	Air Compressors	2	3.00	78	0.48
Paving	Cement and Mortar Mixers	0	0.00	9	0.56
Paving	Pavers	0	0.00	130	0.42
Paving	Paving Equipment	1	1.00	132	0.36
Paving	Rollers	1	1.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	1.00	97	0.37

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	133.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	197.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	4,627.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	11	76.00	35.00	1,500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	33.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

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					0.0125	0.0000	0.0125	1.8900e-003	0.0000	1.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0146	0.1434	0.1284	2.0000e-004		8.4000e-003	8.4000e-003		7.8300e-003	7.8300e-003	0.0000	17.4338	17.4338	4.8000e-003	0.0000	17.5539
Total	**0.0146**	**0.1434**	**0.1284**	**2.0000e-004**	**0.0125**	**8.4000e-003**	**0.0209**	**1.8900e-003**	**7.8300e-003**	**9.7200e-003**	**0.0000**	**17.4338**	**17.4338**	**4.8000e-003**	**0.0000**	**17.5539**

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	6.0000e-004	0.0207	4.0900e-003	5.0000e-005	1.1300e-003	8.0000e-005	1.2100e-003	3.1000e-004	8.0000e-005	3.9000e-004	0.0000	5.1248	5.1248	2.4000e-004	0.0000	5.1308
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	1.1700e-003	8.7000e-004	9.0100e-003	3.0000e-005	2.5600e-003	2.0000e-005	2.5700e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.2642	2.2642	6.0000e-005	0.0000	2.2658
Total	**1.7700e-003**	**0.0216**	**0.0131**	**8.0000e-005**	**3.6900e-003**	**1.0000e-004**	**3.7800e-003**	**9.9000e-004**	**1.0000e-004**	**1.0900e-003**	**0.0000**	**7.3890**	**7.3890**	**3.0000e-004**	**0.0000**	**7.3966**

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					5.6200e-003	0.0000	5.6200e-003	4.3000e-004	0.0000	4.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3200e-003	0.0101	0.1361	2.0000e-004		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	17.4338	17.4338	4.8000e-003	0.0000	17.5539
Total	**2.3200e-003**	**0.0101**	**0.1361**	**2.0000e-004**	**5.6200e-003**	**3.1000e-004**	**5.9300e-003**	**4.3000e-004**	**3.1000e-004**	**7.4000e-004**	**0.0000**	**17.4338**	**17.4338**	**4.8000e-003**	**0.0000**	**17.5539**

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	6.0000e-004	0.0207	4.0900e-003	5.0000e-005	1.1300e-003	8.0000e-005	1.2100e-003	3.1000e-004	8.0000e-005	3.9000e-004	0.0000	5.1248	5.1248	2.4000e-004	0.0000	5.1308
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	1.1700e-003	8.7000e-004	9.0100e-003	3.0000e-005	2.5600e-003	2.0000e-005	2.5700e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.2642	2.2642	6.0000e-005	0.0000	2.2658
Total	**1.7700e-003**	**0.0216**	**0.0131**	**8.0000e-005**	**3.6900e-003**	**1.0000e-004**	**3.7800e-003**	**9.9000e-004**	**1.0000e-004**	**1.0900e-003**	**0.0000**	**7.3890**	**7.3890**	**3.0000e-004**	**0.0000**	**7.3966**

3.3 Site Preparation - 2019

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					9.6100e-003	0.0000	9.6100e-003	4.3700e-003	0.0000	4.3700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.5200e-003	0.0415	0.0169	4.0000e-005		1.7900e-003	1.7900e-003		1.6400e-003	1.6400e-003	0.0000	3.5205	3.5205	1.1100e-003	0.0000	3.5484

Total	**3.5200e-003**	**0.0415**	**0.0169**	**4.0000e-005**	**9.6100e-003**	**1.7900e-003**	**0.0114**	**4.3700e-003**	**1.6400e-003**	**6.0100e-003**	**0.0000**	**3.5205**	**3.5205**	**1.1100e-003**	**0.0000**	**3.5484**

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	9.0000e-004	0.0307	6.0600e-003	8.0000e-005	1.6700e-003	1.2000e-004	1.7900e-003	4.6000e-004	1.1000e-004	5.7000e-004	0.0000	7.5909	7.5909	3.6000e-004	0.0000	7.5997
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	1.8000e-004	1.4000e-004	1.4000e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3510	0.3510	1.0000e-005	0.0000	0.3513
Total	**1.0800e-003**	**0.0308**	**7.4600e-003**	**8.0000e-005**	**2.0700e-003**	**1.2000e-004**	**2.1900e-003**	**5.7000e-004**	**1.1000e-004**	**6.8000e-004**	**0.0000**	**7.9419**	**7.9419**	**3.7000e-004**	**0.0000**	**7.9510**

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					4.3200e-003	0.0000	4.3200e-003	9.8000e-004	0.0000	9.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	2.0800e-003	0.0199	4.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.5205	3.5205	1.1100e-003	0.0000	3.5484
Total	**4.8000e-004**	**2.0800e-003**	**0.0199**	**4.0000e-005**	**4.3200e-003**	**6.0000e-005**	**4.3800e-003**	**9.8000e-004**	**6.0000e-005**	**1.0400e-003**	**0.0000**	**3.5205**	**3.5205**	**1.1100e-003**	**0.0000**	**3.5484**

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	9.0000e-004	0.0307	6.0600e-003	8.0000e-005	1.6700e-003	1.2000e-004	1.7900e-003	4.6000e-004	1.1000e-004	5.7000e-004	0.0000	7.5909	7.5909	3.6000e-004	0.0000	7.5997
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	1.8000e-004	1.4000e-004	1.4000e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3510	0.3510	1.0000e-005	0.0000	0.3513
Total	**1.0800e-003**	**0.0308**	**7.4600e-003**	**8.0000e-005**	**2.0700e-003**	**1.2000e-004**	**2.1900e-003**	**5.7000e-004**	**1.1000e-004**	**6.8000e-004**	**0.0000**	**7.9419**	**7.9419**	**3.7000e-004**	**0.0000**	**7.9510**

3.4 Grading - 2019

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					2.0900e-003	0.0000	2.0900e-003	3.2000e-004	0.0000	3.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8100e-003	0.0386	0.0413	6.0000e-005		2.3200e-003	2.3200e-003		2.1300e-003	2.1300e-003	0.0000	5.3638	5.3638	1.7000e-003	0.0000	5.4063
Total	**3.8100e-003**	**0.0386**	**0.0413**	**6.0000e-005**	**2.0900e-003**	**2.3200e-003**	**4.4100e-003**	**3.2000e-004**	**2.1300e-003**	**2.4500e-003**	**0.0000**	**5.3638**	**5.3638**	**1.7000e-003**	**0.0000**	**5.4063**

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	6.3100e-003	0.2161	0.0427	5.5000e-004	0.0323	8.3000e-004	0.0332	8.2800e-003	7.9000e-004	9.0700e-003	0.0000	53.4866	53.4866	2.5100e-003	0.0000	53.5493
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	1.7000e-004	1.3000e-004	1.3400e-003	0.0000	3.8000e-004	0.0000	3.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3370	0.3370	1.0000e-005	0.0000	0.3372
Total	**6.4800e-003**	**0.2162**	**0.0440**	**5.5000e-004**	**0.0327**	**8.3000e-004**	**0.0335**	**8.3800e-003**	**7.9000e-004**	**9.1700e-003**	**0.0000**	**53.8236**	**53.8236**	**2.5200e-003**	**0.0000**	**53.8865**

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					9.4000e-004	0.0000	9.4000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3000e-004	3.1700e-003	0.0452	6.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	5.3638	5.3638	1.7000e-003	0.0000	5.4062
Total	**7.3000e-004**	**3.1700e-003**	**0.0452**	**6.0000e-005**	**9.4000e-004**	**1.0000e-004**	**1.0400e-003**	**7.0000e-005**	**1.0000e-004**	**1.7000e-004**	**0.0000**	**5.3638**	**5.3638**	**1.7000e-003**	**0.0000**	**5.4062**

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	6.3100e-003	0.2161	0.0427	5.5000e-004	0.0323	8.3000e-004	0.0332	8.2800e-003	7.9000e-004	9.0700e-003	0.0000	53.4866	53.4866	2.5100e-003	0.0000	53.5493
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	1.7000e-004	1.3000e-004	1.3400e-003	0.0000	3.8000e-004	0.0000	3.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3370	0.3370	1.0000e-005	0.0000	0.3372
Total	**6.4800e-003**	**0.2162**	**0.0440**	**5.5000e-004**	**0.0327**	**8.3000e-004**	**0.0335**	**8.3800e-003**	**7.9000e-004**	**9.1700e-003**	**0.0000**	**53.8236**	**53.8236**	**2.5200e-003**	**0.0000**	**53.8865**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0900e-003	0.0000	2.0900e-003	3.2000e-004	0.0000	3.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.1300e-003	0.0811	0.0959	1.4000e-004		4.6900e-003	4.6900e-003		4.3200e-003	4.3200e-003	0.0000	12.2427	12.2427	3.9600e-003	0.0000	12.3417
Total	**8.1300e-003**	**0.0811**	**0.0959**	**1.4000e-004**	**2.0900e-003**	**4.6900e-003**	**6.7800e-003**	**3.2000e-004**	**4.3200e-003**	**4.6400e-003**	**0.0000**	**12.2427**	**12.2427**	**3.9600e-003**	**0.0000**	**12.3417**

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	0.0135	0.4699	0.0962	1.2800e-003	0.0363	1.5300e-003	0.0378	9.7100e-003	1.4600e-003	0.0112	0.0000	123.5167	123.5167	5.6500e-003	0.0000	123.6580
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	2.8000e-003	1.0000e-005	8.9000e-004	1.0000e-005	8.9000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7618	0.7618	2.0000e-005	0.0000	0.7622
Total	**0.0138**	**0.4702**	**0.0990**	**1.2900e-003**	**0.0372**	**1.5400e-003**	**0.0387**	**9.9500e-003**	**1.4700e-003**	**0.0114**	**0.0000**	**124.2785**	**124.2785**	**5.6700e-003**	**0.0000**	**124.4202**

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					9.4000e-004	0.0000	9.4000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	7.4000e-003	0.1054	1.4000e-004		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	12.2427	12.2427	3.9600e-003	0.0000	12.3417
Total	**1.7100e-003**	**7.4000e-003**	**0.1054**	**1.4000e-004**	**9.4000e-004**	**2.3000e-004**	**1.1700e-003**	**7.0000e-005**	**2.3000e-004**	**3.0000e-004**	**0.0000**	**12.2427**	**12.2427**	**3.9600e-003**	**0.0000**	**12.3417**

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	0.0135	0.4699	0.0962	1.2800e-003	0.0363	1.5300e-003	0.0378	9.7100e-003	1.4600e-003	0.0112	0.0000	123.5167	123.5167	5.6500e-003	0.0000	123.6580
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	2.8000e-003	1.0000e-005	8.9000e-004	1.0000e-005	8.9000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7618	0.7618	2.0000e-005	0.0000	0.7622
Total	**0.0138**	**0.4702**	**0.0990**	**1.2900e-003**	**0.0372**	**1.5400e-003**	**0.0387**	**9.9500e-003**	**1.4700e-003**	**0.0114**	**0.0000**	**124.2785**	**124.2785**	**5.6700e-003**	**0.0000**	**124.4202**

3.5 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.5000e-004	3.5100e-003	3.4500e-003	0.0000		2.3000e-004	2.3000e-004		2.2000e-004	2.2000e-004	0.0000	0.4185	0.4185	1.3000e-004	0.0000	0.4218

Total	**3.5000e-004**	**3.5100e-003**	**3.4500e-003**	**0.0000**		**2.3000e-004**	**2.3000e-004**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.4185**	**0.4185**	**1.3000e-004**	**0.0000**	**0.4218**

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	1.1000e-004	8.0000e-005	8.4000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2106	0.2106	1.0000e-005	0.0000	0.2108
Total	**1.1000e-004**	**8.0000e-005**	**8.4000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2106**	**0.2106**	**1.0000e-005**	**0.0000**	**0.2108**

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	6.0000e-005	2.5000e-004	3.5100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.4185	0.4185	1.3000e-004	0.0000	0.4218
Total	**6.0000e-005**	**2.5000e-004**	**3.5100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.4185**	**0.4185**	**1.3000e-004**	**0.0000**	**0.4218**

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	1.1000e-004	8.0000e-005	8.4000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2106	0.2106	1.0000e-005	0.0000	0.2108
Total	**1.1000e-004**	**8.0000e-005**	**8.4000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2106**	**0.2106**	**1.0000e-005**	**0.0000**	**0.2108**

3.5 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5100e-003	0.0253	0.0274	4.0000e-005		1.6000e-003	1.6000e-003		1.4700e-003	1.4700e-003	0.0000	3.2742	3.2742	1.0600e-003	0.0000	3.3007
Total	**2.5100e-003**	**0.0253**	**0.0274**	**4.0000e-005**		**1.6000e-003**	**1.6000e-003**		**1.4700e-003**	**1.4700e-003**	**0.0000**	**3.2742**	**3.2742**	**1.0600e-003**	**0.0000**	**3.3007**

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	8.0000e-004	5.7000e-004	6.0100e-003	2.0000e-005	1.9000e-003	1.0000e-005	1.9200e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.6324	1.6324	4.0000e-005	0.0000	1.6334
Total	**8.0000e-004**	**5.7000e-004**	**6.0100e-003**	**2.0000e-005**	**1.9000e-003**	**1.0000e-005**	**1.9200e-003**	**5.1000e-004**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**1.6324**	**1.6324**	**4.0000e-005**	**0.0000**	**1.6334**

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	4.6000e-004	1.9700e-003	0.0281	4.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.2742	3.2742	1.0600e-003	0.0000	3.3007
Total	**4.6000e-004**	**1.9700e-003**	**0.0281**	**4.0000e-005**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**3.2742**	**3.2742**	**1.0600e-003**	**0.0000**	**3.3007**

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	8.0000e-004	5.7000e-004	6.0100e-003	2.0000e-005	1.9000e-003	1.0000e-005	1.9200e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.6324	1.6324	4.0000e-005	0.0000	1.6334
Total	**8.0000e-004**	**5.7000e-004**	**6.0100e-003**	**2.0000e-005**	**1.9000e-003**	**1.0000e-005**	**1.9200e-003**	**5.1000e-004**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**1.6324**	**1.6324**	**4.0000e-005**	**0.0000**	**1.6334**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1658	1.3596	1.1512	1.9900e-003		0.0717	0.0717		0.0687	0.0687	0.0000	167.5716	167.5716	0.0334	0.0000	168.4064
Total	**0.1658**	**1.3596**	**1.1512**	**1.9900e-003**		**0.0717**	**0.0717**		**0.0687**	**0.0687**	**0.0000**	**167.5716**	**167.5716**	**0.0334**	**0.0000**	**168.4064**

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	3.0800e-003	0.1076	0.0220	2.9000e-004	0.0111	3.5000e-004	0.0115	2.9100e-003	3.3000e-004	3.2400e-003	0.0000	28.2927	28.2927	1.2900e-003	0.0000	28.3250
Vendor	0.0159	0.4563	0.1215	1.0900e-003	0.0264	2.2600e-003	0.0286	7.6200e-003	2.1600e-003	9.7800e-003	0.0000	104.7732	104.7732	4.8000e-003	0.0000	104.8933
Worker	0.0289	0.0208	0.2178	6.5000e-004	0.0690	4.5000e-004	0.0695	0.0184	4.1000e-004	0.0188	0.0000	59.1866	59.1866	1.4500e-003	0.0000	59.2229
Total	**0.0479**	**0.5847**	**0.3614**	**2.0300e-003**	**0.1065**	**3.0600e-003**	**0.1095**	**0.0289**	**2.9000e-003**	**0.0318**	**0.0000**	**192.2525**	**192.2525**	**7.5400e-003**	**0.0000**	**192.4412**

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	0.0251	0.2486	1.1881	1.9900e-003		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003	0.0000	167.5714	167.5714	0.0334	0.0000	168.4062
Total	**0.0251**	**0.2486**	**1.1881**	**1.9900e-003**		**2.8400e-003**	**2.8400e-003**		**2.8400e-003**	**2.8400e-003**	**0.0000**	**167.5714**	**167.5714**	**0.0334**	**0.0000**	**168.4062**

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	3.0800e-003	0.1076	0.0220	2.9000e-004	0.0111	3.5000e-004	0.0115	2.9100e-003	3.3000e-004	3.2400e-003	0.0000	28.2927	28.2927	1.2900e-003	0.0000	28.3250
Vendor	0.0159	0.4563	0.1215	1.0900e-003	0.0264	2.2600e-003	0.0286	7.6200e-003	2.1600e-003	9.7800e-003	0.0000	104.7732	104.7732	4.8000e-003	0.0000	104.8933
Worker	0.0289	0.0208	0.2178	6.5000e-004	0.0690	4.5000e-004	0.0695	0.0184	4.1000e-004	0.0188	0.0000	59.1866	59.1866	1.4500e-003	0.0000	59.2229
Total	**0.0479**	**0.5847**	**0.3614**	**2.0300e-003**	**0.1065**	**3.0600e-003**	**0.1095**	**0.0289**	**2.9000e-003**	**0.0318**	**0.0000**	**192.2525**	**192.2525**	**7.5400e-003**	**0.0000**	**192.4412**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1516	1.2708	1.1515	2.0400e-003		0.0630	0.0630		0.0604	0.0604	0.0000	171.2402	171.2402	0.0332	0.0000	172.0712

Total	**0.1516**	**1.2708**	**1.1515**	**2.0400e-003**		**0.0630**	**0.0630**		**0.0604**	**0.0604**	**0.0000**	**171.2402**	**171.2402**	**0.0332**	**0.0000**	**172.0712**

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	2.9700e-003	0.1014	0.0221	2.9000e-004	0.0111	3.2000e-004	0.0115	2.9200e-003	3.0000e-004	3.2300e-003	0.0000	28.5437	28.5437	1.3000e-003	0.0000	28.5761
Vendor	0.0134	0.4208	0.1120	1.1100e-003	0.0269	9.3000e-004	0.0279	7.7900e-003	8.9000e-004	8.6800e-003	0.0000	106.0725	106.0725	4.6200e-003	0.0000	106.1881
Worker	0.0274	0.0190	0.2034	6.5000e-004	0.0705	4.4000e-004	0.0710	0.0188	4.1000e-004	0.0192	0.0000	58.3797	58.3797	1.3300e-003	0.0000	58.4129
Total	**0.0437**	**0.5411**	**0.3375**	**2.0500e-003**	**0.1086**	**1.6900e-003**	**0.1103**	**0.0295**	**1.6000e-003**	**0.0311**	**0.0000**	**192.9959**	**192.9959**	**7.2500e-003**	**0.0000**	**193.1771**

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	0.0256	0.2540	1.2141	2.0400e-003		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	171.2400	171.2400	0.0332	0.0000	172.0710
Total	**0.0256**	**0.2540**	**1.2141**	**2.0400e-003**		**2.9100e-003**	**2.9100e-003**		**2.9100e-003**	**2.9100e-003**	**0.0000**	**171.2400**	**171.2400**	**0.0332**	**0.0000**	**172.0710**

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	2.9700e-003	0.1014	0.0221	2.9000e-004	0.0111	3.2000e-004	0.0115	2.9200e-003	3.0000e-004	3.2300e-003	0.0000	28.5437	28.5437	1.3000e-003	0.0000	28.5761
Vendor	0.0134	0.4208	0.1120	1.1100e-003	0.0269	9.3000e-004	0.0279	7.7900e-003	8.9000e-004	8.6800e-003	0.0000	106.0725	106.0725	4.6200e-003	0.0000	106.1881
Worker	0.0274	0.0190	0.2034	6.5000e-004	0.0705	4.4000e-004	0.0710	0.0188	4.1000e-004	0.0192	0.0000	58.3797	58.3797	1.3300e-003	0.0000	58.4129
Total	**0.0437**	**0.5411**	**0.3375**	**2.0500e-003**	**0.1086**	**1.6900e-003**	**0.1103**	**0.0295**	**1.6000e-003**	**0.0311**	**0.0000**	**192.9959**	**192.9959**	**7.2500e-003**	**0.0000**	**193.1771**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7168					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0285	0.1985	0.2363	3.9000e-004		0.0122	0.0122		0.0122	0.0122	0.0000	33.1923	33.1923	2.2800e-003	0.0000	33.2492
Total	**0.7452**	**0.1985**	**0.2363**	**3.9000e-004**		**0.0122**	**0.0122**		**0.0122**	**0.0122**	**0.0000**	**33.1923**	**33.1923**	**2.2800e-003**	**0.0000**	**33.2492**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0100e-003	4.1600e-003	0.0446	1.4000e-004	0.0155	1.0000e-004	0.0156	4.1100e-003	9.0000e-005	4.2000e-003	0.0000	12.8026	12.8026	2.9000e-004	0.0000	12.8098
Total	**6.0100e-003**	**4.1600e-003**	**0.0446**	**1.4000e-004**	**0.0155**	**1.0000e-004**	**0.0156**	**4.1100e-003**	**9.0000e-005**	**4.2000e-003**	**0.0000**	**12.8026**	**12.8026**	**2.9000e-004**	**0.0000**	**12.8098**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7168					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8600e-003	0.0167	0.2382	3.9000e-004		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	33.1923	33.1923	2.2800e-003	0.0000	33.2492
Total	**0.7206**	**0.0167**	**0.2382**	**3.9000e-004**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**33.1923**	**33.1923**	**2.2800e-003**	**0.0000**	**33.2492**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0100e-003	4.1600e-003	0.0446	1.4000e-004	0.0155	1.0000e-004	0.0156	4.1100e-003	9.0000e-005	4.2000e-003	0.0000	12.8026	12.8026	2.9000e-004	0.0000	12.8098
Total	**6.0100e-003**	**4.1600e-003**	**0.0446**	**1.4000e-004**	**0.0155**	**1.0000e-004**	**0.0156**	**4.1100e-003**	**9.0000e-005**	**4.2000e-003**	**0.0000**	**12.8026**	**12.8026**	**2.9000e-004**	**0.0000**	**12.8098**

3.8 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.0000e-004	8.1300e-003	9.5000e-003	1.0000e-005		4.6000e-004	4.6000e-004		4.3000e-004	4.3000e-004	0.0000	1.2052	1.2052	3.9000e-004	0.0000	1.2149
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.0000e-004**	**8.1300e-003**	**9.5000e-003**	**1.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**1.2052**	**1.2052**	**3.9000e-004**	**0.0000**	**1.2149**

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	1.3000e-004	4.4100e-003	9.6000e-004	1.0000e-005	2.8000e-004	1.0000e-005	2.9000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.2425	1.2425	6.0000e-005	0.0000	1.2439
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	2.6000e-004	1.8000e-004	1.9400e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5581	0.5581	1.0000e-005	0.0000	0.5584
Total	**3.9000e-004**	**4.5900e-003**	**2.9000e-003**	**2.0000e-005**	**9.5000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**1.8006**	**1.8006**	**7.0000e-005**	**0.0000**	**1.8023**

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	1.7000e-004	7.3000e-004	0.0104	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2052	1.2052	3.9000e-004	0.0000	1.2149
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.7000e-004**	**7.3000e-004**	**0.0104**	**1.0000e-005**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**1.2052**	**1.2052**	**3.9000e-004**	**0.0000**	**1.2149**

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	1.3000e-004	4.4100e-003	9.6000e-004	1.0000e-005	2.8000e-004	1.0000e-005	2.9000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.2425	1.2425	6.0000e-005	0.0000	1.2439
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	2.6000e-004	1.8000e-004	1.9400e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5581	0.5581	1.0000e-005	0.0000	0.5584
Total	**3.9000e-004**	**4.5900e-003**	**2.9000e-003**	**2.0000e-005**	**9.5000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**1.8006**	**1.8006**	**7.0000e-005**	**0.0000**	**1.8023**

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	0.2270	0.9686	2.6737	9.3000e-003	0.8598	7.8800e-003	0.8677	0.2302	7.3600e-003	0.2375	0.0000	851.7049	851.7049	0.0286	0.0000	852.4196
Unmitigated	0.2270	0.9686	2.6737	9.3000e-003	0.8598	7.8800e-003	0.8677	0.2302	7.3600e-003	0.2375	0.0000	851.7049	851.7049	0.0286	0.0000	852.4196

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	1,273.38	284.07	121.54	2,312,097	2,312,097
Total	1,273.38	284.07	121.54	2,312,097	2,312,097

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
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
General Office Building	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	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	342.1700	342.1700	0.0342	7.0800e-003	345.1351
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	386.4439	386.4439	0.0386	8.0000e-003	389.7926
NaturalGas Mitigated	0.0125	0.1134	0.0953	6.8000e-004		8.6200e-003	8.6200e-003		8.6200e-003	8.6200e-003	0.0000	123.4636	123.4636	2.3700e-003	2.2600e-003	124.1973
NaturalGas Unmitigated	0.0125	0.1134	0.0953	6.8000e-004		8.6200e-003	8.6200e-003		8.6200e-003	8.6200e-003	0.0000	123.4636	123.4636	2.3700e-003	2.2600e-003	124.1973

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					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.31362e+006	0.0125	0.1134	0.0953	6.8000e-004		8.6200e-003	8.6200e-003		8.6200e-003	8.6200e-003	0.0000	123.4636	123.4636	2.3700e-003	2.2600e-003	124.1973
Total		**0.0125**	**0.1134**	**0.0953**	**6.8000e-004**		**8.6200e-003**	**8.6200e-003**		**8.6200e-003**	**8.6200e-003**	**0.0000**	**123.4636**	**123.4636**	**2.3700e-003**	**2.2600e-003**	**124.1973**

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					

Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.31362e+006	0.0125	0.1134	0.0953	6.8000e-004		8.6200e-003	8.6200e-003		8.6200e-003	8.6200e-003	0.0000	123.4636	123.4636	2.3700e-003	2.2600e-003	124.1973
Total		**0.0125**	**0.1134**	**0.0953**	**6.8000e-004**		**8.6200e-003**	**8.6200e-003**		**8.6200e-003**	**8.6200e-003**	**0.0000**	**123.4636**	**123.4636**	**2.3700e-003**	**2.2600e-003**	**124.1973**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	417836	54.9628	5.5000e-003	1.1400e-003	55.4391
General Office Building	2.51997e+006	331.4810	0.0332	6.8600e-003	334.3535
Total		**386.4439**	**0.0387**	**8.0000e-003**	**389.7926**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	355445	46.7559	4.6800e-003	9.7000e-004	47.1611
General Office Building	2.24578e+006	295.4141	0.0295	6.1100e-003	297.9740
Total		**342.1700**	**0.0342**	**7.0800e-003**	**345.1351**

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	0.6322	4.0000e-005	4.1100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.9800e-003	7.9800e-003	2.0000e-005	0.0000	8.5000e-003
Unmitigated	0.6322	4.0000e-005	4.1100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.9800e-003	7.9800e-003	2.0000e-005	0.0000	8.5000e-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	0.0752					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5566					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.1100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.9800e-003	7.9800e-003	2.0000e-005	0.0000	8.5000e-003
Total	**0.6322**	**4.0000e-005**	**4.1100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.9800e-003**	**7.9800e-003**	**2.0000e-005**	**0.0000**	**8.5000e-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	0.0752					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5566					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.1100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.9800e-003	7.9800e-003	2.0000e-005	0.0000	8.5000e-003
Total	**0.6322**	**4.0000e-005**	**4.1100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.9800e-003**	**7.9800e-003**	**2.0000e-005**	**0.0000**	**8.5000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	30.3103	0.0327	0.0198	37.0200
Unmitigated	33.8543	0.0331	0.0198	40.5948

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	25.1191 / 15.3956	33.8543	0.0331	0.0198	40.5948
Total		**33.8543**	**0.0331**	**0.0198**	**40.5948**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	25.1191 / 7.69779	30.3103	0.0327	0.0198	37.0200
Total		**30.3103**	**0.0327**	**0.0198**	**37.0200**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	26.6811	1.5768	0.0000	66.1014
Unmitigated	26.6811	1.5768	0.0000	66.1014

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	131.44	26.6811	1.5768	0.0000	66.1014
Total		**26.6811**	**1.5768**	**0.0000**	**66.1014**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	131.44	26.6811	1.5768	0.0000	66.1014

Total		**26.6811**	**1.5768**	**0.0000**	**66.1014**

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	50	185	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 (175 - 300 HP)	7.5900e-003	0.0212	0.0194	4.0000e-005		1.1200e-003	1.1200e-003		1.1200e-003	1.1200e-003	0.0000	3.5224	3.5224	4.9000e-004	0.0000	3.5347
Total	**7.5900e-003**	**0.0212**	**0.0194**	**4.0000e-005**		**1.1200e-003**	**1.1200e-003**		**1.1200e-003**	**1.1200e-003**	**0.0000**	**3.5224**	**3.5224**	**4.9000e-004**	**0.0000**	**3.5347**

11.0 Vegetation

DSP - 300 Mathilda Ave (Rev March 2020) - Santa Clara County, Annual

DSP - 300 Mathilda Ave (Rev March 2020)

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	164.87	1000sqft	2.00	164,865.00	0
Enclosed Parking with Elevator	259.00	Space	0.00	90,754.00	0
Parking Lot	9.00	Space	0.00	3,600.00	0
Strip Mall	8.73	1000sqft	0.00	8,732.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 rate = 290

Land Use - Applicant provided land uses, Revised 3.31.2020

Construction Phase - Applicant provided construction schedule

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Trips and VMT - 348tons pavement demo = 70 one-way trips, building const = 110 one-way cement trips, paving = 178cy = 42 one-way asphalt trips

Grading - Grading = 42,607cy export

Architectural Coating -

Vehicle Trips - Vehicle Trips - After reductions Office = 9.01, 2.01, 0.86, Retail = 35.26, 33.45, 16.25

Area Coating -

Energy Use -

Water And Wastewater - WTP Treatment 100% aerobic

Solid Waste -

Construction Off-road Equipment Mitigation - BMPs, Tier 4 final mitigation

Energy Mitigation - Green Building Measures - energy efficient lighting, appliances, installing solar panels

Water Mitigation - Green Building Measures - water efficient fixtures and landscaping

Stationary Sources - Emergency Generators and Fire Pumps - 100kW diesel generator, 152 hp, 50 hrs/yr

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	100.00
tblConstructionPhase	NumDays	200.00	170.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	4.00	100.00
tblConstructionPhase	NumDays	10.00	40.00
tblConstructionPhase	NumDays	2.00	15.00
tblGrading	AcresOfGrading	62.50	175.00

tblGrading	MaterialExported	0.00	42,607.00
tblLandUse	LandUseSquareFeet	164,870.00	164,865.00
tblLandUse	LandUseSquareFeet	103,600.00	90,754.00
tblLandUse	LandUseSquareFeet	8,730.00	8,732.00
tblLandUse	LotAcreage	3.78	2.00
tblLandUse	LotAcreage	2.33	0.00
tblLandUse	LotAcreage	0.08	0.00
tblLandUse	LotAcreage	0.20	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	7.00	3.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	0.00

tblOffRoadEquipment	UsageHours	6.00	3.00
tblOffRoadEquipment	UsageHours	8.00	3.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	3.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	152.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	0.00	70.00
tblTripsAndVMT	HaulingTripNumber	0.00	110.00
tblTripsAndVMT	HaulingTripNumber	0.00	42.00
tblVehicleTrips	ST_TR	2.46	2.01
tblVehicleTrips	ST_TR	42.04	33.45
tblVehicleTrips	SU_TR	1.05	0.86
tblVehicleTrips	SU_TR	20.43	16.25
tblVehicleTrips	WD_TR	11.03	9.01
tblVehicleTrips	WD_TR	44.32	35.26
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercept	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercept	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercept	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercept	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.042	0.639	0.2814	1.15E-03	0.1824	0.0176	0.2	0.0443	0.0163	0.0605	0	107.9647	107.9647	0.0144	0	108.3251
2020	0.2579	2.6801	1.8137	5.46E-03	0.2823	0.0908	0.3731	0.0753	0.0854	0.1607	0	494.212	494.212	0.0674	0	495.8963
2021	0.9707	0.3477	0.42	8.10E-04	0.0143	0.0167	0.0311	3.84E-03	0.0165	0.0203	0	70.7263	70.7263	8.32E-03	0	70.9342
Maximum	**0.9707**	**2.6801**	**1.8137**	**5.46E-03**	**0.2823**	**0.0908**	**0.3731**	**0.0753**	**0.0854**	**0.1607**	**0**	**494.212**	**494.212**	**0.0674**	**0**	**495.8963**

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					
2019	0.015	0.304	0.2895	1.15E-03	0.1053	1.74E-03	0.107	0.0184	1.69E-03	0.0201	0	107.9647	107.9647	0.0144	0	108.3251
2020	0.0903	1.2678	1.8631	5.46E-03	0.2018	7.76E-03	0.2095	0.0454	7.56E-03	0.053	0	494.2117	494.2117	0.0674	0	495.896
2021	0.9388	0.1394	0.4366	8.10E-04	0.0143	1.02E-03	0.0154	3.84E-03	1.01E-03	4.85E-03	0	70.7262	70.7262	8.32E-03	0	70.9341
Maximum	**0.9388**	**1.2678**	**1.8631**	**5.46E-03**	**0.2018**	**7.76E-03**	**0.2095**	**0.0454**	**7.56E-03**	**0.053**	**0**	**494.2117**	**494.2117**	**0.0674**	**0**	**495.896**

	ROG	NOx	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	**17.82**	**53.33**	**-2.95**	**0.00**	**32.91**	**91.59**	**45.06**	**45.16**	**91.31**	**67.74**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**10-7-2019**	**1-6-2020**	0.7234	0.3506
2	**1-7-2020**	**4-6-2020**	0.9556	0.5494
3	**4-7-2020**	**7-6-2020**	0.5434	0.1665
4	**7-7-2020**	**10-6-2020**	0.7117	0.3059
5	**10-7-2020**	**1-6-2021**	0.6668	0.3040
6	**1-7-2021**	**4-6-2021**	0.6074	0.4920
7	**4-7-2021**	**7-6-2021**	0.6688	0.5667
		Highest	0.9556	0.5667

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	0.7770	4.0000e-005	4.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8900e-003	7.8900e-003	2.0000e-005	0.0000	8.4100e-003
Energy	0.0147	0.1333	0.1120	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	614.1983	614.1983	0.0497	0.0124	619.1255
Mobile	0.3229	1.3572	3.6924	0.0127	1.1644	0.0108	1.1752	0.3117	0.0101	0.3218	0.0000	1,159.4670	1,159.4670	0.0395	0.0000	1,160.4545
Stationary	6.2400e-003	0.0174	0.0226	3.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004	0.0000	2.8941	2.8941	4.1000e-004	0.0000	2.9042
Waste						0.0000	0.0000		0.0000	0.0000	32.9860	0.0000	32.9860	1.9494	0.0000	81.7215
Water						0.0000	0.0000		0.0000	0.0000	10.5962	29.7685	40.3647	0.0395	0.0237	48.4013
Total	**1.1207**	**1.5080**	**3.8311**	**0.0135**	**1.1644**	**0.0218**	**1.1862**	**0.3117**	**0.0211**	**0.3328**	**43.5823**	**1,806.3358**	**1,849.9180**	**2.0785**	**0.0360**	**1,912.6154**

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	0.7770	4.0000e-005	4.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8900e-003	7.8900e-003	2.0000e-005	0.0000	8.4100e-003
Energy	0.0147	0.1333	0.1120	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	455.2181	455.2181	0.0338	9.0800e-003	458.7676
Mobile	0.3229	1.3572	3.6924	0.0127	1.1644	0.0108	1.1752	0.3117	0.0101	0.3218	0.0000	1,159.4670	1,159.4670	0.0395	0.0000	1,160.4545
Stationary	6.2400e-003	0.0174	0.0226	3.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004	0.0000	2.8941	2.8941	4.1000e-004	0.0000	2.9042
Waste						0.0000	0.0000		0.0000	0.0000	32.9860	0.0000	32.9860	1.9494	0.0000	81.7215
Water						0.0000	0.0000		0.0000	0.0000	10.5962	25.5429	36.1391	0.0390	0.0236	44.1391
Total	**1.1207**	**1.5080**	**3.8311**	**0.0135**	**1.1644**	**0.0218**	**1.1862**	**0.3117**	**0.0211**	**0.3328**	**43.5823**	**1,643.1300**	**1,686.7122**	**2.0622**	**0.0327**	**1,747.9954**

	ROG	NOx	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**	**9.04**	**8.82**	**0.79**	**9.38**	**8.61**

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	10/7/2019	10/25/2019	5	15	
2	Site Preparation	Site Preparation	10/28/2019	11/15/2019	5	15	
3	Grading	Grading	11/18/2019	4/3/2020	5	100	
4	Trenching	Trenching	4/13/2020	5/22/2020	5	30	
5	Building Construction	Building Construction	5/25/2020	1/15/2021	5	170	

6	Paving	Paving	5/25/2020	7/17/2020	5	40	
7	Architectural Coating	Architectural Coating	2/3/2021	6/22/2021	5	100	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 175

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 260,396; Non-Residential Outdoor: 86,799; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	2.00	81	0.73
Demolition	Excavators	1	4.00	158	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	3.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	3.00	247	0.40
Site Preparation	Scrapers	0	0.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Grading	Excavators	2	2.00	158	0.38
Grading	Graders	2	1.00	187	0.41
Grading	Rubber Tired Dozers	1	2.00	247	0.40
Grading	Scrapers	2	2.00	367	0.48
Grading	Sweepers/Scrubbers	1	2.00	64	0.46
Grading	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Trenching	Excavators	2	4.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	2	2.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	3.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Pumps	1	2.00	84	0.74

Building Construction	Tractors/Loaders/Backhoes	2	3.00	97	0.37
Building Construction	Welders	4	5.00	46	0.45
Paving	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Pavers	2	6.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	4.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	3.00	97	0.37
Architectural Coating	Aerial Lifts	2	6.00	63	0.31
Architectural Coating	Air Compressors	4	4.00	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	5	13.00	0.00	70.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	23.00	0.00	5,326.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	95.00	44.00	110.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	6	19.00	0.00	42.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

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	4.2200e-003	0.0413	0.0362	6.0000e-005		2.3400e-003	2.3400e-003		2.1900e-003	2.1900e-003	0.0000	5.0353	5.0353	1.3500e-003	0.0000	5.0689
Total	**4.2200e-003**	**0.0413**	**0.0362**	**6.0000e-005**		**2.3400e-003**	**2.3400e-003**		**2.1900e-003**	**2.1900e-003**	**0.0000**	**5.0353**	**5.0353**	**1.3500e-003**	**0.0000**	**5.0689**

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	3.2000e-004	0.0109	2.1500e-003	3.0000e-005	5.9000e-004	4.0000e-005	6.4000e-004	1.6000e-004	4.0000e-005	2.0000e-004	0.0000	2.6973	2.6973	1.3000e-004	0.0000	2.7004
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.6000e-004	2.7200e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.8000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6845	0.6845	2.0000e-005	0.0000	0.6850
Total	**6.7000e-004**	**0.0112**	**4.8700e-003**	**4.0000e-005**	**1.3600e-003**	**5.0000e-005**	**1.4200e-003**	**3.7000e-004**	**4.0000e-005**	**4.1000e-004**	**0.0000**	**3.3818**	**3.3818**	**1.5000e-004**	**0.0000**	**3.3854**

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	6.7000e-004	2.8900e-003	0.0387	6.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	5.0353	5.0353	1.3500e-003	0.0000	5.0689
Total	**6.7000e-004**	**2.8900e-003**	**0.0387**	**6.0000e-005**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**5.0353**	**5.0353**	**1.3500e-003**	**0.0000**	**5.0689**

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	3.2000e-004	0.0109	2.1500e-003	3.0000e-005	5.9000e-004	4.0000e-005	6.4000e-004	1.6000e-004	4.0000e-005	2.0000e-004	0.0000	2.6973	2.6973	1.3000e-004	0.0000	2.7004
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.6000e-004	2.7200e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.8000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6845	0.6845	2.0000e-005	0.0000	0.6850
Total	**6.7000e-004**	**0.0112**	**4.8700e-003**	**4.0000e-005**	**1.3600e-003**	**5.0000e-005**	**1.4200e-003**	**3.7000e-004**	**4.0000e-005**	**4.1000e-004**	**0.0000**	**3.3818**	**3.3818**	**1.5000e-004**	**0.0000**	**3.3854**

3.3 Site Preparation - 2019

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					0.0209	0.0000	0.0209	9.7400e-003	0.0000	9.7400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7100e-003	0.0921	0.0345	9.0000e-005		3.8200e-003	3.8200e-003		3.5200e-003	3.5200e-003	0.0000	7.6777	7.6777	2.4300e-003	0.0000	7.7385
Total	**7.7100e-003**	**0.0921**	**0.0345**	**9.0000e-005**	**0.0209**	**3.8200e-003**	**0.0247**	**9.7400e-003**	**3.5200e-003**	**0.0133**	**0.0000**	**7.6777**	**7.6777**	**2.4300e-003**	**0.0000**	**7.7385**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.6800e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4213	0.4213	1.0000e-005	0.0000	0.4215
Total	**2.2000e-004**	**1.6000e-004**	**1.6800e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4213**	**0.4213**	**1.0000e-005**	**0.0000**	**0.4215**

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					9.4100e-003	0.0000	9.4100e-003	2.1900e-003	0.0000	2.1900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0400e-003	4.5300e-003	0.0419	9.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	7.6777	7.6777	2.4300e-003	0.0000	7.7385
Total	**1.0400e-003**	**4.5300e-003**	**0.0419**	**9.0000e-005**	**9.4100e-003**	**1.4000e-004**	**9.5500e-003**	**2.1900e-003**	**1.4000e-004**	**2.3300e-003**	**0.0000**	**7.6777**	**7.6777**	**2.4300e-003**	**0.0000**	**7.7385**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.6800e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4213	0.4213	1.0000e-005	0.0000	0.4215
Total	**2.2000e-004**	**1.6000e-004**	**1.6800e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4213**	**0.4213**	**1.0000e-005**	**0.0000**	**0.4215**

3.4 Grading - 2019

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					0.1193	0.0000	0.1193	0.0236	0.0000	0.0236	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0201	0.2280	0.1415	2.6000e-004		0.0103	0.0103		9.5100e-003	9.5100e-003	0.0000	23.1937	23.1937	7.3400e-003	0.0000	23.3772
Total	**0.0201**	**0.2280**	**0.1415**	**2.6000e-004**	**0.1193**	**0.0103**	**0.1296**	**0.0236**	**9.5100e-003**	**0.0331**	**0.0000**	**23.1937**	**23.1937**	**7.3400e-003**	**0.0000**	**23.3772**

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	7.7400e-003	0.2653	0.0524	6.8000e-004	0.0374	1.0200e-003	0.0385	9.6100e-003	9.7000e-004	0.0106	0.0000	65.6713	65.6713	3.0800e-003	0.0000	65.7482
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	1.3400e-003	1.0000e-003	0.0103	3.0000e-005	2.9200e-003	2.0000e-005	2.9400e-003	7.8000e-004	2.0000e-005	7.9000e-004	0.0000	2.5837	2.5837	7.0000e-005	0.0000	2.5854

Total	**9.0800e-003**	**0.2663**	**0.0627**	**7.1000e-004**	**0.0404**	**1.0400e-003**	**0.0414**	**0.0104**	**9.9000e-004**	**0.0114**	**0.0000**	**68.2549**	**68.2549**	**3.1500e-003**	**0.0000**	**68.3336**

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					0.0537	0.0000	0.0537	5.3200e-003	0.0000	5.3200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3000e-003	0.0189	0.1397	2.6000e-004		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	23.1937	23.1937	7.3400e-003	0.0000	23.3771
Total	**3.3000e-003**	**0.0189**	**0.1397**	**2.6000e-004**	**0.0537**	**4.2000e-004**	**0.0541**	**5.3200e-003**	**4.2000e-004**	**5.7400e-003**	**0.0000**	**23.1937**	**23.1937**	**7.3400e-003**	**0.0000**	**23.3771**

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	7.7400e-003	0.2653	0.0524	6.8000e-004	0.0374	1.0200e-003	0.0385	9.6100e-003	9.7000e-004	0.0106	0.0000	65.6713	65.6713	3.0800e-003	0.0000	65.7482
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	1.3400e-003	1.0000e-003	0.0103	3.0000e-005	2.9200e-003	2.0000e-005	2.9400e-003	7.8000e-004	2.0000e-005	7.9000e-004	0.0000	2.5837	2.5837	7.0000e-005	0.0000	2.5854
Total	**9.0800e-003**	**0.2663**	**0.0627**	**7.1000e-004**	**0.0404**	**1.0400e-003**	**0.0414**	**0.0104**	**9.9000e-004**	**0.0114**	**0.0000**	**68.2549**	**68.2549**	**3.1500e-003**	**0.0000**	**68.3336**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1464	0.0000	0.1464	0.0385	0.0000	0.0385	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0401	0.4465	0.2885	5.5000e-004		0.0201	0.0201		0.0185	0.0185	0.0000	48.2099	48.2099	0.0156	0.0000	48.5997
Total	**0.0401**	**0.4465**	**0.2885**	**5.5000e-004**	**0.1464**	**0.0201**	**0.1665**	**0.0385**	**0.0185**	**0.0570**	**0.0000**	**48.2099**	**48.2099**	**0.0156**	**0.0000**	**48.5997**

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	0.0151	0.5255	0.1076	1.4300e-003	0.0415	1.7100e-003	0.0432	0.0111	1.6300e-003	0.0127	0.0000	138.1142	138.1142	6.3200e-003	0.0000	138.2722
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	2.6000e-003	1.8700e-003	0.0196	6.0000e-005	6.2000e-003	4.0000e-005	6.2400e-003	1.6500e-003	4.0000e-005	1.6900e-003	0.0000	5.3188	5.3188	1.3000e-004	0.0000	5.3220
Total	**0.0177**	**0.5274**	**0.1272**	**1.4900e-003**	**0.0477**	**1.7500e-003**	**0.0495**	**0.0128**	**1.6700e-003**	**0.0144**	**0.0000**	**143.4330**	**143.4330**	**6.4500e-003**	**0.0000**	**143.5942**

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					0.0659	0.0000	0.0659	8.6700e-003	0.0000	8.6700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0000e-003	0.0401	0.2968	5.5000e-004		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	48.2099	48.2099	0.0156	0.0000	48.5997
Total	**7.0000e-003**	**0.0401**	**0.2968**	**5.5000e-004**	**0.0659**	**9.0000e-004**	**0.0668**	**8.6700e-003**	**9.0000e-004**	**9.5700e-003**	**0.0000**	**48.2099**	**48.2099**	**0.0156**	**0.0000**	**48.5997**

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	0.0151	0.5255	0.1076	1.4300e-003	0.0415	1.7100e-003	0.0432	0.0111	1.6300e-003	0.0127	0.0000	138.1142	138.1142	6.3200e-003	0.0000	138.2722
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	2.6000e-003	1.8700e-003	0.0196	6.0000e-005	6.2000e-003	4.0000e-005	6.2400e-003	1.6500e-003	4.0000e-005	1.6900e-003	0.0000	5.3188	5.3188	1.3000e-004	0.0000	5.3220
Total	**0.0177**	**0.5274**	**0.1272**	**1.4900e-003**	**0.0477**	**1.7500e-003**	**0.0495**	**0.0128**	**1.6700e-003**	**0.0144**	**0.0000**	**143.4330**	**143.4330**	**6.4500e-003**	**0.0000**	**143.5942**

3.5 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.2500e-003	0.0520	0.0661	1.0000e-004		2.7500e-003	2.7500e-003		2.5300e-003	2.5300e-003	0.0000	8.8519	8.8519	2.8600e-003	0.0000	8.9235
Total	**5.2500e-003**	**0.0520**	**0.0661**	**1.0000e-004**		**2.7500e-003**	**2.7500e-003**		**2.5300e-003**	**2.5300e-003**	**0.0000**	**8.8519**	**8.8519**	**2.8600e-003**	**0.0000**	**8.9235**

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	3.6000e-004	3.7500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0202	1.0202	3.0000e-005	0.0000	1.0209
Total	**5.0000e-004**	**3.6000e-004**	**3.7500e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.0202**	**1.0202**	**3.0000e-005**	**0.0000**	**1.0209**

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	1.2400e-003	5.3600e-003	0.0763	1.0000e-004		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	8.8519	8.8519	2.8600e-003	0.0000	8.9235
Total	**1.2400e-003**	**5.3600e-003**	**0.0763**	**1.0000e-004**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**8.8519**	**8.8519**	**2.8600e-003**	**0.0000**	**8.9235**

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	3.6000e-004	3.7500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0202	1.0202	3.0000e-005	0.0000	1.0209
Total	**5.0000e-004**	**3.6000e-004**	**3.7500e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.0202**	**1.0202**	**3.0000e-005**	**0.0000**	**1.0209**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1335	1.0140	0.8005	1.3700e-003		0.0528	0.0528		0.0503	0.0503	0.0000	113.2189	113.2189	0.0271	0.0000	113.8961
Total	**0.1335**	**1.0140**	**0.8005**	**1.3700e-003**		**0.0528**	**0.0528**		**0.0503**	**0.0503**	**0.0000**	**113.2189**	**113.2189**	**0.0271**	**0.0000**	**113.8961**

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	4.3000e-004	0.0149	3.0600e-003	4.0000e-005	9.2000e-004	5.0000e-005	9.7000e-004	2.5000e-004	5.0000e-005	3.0000e-004	0.0000	3.9235	3.9235	1.8000e-004	0.0000	3.9280
Vendor	0.0139	0.3983	0.1061	9.5000e-004	0.0230	1.9700e-003	0.0250	6.6500e-003	1.8900e-003	8.5400e-003	0.0000	91.4527	91.4527	4.1900e-003	0.0000	91.5575
Worker	0.0251	0.0180	0.1890	5.7000e-004	0.0599	3.9000e-004	0.0603	0.0159	3.6000e-004	0.0163	0.0000	51.3683	51.3683	1.2600e-003	0.0000	51.3998

Total	**0.0394**	**0.4313**	**0.2982**	**1.5600e-003**	**0.0838**	**2.4100e-003**	**0.0862**	**0.0228**	**2.3000e-003**	**0.0251**	**0.0000**	**146.7444**	**146.7444**	**5.6300e-003**	**0.0000**	**146.8853**

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	0.0190	0.2443	0.7937	1.3700e-003		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003	0.0000	113.2187	113.2187	0.0271	0.0000	113.8959
Total	**0.0190**	**0.2443**	**0.7937**	**1.3700e-003**		**1.9600e-003**	**1.9600e-003**		**1.9600e-003**	**1.9600e-003**	**0.0000**	**113.2187**	**113.2187**	**0.0271**	**0.0000**	**113.8959**

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	4.3000e-004	0.0149	3.0600e-003	4.0000e-005	9.2000e-004	5.0000e-005	9.7000e-004	2.5000e-004	5.0000e-005	3.0000e-004	0.0000	3.9235	3.9235	1.8000e-004	0.0000	3.9280
Vendor	0.0139	0.3983	0.1061	9.5000e-004	0.0230	1.9700e-003	0.0250	6.6500e-003	1.8900e-003	8.5400e-003	0.0000	91.4527	91.4527	4.1900e-003	0.0000	91.5575
Worker	0.0251	0.0180	0.1890	5.7000e-004	0.0599	3.9000e-004	0.0603	0.0159	3.6000e-004	0.0163	0.0000	51.3683	51.3683	1.2600e-003	0.0000	51.3998
Total	**0.0394**	**0.4313**	**0.2982**	**1.5600e-003**	**0.0838**	**2.4100e-003**	**0.0862**	**0.0228**	**2.3000e-003**	**0.0251**	**0.0000**	**146.7444**	**146.7444**	**5.6300e-003**	**0.0000**	**146.8853**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2600e-003	0.0645	0.0538	1.0000e-004		3.1500e-003	3.1500e-003		3.0000e-003	3.0000e-003	0.0000	7.8330	7.8330	1.8200e-003	0.0000	7.8786
Total	**8.2600e-003**	**0.0645**	**0.0538**	**1.0000e-004**		**3.1500e-003**	**3.1500e-003**		**3.0000e-003**	**3.0000e-003**	**0.0000**	**7.8330**	**7.8330**	**1.8200e-003**	**0.0000**	**7.8786**

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	3.0000e-005	9.5000e-004	2.1000e-004	0.0000	7.1000e-004	0.0000	7.2000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.2680	0.2680	1.0000e-005	0.0000	0.2683
Vendor	7.9000e-004	0.0249	6.6200e-003	7.0000e-005	1.5900e-003	6.0000e-005	1.6500e-003	4.6000e-004	5.0000e-005	5.1000e-004	0.0000	6.2685	6.2685	2.7000e-004	0.0000	6.2753
Worker	1.6100e-003	1.1100e-003	0.0120	4.0000e-005	4.1400e-003	3.0000e-005	4.1700e-003	1.1000e-003	2.0000e-005	1.1300e-003	0.0000	3.4304	3.4304	8.0000e-005	0.0000	3.4324
Total	**2.4300e-003**	**0.0269**	**0.0188**	**1.1000e-004**	**6.4400e-003**	**9.0000e-005**	**6.5400e-003**	**1.7400e-003**	**7.0000e-005**	**1.8200e-003**	**0.0000**	**9.9669**	**9.9669**	**3.6000e-004**	**0.0000**	**9.9760**

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	1.3200e-003	0.0169	0.0549	1.0000e-004		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	7.8330	7.8330	1.8200e-003	0.0000	7.8786
Total	**1.3200e-003**	**0.0169**	**0.0549**	**1.0000e-004**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**7.8330**	**7.8330**	**1.8200e-003**	**0.0000**	**7.8786**

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	3.0000e-005	9.5000e-004	2.1000e-004	0.0000	7.1000e-004	0.0000	7.2000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.2680	0.2680	1.0000e-005	0.0000	0.2683
Vendor	7.9000e-004	0.0249	6.6200e-003	7.0000e-005	1.5900e-003	6.0000e-005	1.6500e-003	4.6000e-004	5.0000e-005	5.1000e-004	0.0000	6.2685	6.2685	2.7000e-004	0.0000	6.2753
Worker	1.6100e-003	1.1100e-003	0.0120	4.0000e-005	4.1400e-003	3.0000e-005	4.1700e-003	1.1000e-003	2.0000e-005	1.1300e-003	0.0000	3.4304	3.4304	8.0000e-005	0.0000	3.4324
Total	**2.4300e-003**	**0.0269**	**0.0188**	**1.1000e-004**	**6.4400e-003**	**9.0000e-005**	**6.5400e-003**	**1.7400e-003**	**7.0000e-005**	**1.8200e-003**	**0.0000**	**9.9669**	**9.9669**	**3.6000e-004**	**0.0000**	**9.9760**

3.7 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0201	0.2078	0.2195	3.4000e-004		0.0110	0.0110		0.0102	0.0102	0.0000	30.0130	30.0130	9.6600e-003	0.0000	30.2544
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0201**	**0.2078**	**0.2195**	**3.4000e-004**		**0.0110**	**0.0110**		**0.0102**	**0.0102**	**0.0000**	**30.0130**	**30.0130**	**9.6600e-003**	**0.0000**	**30.2544**

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	1.3300e-003	9.5000e-004	0.0100	3.0000e-005	3.1700e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.7206	2.7206	7.0000e-005	0.0000	2.7223
Total	**1.3300e-003**	**9.5000e-004**	**0.0100**	**3.0000e-005**	**3.1700e-003**	**2.0000e-005**	**3.1900e-003**	**8.4000e-004**	**2.0000e-005**	**8.6000e-004**	**0.0000**	**2.7206**	**2.7206**	**7.0000e-005**	**0.0000**	**2.7223**

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	4.1700e-003	0.0181	0.2572	3.4000e-004		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	30.0130	30.0130	9.6600e-003	0.0000	30.2544
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.1700e-003**	**0.0181**	**0.2572**	**3.4000e-004**		**5.6000e-004**	**5.6000e-004**		**5.6000e-004**	**5.6000e-004**	**0.0000**	**30.0130**	**30.0130**	**9.6600e-003**	**0.0000**	**30.2544**

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	1.3300e-003	9.5000e-004	0.0100	3.0000e-005	3.1700e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.7206	2.7206	7.0000e-005	0.0000	2.7223
Total	**1.3300e-003**	**9.5000e-004**	**0.0100**	**3.0000e-005**	**3.1700e-003**	**2.0000e-005**	**3.1900e-003**	**8.4000e-004**	**2.0000e-005**	**8.6000e-004**	**0.0000**	**2.7206**	**2.7206**	**7.0000e-005**	**0.0000**	**2.7223**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9249					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0320	0.2486	0.3244	5.2000e-004		0.0134	0.0134		0.0133	0.0133	0.0000	45.1079	45.1079	5.9100e-003	0.0000	45.2557
Total	**0.9569**	**0.2486**	**0.3244**	**5.2000e-004**		**0.0134**	**0.0134**		**0.0133**	**0.0133**	**0.0000**	**45.1079**	**45.1079**	**5.9100e-003**	**0.0000**	**45.2557**

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	1.6000e-004	5.6200e-003	1.2200e-003	2.0000e-005	3.6000e-004	2.0000e-005	3.7000e-004	1.0000e-004	2.0000e-005	1.1000e-004	0.0000	1.5814	1.5814	7.0000e-005	0.0000	1.5832
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	2.9300e-003	2.0300e-003	0.0217	7.0000e-005	7.5300e-003	5.0000e-005	7.5800e-003	2.0000e-003	4.0000e-005	2.0500e-003	0.0000	6.2372	6.2372	1.4000e-004	0.0000	6.2407

Total	**3.0900e-003**	**7.6500e-003**	**0.0230**	**9.0000e-005**	**7.8900e-003**	**7.0000e-005**	**7.9500e-003**	**2.1000e-003**	**6.0000e-005**	**2.1600e-003**	**0.0000**	**7.8185**	**7.8185**	**2.1000e-004**	**0.0000**	**7.8239**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9249					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0600e-003	0.0880	0.3399	5.2000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	45.1078	45.1078	5.9100e-003	0.0000	45.2557
Total	**0.9319**	**0.0880**	**0.3399**	**5.2000e-004**		**7.3000e-004**	**7.3000e-004**		**7.3000e-004**	**7.3000e-004**	**0.0000**	**45.1078**	**45.1078**	**5.9100e-003**	**0.0000**	**45.2557**

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	1.6000e-004	5.6200e-003	1.2200e-003	2.0000e-005	3.6000e-004	2.0000e-005	3.7000e-004	1.0000e-004	2.0000e-005	1.1000e-004	0.0000	1.5814	1.5814	7.0000e-005	0.0000	1.5832
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	2.9300e-003	2.0300e-003	0.0217	7.0000e-005	7.5300e-003	5.0000e-005	7.5800e-003	2.0000e-003	4.0000e-005	2.0500e-003	0.0000	6.2372	6.2372	1.4000e-004	0.0000	6.2407
Total	**3.0900e-003**	**7.6500e-003**	**0.0230**	**9.0000e-005**	**7.8900e-003**	**7.0000e-005**	**7.9500e-003**	**2.1000e-003**	**6.0000e-005**	**2.1600e-003**	**0.0000**	**7.8185**	**7.8185**	**2.1000e-004**	**0.0000**	**7.8239**

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	0.3229	1.3572	3.6924	0.0127	1.1644	0.0108	1.1752	0.3117	0.0101	0.3218	0.0000	1,159.4670	1,159.4670	0.0395	0.0000	1,160.4545
Unmitigated	0.3229	1.3572	3.6924	0.0127	1.1644	0.0108	1.1752	0.3117	0.0101	0.3218	0.0000	1,159.4670	1,159.4670	0.0395	0.0000	1,160.4545

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	1,485.48	331.39	141.79	2,697,201	2,697,201
Parking Lot	0.00	0.00	0.00		
Strip Mall	307.82	292.02	141.86	434,065	434,065
Total	1,793.30	623.41	283.65	3,131,266	3,131,266

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
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740

General Office Building	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Parking Lot	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Strip Mall	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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	310.0934	310.0934	0.0310	6.4200e-003	312.7805
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	469.0736	469.0736	0.0469	9.7000e-003	473.1384
NaturalGas Mitigated	0.0147	0.1333	0.1120	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	145.1247	145.1247	2.7800e-003	2.6600e-003	145.9871
NaturalGas Unmitigated	0.0147	0.1333	0.1120	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	145.1247	145.1247	2.7800e-003	2.6600e-003	145.9871

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					

Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.69884e+006	0.0146	0.1323	0.1111	7.9000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	144.0204	144.0204	2.7600e-003	2.6400e-003	144.8762
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	20694.8	1.1000e-004	1.0100e-003	8.5000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1044	1.1044	2.0000e-005	2.0000e-005	1.1109
Total		**0.0147**	**0.1333**	**0.1120**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**	**0.0000**	**145.1247**	**145.1247**	**2.7800e-003**	**2.6600e-003**	**145.9871**

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					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.69884e+006	0.0146	0.1323	0.1111	7.9000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	144.0204	144.0204	2.7600e-003	2.6400e-003	144.8762
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	20694.8	1.1000e-004	1.0100e-003	8.5000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1044	1.1044	2.0000e-005	2.0000e-005	1.1109
Total		**0.0147**	**0.1333**	**0.1120**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**	**0.0000**	**145.1247**	**145.1247**	**2.7800e-003**	**2.6600e-003**	**145.9871**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	531818	69.9564	7.0000e-003	1.4500e-003	70.5626

General Office Building	2.93954e+006	386.6727	0.0387	8.0000e-003	390.0235
Parking Lot	1260	0.1657	2.0000e-005	0.0000	0.1672
Strip Mall	93345.1	12.2788	1.2300e-003	2.5000e-004	12.3852
Total		**469.0736**	**0.0469**	**9.7000e-003**	**473.1384**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	339307	44.6330	4.4600e-003	9.2000e-004	45.0198
General Office Building	1.96478e+006	258.4505	0.0259	5.3500e-003	260.6901
Parking Lot	472.5	0.0622	1.0000e-005	0.0000	0.0627
Strip Mall	52817.7	6.9477	6.9000e-004	1.4000e-004	7.0079
Total		**310.0934**	**0.0310**	**6.4100e-003**	**312.7805**

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	0.7770	4.0000e-005	4.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8900e-003	7.8900e-003	2.0000e-005	0.0000	8.4100e-003
Unmitigated	0.7770	4.0000e-005	4.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8900e-003	7.8900e-003	2.0000e-005	0.0000	8.4100e-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	0.0925					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6841					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8900e-003	7.8900e-003	2.0000e-005	0.0000	8.4100e-003
Total	**0.7770**	**4.0000e-005**	**4.0600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.8900e-003**	**7.8900e-003**	**2.0000e-005**	**0.0000**	**8.4100e-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	0.0925					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6841					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8900e-003	7.8900e-003	2.0000e-005	0.0000	8.4100e-003

Total	**0.7770**	**4.0000e-005**	**4.0600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.8900e-003**	**7.8900e-003**	**2.0000e-005**	**0.0000**	**8.4100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	36.1391	0.0390	0.0236	44.1391
Unmitigated	40.3647	0.0395	0.0237	48.4013

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000

General Office Building	29.303 / 17.9599	39.4931	0.0386	0.0232	47.3563
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.646653 / 0.396336	0.8715	8.5000e-004	5.1000e-004	1.0451
Total		**40.3647**	**0.0395**	**0.0237**	**48.4013**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	29.303 / 8.97994	35.3588	0.0382	0.0231	43.1861
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.646653 / 0.198168	0.7803	8.4000e-004	5.1000e-004	0.9530
Total		**36.1391**	**0.0390**	**0.0236**	**44.1391**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e

	MT/yr			
Mitigated	32.9860	1.9494	0.0000	81.7215
Unmitigated	32.9860	1.9494	0.0000	81.7215

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	153.33	31.1246	1.8394	0.0000	77.1099
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	9.17	1.8614	0.1100	0.0000	4.6116
Total		**32.9860**	**1.9494**	**0.0000**	**81.7215**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	153.33	31.1246	1.8394	0.0000	77.1099

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	9.17	1.8614	0.1100	0.0000	4.6116
Total		**32.9860**	**1.9494**	**0.0000**	**81.7215**

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	50	152	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 (100 - 175 HP)	6.2400e-003	0.0174	0.0226	3.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004	0.0000	2.8941	2.8941	4.1000e-004	0.0000	2.9042
Total	**6.2400e-003**	**0.0174**	**0.0226**	**3.0000e-005**		**9.2000e-004**	**9.2000e-004**		**9.2000e-004**	**9.2000e-004**	**0.0000**	**2.8941**	**2.8941**	**4.1000e-004**	**0.0000**	**2.9042**

11.0 Vegetation

DSP - Macys & Redwood Sqaure (Rev March 2020) - Santa Clara County, Annual

DSP - Macys & Redwood Sqaure (Rev March 2020)

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	497.33	1000sqft	0.00	497,332.00	0
Enclosed Parking with Elevator	1,336.00	Space	0.00	511,197.00	0
Apartments Mid Rise	467.00	Dwelling Unit	7.60	557,404.00	1336
Strip Mall	158.15	1000sqft	0.00	158,145.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 Rate = 290

Land Use - Applicant provided land uses, Revised 3.4.2020

Construction Phase - Applicant provided construction schedule

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Trips and VMT - 615tons pavement demo = 124 one-way trips, 796+124= 920 demo trips, building const = 460 one-way cement trips, paving = 160cy = 38 one-way asphalt trips

Demolition - Existing building demo = 175,000sf

Grading - Grading = 273,022cy export

Vehicle Trips - Vehicle Trips - After reuctions, Res = 3.97, 3.81, 3.50, Office = 9.01, 2.01, 0.86, Retail = 35.26, 33.45, 16.25

Woodstoves - No Wood All Gas

Energy Use -

Water And Wastewater - WTP treatment 100% aerobic

Construction Off-road Equipment Mitigation - BMPs, Tier 4 final mitigation

Energy Mitigation - Green Building Measures - energy efficient lighting, appliances, installing solar panels

Water Mitigation - Green Building Measures - water efficient fixtures and landscaping

Stationary Sources - Emergency Generators and Fire Pumps - Macys = 2 150kW 240hp diesel generator, 50hrs/year, Redwood Square = 1000kW 1528hp diesel generator, 50hrs/yr

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	165.00
tblConstructionPhase	NumDays	230.00	400.00
tblConstructionPhase	NumDays	20.00	90.00
tblConstructionPhase	NumDays	20.00	220.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	10.00	20.00
tblGrading	AcresOfGrading	467.50	10.00
tblGrading	AcresOfGrading	20.00	0.00
tblGrading	MaterialExported	0.00	273,022.00

tblLandUse	LandUseSquareFeet	534,400.00	511,197.00
tblLandUse	LandUseSquareFeet	467,000.00	557,404.00
tblLandUse	LotAcreage	11.42	0.00
tblLandUse	LotAcreage	12.02	0.00
tblLandUse	LotAcreage	12.29	7.60
tblLandUse	LotAcreage	3.63	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	7.00	5.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	4.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	HaulingTripNumber	0.00	460.00
tblTripsAndVMT	HaulingTripNumber	0.00	38.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0755	0.7846	0.5380	1.1200e-003	0.0737	0.0368	0.1105	0.0128	0.0343	0.0471	0.0000	101.9854	101.9854	0.0214	0.0000	102.5209
2020	0.6893	10.6973	5.3581	0.0213	1.0709	0.2761	1.3470	0.4771	0.2548	0.7319	0.0000	1,993.9110	1,993.9110	0.2788	0.0000	2,000.8797
2021	0.7254	6.3951	5.6892	0.0192	1.1206	0.1767	1.2973	0.3004	0.1680	0.4684	0.0000	1,753.3411	1,753.3411	0.1397	0.0000	1,756.8346
2022	4.3537	4.4984	4.4245	0.0150	0.7188	0.1184	0.8371	0.1944	0.1133	0.3076	0.0000	1,361.4324	1,361.4324	0.1010	0.0000	1,363.9573
2023	3.6317	0.2134	0.4418	9.3000e-004	0.0482	8.9500e-003	0.0572	0.0128	8.8400e-003	0.0217	0.0000	81.9444	81.9444	8.0800e-003	0.0000	82.1465
Maximum	**4.3537**	**10.6973**	**5.6892**	**0.0213**	**1.1206**	**0.2761**	**1.3470**	**0.4771**	**0.2548**	**0.7319**	**0.0000**	**1,993.9110**	**1,993.9110**	**0.2788**	**0.0000**	**2,000.8797**

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					
2019	0.0160	0.1307	0.5695	1.1200e-003	0.0410	1.6900e-003	0.0427	5.8400e-003	1.6700e-003	7.5100e-003	0.0000	101.9853	101.9853	0.0214	0.0000	102.5208
2020	0.2520	5.2957	5.5808	0.0213	0.6655	0.0288	0.6942	0.1780	0.0281	0.2060	0.0000	1,993.9101	1,993.9101	0.2788	0.0000	2,000.8789
2021	0.4215	3.6285	5.9087	0.0192	1.0992	0.0187	1.1179	0.2905	0.0180	0.3085	0.0000	1,753.3405	1,753.3405	0.1397	0.0000	1,756.8340
2022	4.1610	2.8042	4.5878	0.0150	0.7188	0.0236	0.7424	0.1944	0.0230	0.2174	0.0000	1,361.4320	1,361.4320	0.1010	0.0000	1,363.9569
2023	3.6317	0.2134	0.4418	9.3000e-004	0.0482	8.9500e-003	0.0572	0.0128	8.4400e-003	0.0217	0.0000	81.9444	81.9444	8.0800e-003	0.0000	82.1465
Maximum	**4.1610**	**5.2957**	**5.9087**	**0.0213**	**1.0992**	**0.0288**	**1.1179**	**0.2905**	**0.0281**	**0.3085**	**0.0000**	**1,993.9101**	**1,993.9101**	**0.2788**	**0.0000**	**2,000.8789**

	ROG	NOx	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	**10.48**	**46.56**	**-3.87**	**0.00**	**15.15**	**86.76**	**27.26**	**31.69**	**86.25**	**51.73**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**10-7-2019**	**1-6-2020**	0.9083	0.1561
2	**1-7-2020**	**4-6-2020**	1.5663	0.5951
3	**4-7-2020**	**7-6-2020**	3.2444	1.6313
4	**7-7-2020**	**10-6-2020**	3.2825	1.6517
5	**10-7-2020**	**1-6-2021**	3.3007	1.6789
6	**1-7-2021**	**4-6-2021**	1.1772	0.6075
7	**4-7-2021**	**7-6-2021**	1.9316	1.1124
8	**7-7-2021**	**10-6-2021**	1.9243	1.1215
9	**10-7-2021**	**1-6-2022**	1.9374	1.1407
10	**1-7-2022**	**4-6-2022**	1.7540	1.0608

11	**4-7-2022**	**7-6-2022**	1.7531	1.0522
12	**7-7-2022**	**10-6-2022**	2.2213	1.7745
13	**10-7-2022**	**1-6-2023**	3.1751	3.1751
14	**1-7-2023**	**4-6-2023**	3.0920	3.0920
15	**4-7-2023**	**7-6-2023**	0.5149	0.5149
		Highest	3.3007	3.1751

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	6.6940	0.0649	4.9681	3.1400e-003		0.2314	0.2314		0.2314	0.2314	21.2904	14.4447	35.7351	0.0397	1.4000e-003	37.1448
Energy	0.0677	0.6034	0.4298	3.6900e-003		0.0468	0.0468		0.0468	0.0468	0.0000	2,706.2271	2,706.2271	0.2165	0.0544	2,727.8542
Mobile	2.5854	9.7462	28.3808	0.1023	9.9850	0.0807	10.0658	2.6726	0.0751	2.7477	0.0000	9,382.2857	9,382.2857	0.3000	0.0000	9,389.7852
Stationary	0.0824	0.3354	0.2101	4.0000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	38.2320	38.2320	5.3600e-003	0.0000	38.3660
Waste						0.0000	0.0000		0.0000	0.0000	169.4081	0.0000	169.4081	10.0117	0.0000	419.7015
Water						0.0000	0.0000		0.0000	0.0000	41.3013	129.6419	170.9432	4.2550	0.1029	307.9665
Total	**9.4295**	**10.7499**	**33.9888**	**0.1095**	**9.9850**	**0.3710**	**10.3561**	**2.6726**	**0.3654**	**3.0380**	**231.9999**	**12,270.8315**	**12,502.8314**	**14.8283**	**0.1587**	**12,920.8182**

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	6.6940	0.0649	4.9681	3.1400e-003		0.2314	0.2314		0.2314	0.2314	21.2904	14.4447	35.7351	0.0397	1.4000e-003	37.1448
Energy	0.0677	0.6034	0.4298	3.6900e-003		0.0468	0.0468		0.0468	0.0468	0.0000	1,999.7593	1,999.7593	0.1458	0.0398	2,015.2645
Mobile	2.5854	9.7462	28.3808	0.1023	9.9850	0.0807	10.0658	2.6726	0.0751	2.7477	0.0000	9,382.2857	9,382.2857	0.3000	0.0000	9,389.7852
Stationary	0.0824	0.3354	0.2101	4.0000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	38.2320	38.2320	5.3600e-003	0.0000	38.3660
Waste						0.0000	0.0000		0.0000	0.0000	169.4081	0.0000	169.4081	10.0117	0.0000	419.7015
Water						0.0000	0.0000		0.0000	0.0000	41.3013	111.1516	152.4529	4.2532	0.1025	289.3159
Total	**9.4295**	**10.7499**	**33.9888**	**0.1095**	**9.9850**	**0.3710**	**10.3561**	**2.6726**	**0.3654**	**3.0380**	**231.9999**	**11,545.8734**	**11,777.8732**	**14.7558**	**0.1437**	**12,189.5779**

	ROG	NOx	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**	**5.91**	**5.80**	**0.49**	**9.45**	**5.66**

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	10/7/2019	2/7/2020	5	90	
2	Site Preparation	Site Preparation	2/10/2020	3/6/2020	5	20	
3	Grading	Grading	3/9/2020	1/8/2021	5	220	
4	Trenching	Trenching	1/11/2021	2/19/2021	5	30	
5	Building Construction	Building Construction	2/22/2021	9/2/2022	5	400	
6	Paving	Paving	2/22/2021	4/16/2021	5	40	
7	Architectural Coating	Architectural Coating	9/5/2022	4/21/2023	5	165	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 1,128,743; Residential Outdoor: 376,248; Non-Residential Indoor: 971,016; Non-Residential Outdoor: 323,672;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	3	2.00	81	0.73
Demolition	Excavators	4	4.00	158	0.38
Demolition	Rubber Tired Dozers	4	2.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Site Preparation	Graders	2	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	6.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Excavators	6	6.00	158	0.38
Grading	Graders	2	1.00	187	0.41
Grading	Rubber Tired Dozers	2	4.00	247	0.40
Grading	Scrapers	4	4.00	367	0.48
Grading	Sweepers/Scrubbers	1	1.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Trenching	Excavators	2	4.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	2	2.00	97	0.37
Building Construction	Cranes	3	5.00	231	0.29
Building Construction	Forklifts	4	4.00	89	0.20
Building Construction	Generator Sets	3	4.00	84	0.74
Building Construction	Pumps	2	3.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Building Construction	Welders	4	5.00	46	0.45
Paving	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Pavers	2	4.00	130	0.42
Paving	Paving Equipment	2	4.00	132	0.36
Paving	Rollers	2	4.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	3.00	97	0.37

Architectural Coating	Aerial Lifts	4	6.00	63	0.31
Architectural Coating	Air Compressors	4	4.00	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	13	33.00	0.00	796.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	17	43.00	0.00	34,128.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	20	758.00	240.00	460.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	38.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	8	152.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

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					0.0593	0.0000	0.0593	8.9800e-003	0.0000	8.9800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0693	0.6965	0.4926	8.3000e-004		0.0364	0.0364		0.0340	0.0340	0.0000	73.6737	73.6737	0.0202	0.0000	74.1796
Total	**0.0693**	**0.6965**	**0.4926**	**8.3000e-004**	**0.0593**	**0.0364**	**0.0958**	**8.9800e-003**	**0.0340**	**0.0429**	**0.0000**	**73.6737**	**73.6737**	**0.0202**	**0.0000**	**74.1796**

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	2.4900e-003	0.0854	0.0169	2.2000e-004	6.2200e-003	3.3000e-004	6.5500e-003	1.6600e-003	3.1000e-004	1.9800e-003	0.0000	21.1294	21.1294	9.9000e-004	0.0000	21.1541
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.7700e-003	0.0286	8.0000e-005	8.1100e-003	5.0000e-005	8.1700e-003	2.1600e-003	5.0000e-005	2.2100e-003	0.0000	7.1823	7.1823	2.0000e-004	0.0000	7.1872
Total	**6.2100e-003**	**0.0881**	**0.0454**	**3.0000e-004**	**0.0143**	**3.8000e-004**	**0.0147**	**3.8200e-003**	**3.6000e-004**	**4.1900e-003**	**0.0000**	**28.3117**	**28.3117**	**1.1900e-003**	**0.0000**	**28.3413**

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					0.0267	0.0000	0.0267	2.0200e-003	0.0000	2.0200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8100e-003	0.0425	0.5241	8.3000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	73.6736	73.6736	0.0202	0.0000	74.1795
Total	**9.8100e-003**	**0.0425**	**0.5241**	**8.3000e-004**	**0.0267**	**1.3100e-003**	**0.0280**	**2.0200e-003**	**1.3100e-003**	**3.3300e-003**	**0.0000**	**73.6736**	**73.6736**	**0.0202**	**0.0000**	**74.1795**

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	2.4900e-003	0.0854	0.0169	2.2000e-004	6.2200e-003	3.3000e-004	6.5500e-003	1.6600e-003	3.1000e-004	1.9800e-003	0.0000	21.1294	21.1294	9.9000e-004	0.0000	21.1541
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.7700e-003	0.0286	8.0000e-005	8.1100e-003	5.0000e-005	8.1700e-003	2.1600e-003	5.0000e-005	2.2100e-003	0.0000	7.1823	7.1823	2.0000e-004	0.0000	7.1872
Total	**6.2100e-003**	**0.0881**	**0.0454**	**3.0000e-004**	**0.0143**	**3.8000e-004**	**0.0147**	**3.8200e-003**	**3.6000e-004**	**4.1900e-003**	**0.0000**	**28.3117**	**28.3117**	**1.1900e-003**	**0.0000**	**28.3413**

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0268	0.0000	0.0268	4.0600e-003	0.0000	4.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.2903	0.2200	3.7000e-004		0.0150	0.0150		0.0140	0.0140	0.0000	32.6767	32.6767	9.1000e-003	0.0000	32.9042
Total	**0.0293**	**0.2903**	**0.2200**	**3.7000e-004**	**0.0268**	**0.0150**	**0.0418**	**4.0600e-003**	**0.0140**	**0.0180**	**0.0000**	**32.6767**	**32.6767**	**9.1000e-003**	**0.0000**	**32.9042**

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	1.0300e-003	0.0359	7.3600e-003	1.0000e-004	5.5800e-003	1.2000e-004	5.7000e-003	1.4300e-003	1.1000e-004	1.5400e-003	0.0000	9.4440	9.4440	4.3000e-004	0.0000	9.4548
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	1.5300e-003	1.1000e-003	0.0116	3.0000e-005	3.6600e-003	2.0000e-005	3.6900e-003	9.7000e-004	2.0000e-005	1.0000e-003	0.0000	3.1423	3.1423	8.0000e-005	0.0000	3.1442
Total	**2.5600e-003**	**0.0370**	**0.0189**	**1.3000e-004**	**9.2400e-003**	**1.4000e-004**	**9.3900e-003**	**2.4000e-003**	**1.3000e-004**	**2.5400e-003**	**0.0000**	**12.5863**	**12.5863**	**5.1000e-004**	**0.0000**	**12.5990**

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					0.0121	0.0000	0.0121	9.1000e-004	0.0000	9.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4300e-003	0.0192	0.2367	3.7000e-004		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	32.6766	32.6766	9.1000e-003	0.0000	32.9041
Total	**4.4300e-003**	**0.0192**	**0.2367**	**3.7000e-004**	**0.0121**	**5.9000e-004**	**0.0127**	**9.1000e-004**	**5.9000e-004**	**1.5000e-003**	**0.0000**	**32.6766**	**32.6766**	**9.1000e-003**	**0.0000**	**32.9041**

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	1.0300e-003	0.0359	7.3600e-003	1.0000e-004	5.5800e-003	1.2000e-004	5.7000e-003	1.4300e-003	1.1000e-004	1.5400e-003	0.0000	9.4440	9.4440	4.3000e-004	0.0000	9.4548
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	1.5300e-003	1.1000e-003	0.0116	3.0000e-005	3.6600e-003	2.0000e-005	3.6900e-003	9.7000e-004	2.0000e-005	1.0000e-003	0.0000	3.1423	3.1423	8.0000e-005	0.0000	3.1442
Total	**2.5600e-003**	**0.0370**	**0.0189**	**1.3000e-004**	**9.2400e-003**	**1.4000e-004**	**9.3900e-003**	**2.4000e-003**	**1.3000e-004**	**2.5400e-003**	**0.0000**	**12.5863**	**12.5863**	**5.1000e-004**	**0.0000**	**12.5990**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0192	0.2273	0.0844	2.2000e-004		9.2100e-003	9.2100e-003		8.4700e-003	8.4700e-003	0.0000	19.3368	19.3368	6.2500e-003	0.0000	19.4932
Total	**0.0192**	**0.2273**	**0.0844**	**2.2000e-004**	**0.0452**	**9.2100e-003**	**0.0544**	**0.0248**	**8.4700e-003**	**0.0333**	**0.0000**	**19.3368**	**19.3368**	**6.2500e-003**	**0.0000**	**19.4932**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.4000e-004	2.5000e-003	1.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6802	0.6802	2.0000e-005	0.0000	0.6806
Total	**3.3000e-004**	**2.4000e-004**	**2.5000e-003**	**1.0000e-005**	**7.9000e-004**	**1.0000e-005**	**8.0000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6802**	**0.6802**	**2.0000e-005**	**0.0000**	**0.6806**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0203	0.0000	0.0203	5.5900e-003	0.0000	5.5900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0117	0.1058	2.2000e-004		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	19.3368	19.3368	6.2500e-003	0.0000	19.4932
Total	**2.6900e-003**	**0.0117**	**0.1058**	**2.2000e-004**	**0.0203**	**3.6000e-004**	**0.0207**	**5.5900e-003**	**3.6000e-004**	**5.9500e-003**	**0.0000**	**19.3368**	**19.3368**	**6.2500e-003**	**0.0000**	**19.4932**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.4000e-004	2.5000e-003	1.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6802	0.6802	2.0000e-005	0.0000	0.6806
Total	**3.3000e-004**	**2.4000e-004**	**2.5000e-003**	**1.0000e-005**	**7.9000e-004**	**1.0000e-005**	**8.0000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6802**	**0.6802**	**2.0000e-005**	**0.0000**	**0.6806**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6651	0.0000	0.6651	0.3571	0.0000	0.3571	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.4847	5.3148	3.9307	7.1900e-003		0.2359	0.2359		0.2170	0.2170	0.0000	631.3475	631.3475	0.2042	0.0000	636.4522
Total	**0.4847**	**5.3148**	**3.9307**	**7.1900e-003**	**0.6651**	**0.2359**	**0.9010**	**0.3571**	**0.2170**	**0.5741**	**0.0000**	**631.3475**	**631.3475**	**0.2042**	**0.0000**	**636.4522**

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	0.1379	4.8167	0.9864	0.0131	0.2873	0.0157	0.3029	0.0788	0.0150	0.0938	0.0000	1,265.9898	1,265.9898	0.0579	0.0000	1,267.4377
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	0.0153	0.0110	0.1152	3.5000e-004	0.0365	2.4000e-004	0.0367	9.7000e-003	2.2000e-004	9.9200e-003	0.0000	31.2937	31.2937	7.7000e-004	0.0000	31.3129
Total	**0.1532**	**4.8276**	**1.1016**	**0.0134**	**0.3238**	**0.0159**	**0.3397**	**0.0885**	**0.0152**	**0.1037**	**0.0000**	**1,297.2835**	**1,297.2835**	**0.0587**	**0.0000**	**1,298.7505**

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					0.2993	0.0000	0.2993	0.0804	0.0000	0.0804	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0887	0.4000	4.1153	7.1900e-003		0.0118	0.0118		0.0118	0.0118	0.0000	631.3467	631.3467	0.2042	0.0000	636.4515
Total	**0.0887**	**0.4000**	**4.1153**	**7.1900e-003**	**0.2993**	**0.0118**	**0.3111**	**0.0804**	**0.0118**	**0.0921**	**0.0000**	**631.3467**	**631.3467**	**0.2042**	**0.0000**	**636.4515**

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	0.1379	4.8167	0.9864	0.0131	0.2873	0.0157	0.3029	0.0788	0.0150	0.0938	0.0000	1,265.9898	1,265.9898	0.0579	0.0000	1,267.4377
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	0.0153	0.0110	0.1152	3.5000e-004	0.0365	2.4000e-004	0.0367	9.7000e-003	2.2000e-004	9.9200e-003	0.0000	31.2937	31.2937	7.7000e-004	0.0000	31.3129
Total	**0.1532**	**4.8276**	**1.1016**	**0.0134**	**0.3238**	**0.0159**	**0.3397**	**0.0885**	**0.0152**	**0.1037**	**0.0000**	**1,297.2835**	**1,297.2835**	**0.0587**	**0.0000**	**1,298.7505**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0388	0.0000	0.0388	0.0128	0.0000	0.0128	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0128	0.1371	0.1072	2.0000e-004		6.0400e-003	6.0400e-003		5.5600e-003	5.5600e-003	0.0000	17.7068	17.7068	5.7300e-003	0.0000	17.8500
Total	**0.0128**	**0.1371**	**0.1072**	**2.0000e-004**	**0.0388**	**6.0400e-003**	**0.0449**	**0.0128**	**5.5600e-003**	**0.0184**	**0.0000**	**17.7068**	**17.7068**	**5.7300e-003**	**0.0000**	**17.8500**

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	3.6500e-003	0.1245	0.0271	3.6000e-004	0.2186	3.9000e-004	0.2190	0.0539	3.7000e-004	0.0543	0.0000	35.0448	35.0448	1.5900e-003	0.0000	35.0845
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	4.0000e-004	2.8000e-004	2.9500e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8469	0.8469	2.0000e-005	0.0000	0.8474
Total	**4.0500e-003**	**0.1247**	**0.0301**	**3.7000e-004**	**0.2196**	**4.0000e-004**	**0.2200**	**0.0542**	**3.8000e-004**	**0.0546**	**0.0000**	**35.8917**	**35.8917**	**1.6100e-003**	**0.0000**	**35.9320**

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					0.0175	0.0000	0.0175	2.8900e-003	0.0000	2.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4900e-003	0.0112	0.1154	2.0000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	17.7068	17.7068	5.7300e-003	0.0000	17.8499
Total	**2.4900e-003**	**0.0112**	**0.1154**	**2.0000e-004**	**0.0175**	**3.3000e-004**	**0.0178**	**2.8900e-003**	**3.3000e-004**	**3.2200e-003**	**0.0000**	**17.7068**	**17.7068**	**5.7300e-003**	**0.0000**	**17.8499**

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	3.6500e-003	0.1245	0.0271	3.6000e-004	0.2186	3.9000e-004	0.2190	0.0539	3.7000e-004	0.0543	0.0000	35.0448	35.0448	1.5900e-003	0.0000	35.0845
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	4.0000e-004	2.8000e-004	2.9500e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8469	0.8469	2.0000e-005	0.0000	0.8474
Total	**4.0500e-003**	**0.1247**	**0.0301**	**3.7000e-004**	**0.2196**	**4.0000e-004**	**0.2200**	**0.0542**	**3.8000e-004**	**0.0546**	**0.0000**	**35.8917**	**35.8917**	**1.6100e-003**	**0.0000**	**35.9320**

3.5 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.8400e-003	0.0465	0.0660	1.0000e-004		2.4000e-003	2.4000e-003		2.2100e-003	2.2100e-003	0.0000	8.8538	8.8538	2.8600e-003	0.0000	8.9254
Total	**4.8400e-003**	**0.0465**	**0.0660**	**1.0000e-004**		**2.4000e-003**	**2.4000e-003**		**2.2100e-003**	**2.2100e-003**	**0.0000**	**8.8538**	**8.8538**	**2.8600e-003**	**0.0000**	**8.9254**

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	4.6000e-004	3.2000e-004	3.4300e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9848	0.9848	2.0000e-005	0.0000	0.9854
Total	**4.6000e-004**	**3.2000e-004**	**3.4300e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9848**	**0.9848**	**2.0000e-005**	**0.0000**	**0.9854**

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	1.2400e-003	5.3600e-003	0.0763	1.0000e-004		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	8.8538	8.8538	2.8600e-003	0.0000	8.9254
Total	**1.2400e-003**	**5.3600e-003**	**0.0763**	**1.0000e-004**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**8.8538**	**8.8538**	**2.8600e-003**	**0.0000**	**8.9254**

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	4.6000e-004	3.2000e-004	3.4300e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9848	0.9848	2.0000e-005	0.0000	0.9854
Total	**4.6000e-004**	**3.2000e-004**	**3.4300e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9848**	**0.9848**	**2.0000e-005**	**0.0000**	**0.9854**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3359	2.9443	2.6104	4.6400e-003		0.1497	0.1497		0.1428	0.1428	0.0000	394.5594	394.5594	0.0786	0.0000	396.5238

Total	**0.3359**	**2.9443**	**2.6104**	**4.6400e-003**		**0.1497**	**0.1497**		**0.1428**	**0.1428**	**0.0000**	**394.5594**	**394.5594**	**0.0786**	**0.0000**	**396.5238**

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	1.0100e-003	0.0346	7.5400e-003	1.0000e-004	3.4700e-003	1.1000e-004	3.5800e-003	9.2000e-004	1.0000e-004	1.0200e-003	0.0000	9.7424	9.7424	4.4000e-004	0.0000	9.7534
Vendor	0.0881	2.7745	0.7386	7.2900e-003	0.1776	6.1500e-003	0.1838	0.0514	5.8800e-003	0.0572	0.0000	699.3794	699.3794	0.0305	0.0000	700.1413
Worker	0.2627	0.1819	1.9507	6.1900e-003	0.6763	4.2600e-003	0.6806	0.1799	3.9200e-003	0.1838	0.0000	559.8660	559.8660	0.0127	0.0000	560.1844
Total	**0.3518**	**2.9910**	**2.6968**	**0.0136**	**0.8574**	**0.0105**	**0.8679**	**0.2322**	**9.9000e-003**	**0.2421**	**0.0000**	**1,268.9878**	**1,268.9878**	**0.0437**	**0.0000**	**1,270.0791**

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	0.0567	0.4747	2.7844	4.6400e-003		6.7400e-003	6.7400e-003		6.7400e-003	6.7400e-003	0.0000	394.5589	394.5589	0.0786	0.0000	396.5233
Total	**0.0567**	**0.4747**	**2.7844**	**4.6400e-003**		**6.7400e-003**	**6.7400e-003**		**6.7400e-003**	**6.7400e-003**	**0.0000**	**394.5589**	**394.5589**	**0.0786**	**0.0000**	**396.5233**

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	1.0100e-003	0.0346	7.5400e-003	1.0000e-004	3.4700e-003	1.1000e-004	3.5800e-003	9.2000e-004	1.0000e-004	1.0200e-003	0.0000	9.7424	9.7424	4.4000e-004	0.0000	9.7534
Vendor	0.0881	2.7745	0.7386	7.2900e-003	0.1776	6.1500e-003	0.1838	0.0514	5.8800e-003	0.0572	0.0000	699.3794	699.3794	0.0305	0.0000	700.1413
Worker	0.2627	0.1819	1.9507	6.1900e-003	0.6763	4.2600e-003	0.6806	0.1799	3.9200e-003	0.1838	0.0000	559.8660	559.8660	0.0127	0.0000	560.1844
Total	**0.3518**	**2.9910**	**2.6968**	**0.0136**	**0.8574**	**0.0105**	**0.8679**	**0.2322**	**9.9000e-003**	**0.2421**	**0.0000**	**1,268.9878**	**1,268.9878**	**0.0437**	**0.0000**	**1,270.0791**

3.6 Building Construction - 2022

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	0.2368	2.0635	2.0023	3.6100e-003		0.1000	0.1000		0.0955	0.0955	0.0000	306.9469	306.9469	0.0603	0.0000	308.4547
Total	**0.2368**	**2.0635**	**2.0023**	**3.6100e-003**		**0.1000**	**0.1000**		**0.0955**	**0.0955**	**0.0000**	**306.9469**	**306.9469**	**0.0603**	**0.0000**	**308.4547**

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	7.4000e-004	0.0247	5.7600e-003	8.0000e-005	3.3500e-003	7.0000e-005	3.4200e-003	8.7000e-004	7.0000e-005	9.4000e-004	0.0000	7.4752	7.4752	3.4000e-004	0.0000	7.4836
Vendor	0.0639	2.0399	0.5410	5.6100e-003	0.1382	4.1600e-003	0.1423	0.0400	3.9800e-003	0.0439	0.0000	538.7577	538.7577	0.0226	0.0000	539.3235
Worker	0.1907	0.1269	1.3945	4.6400e-003	0.5260	3.2400e-003	0.5293	0.1399	2.9800e-003	0.1429	0.0000	419.6341	419.6341	8.8800e-003	0.0000	419.8562
Total	**0.2553**	**2.1915**	**1.9413**	**0.0103**	**0.6676**	**7.4700e-003**	**0.6750**	**0.1807**	**7.0300e-003**	**0.1877**	**0.0000**	**965.8670**	**965.8670**	**0.0319**	**0.0000**	**966.6633**

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	0.0441	0.3692	2.1656	3.6100e-003		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003	0.0000	306.9465	306.9465	0.0603	0.0000	308.4543
Total	**0.0441**	**0.3692**	**2.1656**	**3.6100e-003**		**5.2400e-003**	**5.2400e-003**		**5.2400e-003**	**5.2400e-003**	**0.0000**	**306.9465**	**306.9465**	**0.0603**	**0.0000**	**308.4543**

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	7.4000e-004	0.0247	5.7600e-003	8.0000e-005	3.3500e-003	7.0000e-005	3.4200e-003	8.7000e-004	7.0000e-005	9.4000e-004	0.0000	7.4752	7.4752	3.4000e-004	0.0000	7.4836
Vendor	0.0639	2.0399	0.5410	5.6100e-003	0.1382	4.1600e-003	0.1423	0.0400	3.9800e-003	0.0439	0.0000	538.7577	538.7577	0.0226	0.0000	539.3235
Worker	0.1907	0.1269	1.3945	4.6400e-003	0.5260	3.2400e-003	0.5293	0.1399	2.9800e-003	0.1429	0.0000	419.6341	419.6341	8.8800e-003	0.0000	419.8562
Total	**0.2553**	**2.1915**	**1.9413**	**0.0103**	**0.6676**	**7.4700e-003**	**0.6750**	**0.1807**	**7.0300e-003**	**0.1877**	**0.0000**	**965.8670**	**965.8670**	**0.0319**	**0.0000**	**966.6633**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0143	0.1453	0.1650	2.5000e-004		7.6900e-003	7.6900e-003		7.0800e-003	7.0800e-003	0.0000	22.2999	22.2999	7.1600e-003	0.0000	22.4790
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0143**	**0.1453**	**0.1650**	**2.5000e-004**		**7.6900e-003**	**7.6900e-003**		**7.0800e-003**	**7.0800e-003**	**0.0000**	**22.2999**	**22.2999**	**7.1600e-003**	**0.0000**	**22.4790**

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	1.5000e-004	5.0800e-003	1.1100e-003	1.0000e-005	3.2000e-004	2.0000e-005	3.4000e-004	9.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.4308	1.4308	6.0000e-005	0.0000	1.4324
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	1.2300e-003	8.5000e-004	9.1500e-003	3.0000e-005	3.1700e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.6262	2.6262	6.0000e-005	0.0000	2.6277
Total	**1.3800e-003**	**5.9300e-003**	**0.0103**	**4.0000e-005**	**3.4900e-003**	**4.0000e-005**	**3.5300e-003**	**9.3000e-004**	**4.0000e-005**	**9.6000e-004**	**0.0000**	**4.0569**	**4.0569**	**1.2000e-004**	**0.0000**	**4.0601**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3800e-003	0.0152	0.1921	2.5000e-004		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	22.2999	22.2999	7.1600e-003	0.0000	22.4789
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.3800e-003**	**0.0152**	**0.1921**	**2.5000e-004**		**4.8000e-004**	**4.8000e-004**		**4.8000e-004**	**4.8000e-004**	**0.0000**	**22.2999**	**22.2999**	**7.1600e-003**	**0.0000**	**22.4789**

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	1.5000e-004	5.0800e-003	1.1100e-003	1.0000e-005	3.2000e-004	2.0000e-005	3.4000e-004	9.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.4308	1.4308	6.0000e-005	0.0000	1.4324
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	1.2300e-003	8.5000e-004	9.1500e-003	3.0000e-005	3.1700e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.6262	2.6262	6.0000e-005	0.0000	2.6277
Total	**1.3800e-003**	**5.9300e-003**	**0.0103**	**4.0000e-005**	**3.4900e-003**	**4.0000e-005**	**3.5300e-003**	**9.3000e-004**	**4.0000e-005**	**9.6000e-004**	**0.0000**	**4.0569**	**4.0569**	**1.2000e-004**	**0.0000**	**4.0601**

3.8 Architectural Coating - 2022

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	3.8152					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0278	0.2311	0.3450	5.5000e-004		0.0106	0.0106		0.0105	0.0105	0.0000	47.7465	47.7465	7.9700e-003	0.0000	47.9457
Total	**3.8430**	**0.2311**	**0.3450**	**5.5000e-004**		**0.0106**	**0.0106**		**0.0105**	**0.0105**	**0.0000**	**47.7465**	**47.7465**	**7.9700e-003**	**0.0000**	**47.9457**

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	0.0186	0.0124	0.1358	4.5000e-004	0.0512	3.2000e-004	0.0516	0.0136	2.9000e-004	0.0139	0.0000	40.8720	40.8720	8.7000e-004	0.0000	40.8936
Total	**0.0186**	**0.0124**	**0.1358**	**4.5000e-004**	**0.0512**	**3.2000e-004**	**0.0516**	**0.0136**	**2.9000e-004**	**0.0139**	**0.0000**	**40.8720**	**40.8720**	**8.7000e-004**	**0.0000**	**40.8936**

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	3.8152					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0278	0.2311	0.3450	5.5000e-004		0.0106	0.0106		0.0105	0.0105	0.0000	47.7464	47.7464	7.9700e-003	0.0000	47.9456
Total	**3.8430**	**0.2311**	**0.3450**	**5.5000e-004**		**0.0106**	**0.0106**		**0.0105**	**0.0105**	**0.0000**	**47.7464**	**47.7464**	**7.9700e-003**	**0.0000**	**47.9456**

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	0.0186	0.0124	0.1358	4.5000e-004	0.0512	3.2000e-004	0.0516	0.0136	2.9000e-004	0.0139	0.0000	40.8720	40.8720	8.7000e-004	0.0000	40.8936
Total	**0.0186**	**0.0124**	**0.1358**	**4.5000e-004**	**0.0512**	**3.2000e-004**	**0.0516**	**0.0136**	**2.9000e-004**	**0.0139**	**0.0000**	**40.8720**	**40.8720**	**8.7000e-004**	**0.0000**	**40.8936**

3.8 Architectural Coating - 2023

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	3.5908					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0246	0.2030	0.3242	5.2000e-004		8.6600e-003	8.6600e-003		8.5700e-003	8.5700e-003	0.0000	44.9379	44.9379	7.3500e-003	0.0000	45.1217
Total	**3.6154**	**0.2030**	**0.3242**	**5.2000e-004**		**8.6600e-003**	**8.6600e-003**		**8.5700e-003**	**8.5700e-003**	**0.0000**	**44.9379**	**44.9379**	**7.3500e-003**	**0.0000**	**45.1217**

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	0.0164	0.0105	0.1176	4.1000e-004	0.0482	2.9000e-004	0.0485	0.0128	2.7000e-004	0.0131	0.0000	37.0066	37.0066	7.3000e-004	0.0000	37.0248
Total	**0.0164**	**0.0105**	**0.1176**	**4.1000e-004**	**0.0482**	**2.9000e-004**	**0.0485**	**0.0128**	**2.7000e-004**	**0.0131**	**0.0000**	**37.0066**	**37.0066**	**7.3000e-004**	**0.0000**	**37.0248**

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	3.5908					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0246	0.2030	0.3242	5.2000e-004		8.6600e-003	8.6600e-003		8.5700e-003	8.5700e-003	0.0000	44.9378	44.9378	7.3500e-003	0.0000	45.1217
Total	**3.6154**	**0.2030**	**0.3242**	**5.2000e-004**		**8.6600e-003**	**8.6600e-003**		**8.5700e-003**	**8.5700e-003**	**0.0000**	**44.9378**	**44.9378**	**7.3500e-003**	**0.0000**	**45.1217**

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	0.0164	0.0105	0.1176	4.1000e-004	0.0482	2.9000e-004	0.0485	0.0128	2.7000e-004	0.0131	0.0000	37.0066	37.0066	7.3000e-004	0.0000	37.0248
Total	**0.0164**	**0.0105**	**0.1176**	**4.1000e-004**	**0.0482**	**2.9000e-004**	**0.0485**	**0.0128**	**2.7000e-004**	**0.0131**	**0.0000**	**37.0066**	**37.0066**	**7.3000e-004**	**0.0000**	**37.0248**

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	2.5854	9.7462	28.3808	0.1023	9.9850	0.0807	10.0658	2.6726	0.0751	2.7477	0.0000	9,382.2857	9,382.2857	0.3000	0.0000	9,389.7852
Unmitigated	2.5854	9.7462	28.3808	0.1023	9.9850	0.0807	10.0658	2.6726	0.0751	2.7477	0.0000	9,382.2857	9,382.2857	0.3000	0.0000	9,389.7852

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	3,105.55	2,984.13	2736.62	7,010,813	7,010,813
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	5,485.55	1,223.43	522.20	9,959,595	9,959,595
Strip Mall	7,009.21	6,648.63	3231.00	9,883,860	9,883,860
Total	15,600.31	10,856.19	6,489.82	26,854,267	26,854,267

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704
Enclosed Parking with Elevator	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704
General Office Building	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704
Strip Mall	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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	1,330.0034	1,330.0034	0.1330	0.0275	1,341.5286
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,036.4712	2,036.4712	0.2037	0.0421	2,054.1183
NaturalGas Mitigated	0.0677	0.6034	0.4298	3.6900e-003		0.0468	0.0468		0.0468	0.0468	0.0000	669.7559	669.7559	0.0128	0.0123	673.7359
NaturalGas Unmitigated	0.0677	0.6034	0.4298	3.6900e-003		0.0468	0.0468		0.0468	0.0468	0.0000	669.7559	669.7559	0.0128	0.0123	673.7359

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					
Apartments Mid Rise	4.03462e+006	0.0218	0.1859	0.0791	1.1900e-003		0.0150	0.0150		0.0150	0.0150	0.0000	215.3029	215.3029	4.1300e-003	3.9500e-003	216.5823
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	8.14132e+006	0.0439	0.3991	0.3352	2.3900e-003		0.0303	0.0303		0.0303	0.0303	0.0000	434.4521	434.4521	8.3300e-003	7.9600e-003	437.0338
Strip Mall	374804	2.0200e-003	0.0184	0.0154	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	20.0010	20.0010	3.8000e-004	3.7000e-004	20.1198
Total		**0.0677**	**0.6034**	**0.4298**	**3.6900e-003**		**0.0468**	**0.0468**		**0.0468**	**0.0468**	**0.0000**	**669.7559**	**669.7559**	**0.0128**	**0.0123**	**673.7359**

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					
Apartments Mid Rise	4.03462e+006	0.0218	0.1859	0.0791	1.1900e-003		0.0150	0.0150		0.0150	0.0150	0.0000	215.3029	215.3029	4.1300e-003	3.9500e-003	216.5823
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	8.14132e+006	0.0439	0.3991	0.3352	2.3900e-003		0.0303	0.0303		0.0303	0.0303	0.0000	434.4521	434.4521	8.3300e-003	7.9600e-003	437.0338
Strip Mall	374804	2.0200e-003	0.0184	0.0154	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	20.0010	20.0010	3.8000e-004	3.7000e-004	20.1198
Total		**0.0677**	**0.6034**	**0.4298**	**3.6900e-003**		**0.0468**	**0.0468**		**0.0468**	**0.0468**	**0.0000**	**669.7559**	**669.7559**	**0.0128**	**0.0123**	**673.7359**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e

Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.92794e+006	253.6046	0.0254	5.2500e-003	255.8022
Enclosed Parking with Elevator	2.99561e+006	394.0485	0.0394	8.1500e-003	397.4631
General Office Building	8.86743e+006	1,166.4375	0.1166	0.0241	1,176.5453
Strip Mall	1.69057e+006	222.3806	0.0222	4.6000e-003	224.3077
Total		**2,036.4712**	**0.2036**	**0.0421**	**2,054.1183**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.31611e+006	173.1235	0.0173	3.5800e-003	174.6237
Enclosed Parking with Elevator	1.91124e+006	251.4076	0.0251	5.2000e-003	253.5862
General Office Building	5.92695e+006	779.6421	0.0780	0.0161	786.3981
Strip Mall	956580	125.8302	0.0126	2.6000e-003	126.9206
Total		**1,330.0034**	**0.1330**	**0.0275**	**1,341.5286**

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	6.6940	0.0649	4.9681	3.1400e-003		0.2314	0.2314		0.2314	0.2314	21.2904	14.4447	35.7351	0.0397	1.4000e-003	37.1448
Unmitigated	6.6940	0.0649	4.9681	3.1400e-003		0.2314	0.2314		0.2314	0.2314	21.2904	14.4447	35.7351	0.0397	1.4000e-003	37.1448

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	0.7406					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.7700					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.0775	0.0248	1.4838	2.9500e-003		0.2121	0.2121		0.2121	0.2121	21.2904	8.7450	30.0354	0.0342	1.4000e-003	31.3069
Landscaping	0.1059	0.0401	3.4843	1.8000e-004		0.0193	0.0193		0.0193	0.0193	0.0000	5.6997	5.6997	5.5300e-003	0.0000	5.8379
Total	**6.6940**	**0.0649**	**4.9681**	**3.1300e-003**		**0.2314**	**0.2314**		**0.2314**	**0.2314**	**21.2904**	**14.4447**	**35.7351**	**0.0398**	**1.4000e-003**	**37.1448**

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	0.7406					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Consumer Products	4.7700					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.0775	0.0248	1.4838	2.9500e-003		0.2121	0.2121		0.2121	0.2121	21.2904	8.7450	30.0354	0.0342	1.4000e-003	31.3069
Landscaping	0.1059	0.0401	3.4843	1.8000e-004		0.0193	0.0193		0.0193	0.0193	0.0000	5.6997	5.6997	5.5300e-003	0.0000	5.8379
Total	**6.6940**	**0.0649**	**4.9681**	**3.1300e-003**		**0.2314**	**0.2314**		**0.2314**	**0.2314**	**21.2904**	**14.4447**	**35.7351**	**0.0398**	**1.4000e-003**	**37.1448**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	152.4529	4.2532	0.1025	289.3159
Unmitigated	170.9432	4.2550	0.1029	307.9665

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	30.4269 / 19.1822	40.1415	0.9945	0.0240	72.1686
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	88.826 / 54.4417	116.4691	2.9032	0.0702	209.9603
Strip Mall	10.9309 / 6.69957	14.3326	0.3573	8.6400e-003	25.8376
Total		**170.9432**	**4.2550**	**0.1029**	**307.9665**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	30.4269 / 9.5911	35.7258	0.9941	0.0240	67.7147
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	88.826 / 27.2209	103.9367	2.9020	0.0699	197.3193
Strip Mall	10.9309 / 3.34979	12.7904	0.3571	8.6000e-003	24.2820
Total		**152.4529**	**4.2532**	**0.1025**	**289.3159**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	169.4081	10.0117	0.0000	419.7015
Unmitigated	169.4081	10.0117	0.0000	419.7015

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	214.82	43.6065	2.5771	0.0000	108.0333
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	464.79	94.3482	5.5758	0.0000	233.7436
Strip Mall	154.95	31.4535	1.8589	0.0000	77.9246
Total		**169.4081**	**10.0117**	**0.0000**	**419.7015**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e

Land Use	tons	MT/yr			
Apartments Mid Rise	214.82	43.6065	2.5771	0.0000	108.0333
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	464.79	94.3482	5.5758	0.0000	233.7436
Strip Mall	154.95	31.4535	1.8589	0.0000	77.9246
Total		**169.4081**	**10.0117**	**0.0000**	**419.7015**

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	50	240	0.73	Diesel
Emergency Generator	1	0	50	240	0.73	Diesel
Emergency Generator	1	0	50	1528	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 (175 - 300 HP)	0.0197	0.0550	0.0502	9.0000e-005		2.9000e-003	2.9000e-003		2.9000e-003	2.9000e-003	0.0000	9.1391	9.1391	1.2800e-003	0.0000	9.1712
Emergency Generator - Diesel (750 - 9999 HP)	0.0627	0.2803	0.1598	3.0000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	29.0929	29.0929	4.0800e-003	0.0000	29.1949
Total	**0.0824**	**0.3354**	**0.2101**	**3.9000e-004**		**0.0121**	**0.0121**		**0.0121**	**0.0121**	**0.0000**	**38.2320**	**38.2320**	**5.3600e-003**	**0.0000**	**38.3661**

11.0 Vegetation

DSP - SubBlock 6 (Rev March 2020 - Santa Clara County, Annual

DSP - SubBlock 6 (Rev March 2020

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	950.00	Space	0.00	348,000.00	0
Apartments Mid Rise	325.00	Dwelling Unit	4.40	422,850.00	930
Strip Mall	40.47	1000sqft	0.00	40,474.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 Rate = 290

Land Use - Applicant provided land uses, Revised 3.4.2020

Construction Phase - Applicant provided construction schedule

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Off-road Equipment - Applicant provided construction equipment and hours, rev construction hours 4.29.2019

Trips and VMT - 2,960tons pavement demo = 592 one-way trips, building const = 280 one-way cement trips, paving = 90cy = 22 one-way asphlat trips

Grading - Grading = 64,789cy export

Vehicle Trips - Vehicle Trips - After reuctions, Res = 3.97, 3.81, 3.50, Retail = 35.26, 33.45, 16.25

Woodstoves - No Wood All Gas

Energy Use -

Water And Wastewater - WTP treatment 100% aerobic

Construction Off-road Equipment Mitigation - BMPs, Tier 4 final mitigation

Energy Mitigation - Green Building Measures - energy efficient lighting, appliances, installing solar panels

Water Mitigation - Green Building Measures - water efficient fixtures and landscaping

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	18.00	145.00
tblConstructionPhase	NumDays	230.00	360.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	8.00	180.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	10.00
tblGrading	AcresOfGrading	202.50	652.00
tblGrading	AcresOfGrading	10.00	0.00
tblGrading	MaterialExported	0.00	64,789.00

tblLandUse	LandUseSquareFeet	380,000.00	348,000.00
tblLandUse	LandUseSquareFeet	325,000.00	422,850.00
tblLandUse	LotAcreage	8.55	0.00
tblLandUse	LotAcreage	8.55	4.40
tblLandUse	LotAcreage	0.93	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	3.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	3.00
tblOffRoadEquipment	UsageHours	8.00	1.00

tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	3.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	3.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	HaulingTripNumber	0.00	592.00
tblTripsAndVMT	HaulingTripNumber	0.00	280.00
tblTripsAndVMT	HaulingTripNumber	0.00	22.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2558	3.5258	1.9869	6.8700e-003	0.6164	0.1031	0.7195	0.1512	0.0953	0.2465	0.0000	635.5594	635.5594	0.0977	0.0000	638.0016
2021	0.5028	3.9726	3.9318	0.0113	0.4927	0.1381	0.6308	0.1330	0.1315	0.2645	0.0000	1,014.4608	1,014.4608	0.0926	0.0000	1,016.7764
2022	3.1199	1.6405	1.9647	5.0700e-003	0.2118	0.0581	0.2698	0.0570	0.0559	0.1129	0.0000	453.4634	453.4634	0.0450	0.0000	454.5886
2023	0.3410	0.0391	0.0721	1.4000e-004	4.6400e-003	1.6500e-003	6.2900e-003	1.2300e-003	1.6300e-003	2.8700e-003	0.0000	11.9865	11.9865	1.4500e-003	0.0000	12.0227
Maximum	**3.1199**	**3.9726**	**3.9318**	**0.0113**	**0.6164**	**0.1381**	**0.7195**	**0.1512**	**0.1315**	**0.2645**	**0.0000**	**1,014.4608**	**1,014.4608**	**0.0977**	**0.0000**	**1,016.7764**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0917	1.5041	2.0434	6.8700e-003	0.3435	9.3800e-003	0.3529	0.0594	9.1700e-003	0.0685	0.0000	635.5591	635.5591	0.0977	0.0000	638.0012
2021	0.2510	1.9371	4.0284	0.0113	0.4927	0.0114	0.5041	0.1330	0.0110	0.1440	0.0000	1,014.4604	1,014.4604	0.0926	0.0000	1,016.7760
2022	3.0124	0.8576	2.0506	5.0700e-003	0.2118	5.3000e-003	0.2171	0.0570	5.1700e-003	0.0622	0.0000	453.4631	453.4631	0.0450	0.0000	454.5884
2023	0.3380	0.0248	0.0766	1.4000e-004	4.6400e-003	1.7000e-004	4.8100e-003	1.2300e-003	1.7000e-004	1.4000e-003	0.0000	11.9865	11.9865	1.4500e-003	0.0000	12.0227
Maximum	**3.0124**	**1.9371**	**4.0284**	**0.0113**	**0.4927**	**0.0114**	**0.5041**	**0.1330**	**0.0110**	**0.1440**	**0.0000**	**1,014.4604**	**1,014.4604**	**0.0977**	**0.0000**	**1,016.7760**

	ROG	NOx	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	**12.48**	**52.89**	**-3.06**	**0.00**	**20.59**	**91.29**	**33.67**	**26.83**	**91.02**	**55.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-20-2020	4-19-2020	0.9703	0.4044
2	4-20-2020	7-19-2020	1.1767	0.4982
3	7-20-2020	10-19-2020	1.1920	0.5060
4	10-20-2020	1-19-2021	0.5800	0.2558
5	1-20-2021	4-19-2021	1.0998	0.5421
6	4-20-2021	7-19-2021	1.1028	0.5389
7	7-20-2021	10-19-2021	1.1173	0.5473
8	10-20-2021	1-19-2022	1.1640	0.5609
9	1-20-2022	4-19-2022	1.0103	0.5174
10	4-20-2022	7-19-2022	0.4813	0.3727
11	7-20-2022	10-19-2022	1.6795	1.5904

12	**10-20-2022**	**1-19-2023**	1.6777	1.5913
13	**1-20-2023**	**4-19-2023**	0.0181	0.0173
		Highest	1.6795	1.5913

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	2.9789	0.0451	3.4538	2.1800e-003		0.1610	0.1610		0.1610	0.1610	14.8167	10.0455	24.8621	0.0276	9.7000e-004	25.8427
Energy	0.0157	0.1341	0.0590	8.5000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	656.6106	656.6106	0.0531	0.0132	661.8786
Mobile	0.7129	2.6877	7.8280	0.0282	2.7547	0.0223	2.7769	0.7373	0.0207	0.7580	0.0000	2,588.2197	2,588.2197	0.0827	0.0000	2,590.2883
Waste						0.0000	0.0000		0.0000	0.0000	38.0202	0.0000	38.0202	2.2469	0.0000	94.1935
Water						0.0000	0.0000		0.0000	0.0000	7.5639	23.8684	31.4322	0.7793	0.0188	56.5276
Total	**3.7075**	**2.8669**	**11.3409**	**0.0313**	**2.7547**	**0.1941**	**2.9488**	**0.7373**	**0.1926**	**0.9299**	**60.4007**	**3,278.7442**	**3,339.1449**	**3.1897**	**0.0330**	**3,428.7305**

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	2.9789	0.0451	3.4538	2.1800e-003		0.1610	0.1610		0.1610	0.1610	14.8167	10.0455	24.8621	0.0276	9.7000e-004	25.8427
Energy	0.0157	0.1341	0.0590	8.5000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	478.7877	478.7877	0.0354	9.5400e-003	482.5147
Mobile	0.7129	2.6877	7.8280	0.0282	2.7547	0.0223	2.7769	0.7373	0.0207	0.7580	0.0000	2,588.2197	2,588.2197	0.0827	0.0000	2,590.2883

Waste						0.0000	0.0000		0.0000	0.0000	38.0202	0.0000	38.0202	2.2469	0.0000	94.1935
Water						0.0000	0.0000		0.0000	0.0000	7.5639	20.4191	27.9830	0.7789	0.0188	53.0484
Total	**3.7075**	**2.8669**	**11.3409**	**0.0313**	**2.7547**	**0.1941**	**2.9488**	**0.7373**	**0.1926**	**0.9299**	**60.4007**	**3,097.4720**	**3,157.8727**	**3.1716**	**0.0293**	**3,245.8875**

	ROG	NOx	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**	**5.53**	**5.43**	**0.57**	**11.35**	**5.33**

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	1/20/2020	2/7/2020	5	15	
2	Site Preparation	Site Preparation	2/10/2020	2/21/2020	5	10	
3	Grading	Grading	2/24/2020	10/30/2020	5	180	
4	Trenching	Trenching	11/2/2020	12/11/2020	5	30	
5	Building Construction	Building Construction	12/21/2020	5/6/2022	5	360	
6	Paving	Paving	12/21/2021	1/17/2022	5	20	
7	Architectural Coating	Architectural Coating	7/4/2022	1/20/2023	5	145	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 652

Acres of Paving: 0

Residential Indoor: 856,271; Residential Outdoor: 285,424; Non-Residential Indoor: 54,000; Non-Residential Outdoor: 18,000; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	2.00	81	0.73
Demolition	Excavators	2	5.00	158	0.38
Demolition	Rubber Tired Dozers	2	1.00	247	0.40

Demolition	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Site Preparation	Graders	2	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	3.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Grading	Excavators	4	2.00	158	0.38
Grading	Graders	2	1.00	187	0.41
Grading	Rubber Tired Dozers	1	2.00	247	0.40
Grading	Scrapers	4	2.00	367	0.48
Grading	Sweepers/Scrubbers	1	1.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Trenching	Excavators	2	4.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	2	2.00	97	0.37
Building Construction	Cranes	2	4.00	231	0.29
Building Construction	Forklifts	4	4.00	89	0.20
Building Construction	Generator Sets	3	3.00	84	0.74
Building Construction	Pumps	2	1.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	4	4.00	97	0.37
Building Construction	Welders	4	5.00	46	0.45
Paving	Cement and Mortar Mixers	1	3.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	6.00	132	0.36
Paving	Rollers	1	4.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	3.00	97	0.37
Architectural Coating	Aerial Lifts	4	6.00	63	0.31
Architectural Coating	Air Compressors	4	4.00	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	8	20.00	0.00	592.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Site Preparation	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	14	35.00	0.00	8,099.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	19	392.00	98.00	280.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	22.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	8	78.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.4600e-003	0.0720	0.0693	1.1000e-004		3.8800e-003	3.8800e-003		3.6300e-003	3.6300e-003	0.0000	9.7233	9.7233	2.6200e-003	0.0000	9.7888
Total	**7.4600e-003**	**0.0720**	**0.0693**	**1.1000e-004**		**3.8800e-003**	**3.8800e-003**		**3.6300e-003**	**3.6300e-003**	**0.0000**	**9.7233**	**9.7233**	**2.6200e-003**	**0.0000**	**9.7888**

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	2.4600e-003	0.0859	0.0176	2.3000e-004	5.0200e-003	2.8000e-004	5.3000e-003	1.3800e-003	2.7000e-004	1.6500e-003	0.0000	22.5762	22.5762	1.0300e-003	0.0000	22.6020
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	3.6000e-004	3.7500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0202	1.0202	3.0000e-005	0.0000	1.0209
Total	**2.9600e-003**	**0.0863**	**0.0213**	**2.4000e-004**	**6.2100e-003**	**2.9000e-004**	**6.5000e-003**	**1.7000e-003**	**2.8000e-004**	**1.9700e-003**	**0.0000**	**23.5964**	**23.5964**	**1.0600e-003**	**0.0000**	**23.6228**

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	1.3100e-003	5.6800e-003	0.0760	1.1000e-004		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	9.7233	9.7233	2.6200e-003	0.0000	9.7888
Total	**1.3100e-003**	**5.6800e-003**	**0.0760**	**1.1000e-004**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**9.7233**	**9.7233**	**2.6200e-003**	**0.0000**	**9.7888**

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	2.4600e-003	0.0859	0.0176	2.3000e-004	5.0200e-003	2.8000e-004	5.3000e-003	1.3800e-003	2.7000e-004	1.6500e-003	0.0000	22.5762	22.5762	1.0300e-003	0.0000	22.6020

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	3.6000e-004	3.7500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0202	1.0202	3.0000e-005	0.0000	1.0209
Total	**2.9600e-003**	**0.0863**	**0.0213**	**2.4000e-004**	**6.2100e-003**	**2.9000e-004**	**6.5000e-003**	**1.7000e-003**	**2.8000e-004**	**1.9700e-003**	**0.0000**	**23.5964**	**23.5964**	**1.0600e-003**	**0.0000**	**23.6228**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0113	0.0000	0.0113	6.2100e-003	0.0000	6.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.8300e-003	0.0950	0.0373	1.0000e-004		3.7300e-003	3.7300e-003		3.4300e-003	3.4300e-003	0.0000	8.6022	8.6022	2.7800e-003	0.0000	8.6718
Total	**7.8300e-003**	**0.0950**	**0.0373**	**1.0000e-004**	**0.0113**	**3.7300e-003**	**0.0150**	**6.2100e-003**	**3.4300e-003**	**9.6400e-003**	**0.0000**	**8.6022**	**8.6022**	**2.7800e-003**	**0.0000**	**8.6718**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.6300e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4421	0.4421	1.0000e-005	0.0000	0.4424
Total	**2.2000e-004**	**1.6000e-004**	**1.6300e-003**	**0.0000**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4421**	**0.4421**	**1.0000e-005**	**0.0000**	**0.4424**

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					5.0800e-003	0.0000	5.0800e-003	1.4000e-003	0.0000	1.4000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-003	5.1900e-003	0.0487	1.0000e-004		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	8.6022	8.6022	2.7800e-003	0.0000	8.6717
Total	**1.2000e-003**	**5.1900e-003**	**0.0487**	**1.0000e-004**	**5.0800e-003**	**1.6000e-004**	**5.2400e-003**	**1.4000e-003**	**1.6000e-004**	**1.5600e-003**	**0.0000**	**8.6022**	**8.6022**	**2.7800e-003**	**0.0000**	**8.6717**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.6300e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4421	0.4421	1.0000e-005	0.0000	0.4424
Total	**2.2000e-004**	**1.6000e-004**	**1.6300e-003**	**0.0000**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4421**	**0.4421**	**1.0000e-005**	**0.0000**	**0.4424**

3.4 Grading - 2020

Unmitigated Construction On-Site

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

Category	tons/yr										MT/yr					
Fugitive Dust					0.4849	0.0000	0.4849	0.1124	0.0000	0.1124	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1683	1.8878	1.3267	2.4800e-003		0.0829	0.0829		0.0763	0.0763	0.0000	217.6854	217.6854	0.0704	0.0000	219.4455
Total	**0.1683**	**1.8878**	**1.3267**	**2.4800e-003**	**0.4849**	**0.0829**	**0.5678**	**0.1124**	**0.0763**	**0.1886**	**0.0000**	**217.6854**	**217.6854**	**0.0704**	**0.0000**	**219.4455**

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	0.0337	1.1751	0.2407	3.1900e-003	0.0686	3.8200e-003	0.0725	0.0189	3.6500e-003	0.0225	0.0000	308.8586	308.8586	0.0141	0.0000	309.2118
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	0.0105	7.5200e-003	0.0788	2.4000e-004	0.0250	1.6000e-004	0.0251	6.6400e-003	1.5000e-004	6.7900e-003	0.0000	21.4247	21.4247	5.3000e-004	0.0000	21.4379
Total	**0.0441**	**1.1826**	**0.3195**	**3.4300e-003**	**0.0936**	**3.9800e-003**	**0.0976**	**0.0255**	**3.8000e-003**	**0.0293**	**0.0000**	**330.2833**	**330.2833**	**0.0147**	**0.0000**	**330.6497**

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					0.2182	0.0000	0.2182	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0308	0.1464	1.3534	2.4800e-003		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	217.6851	217.6851	0.0704	0.0000	219.4452

Total	**0.0308**	**0.1464**	**1.3534**	**2.4800e-003**	**0.2182**	**4.0600e-003**	**0.2223**	**0.0253**	**4.0600e-003**	**0.0293**	**0.0000**	**217.6851**	**217.6851**	**0.0704**	**0.0000**	**219.4452**

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	0.0337	1.1751	0.2407	3.1900e-003	0.0686	3.8200e-003	0.0725	0.0189	3.6500e-003	0.0225	0.0000	308.8586	308.8586	0.0141	0.0000	309.2118
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	0.0105	7.5200e-003	0.0788	2.4000e-004	0.0250	1.6000e-004	0.0251	6.6400e-003	1.5000e-004	6.7900e-003	0.0000	21.4247	21.4247	5.3000e-004	0.0000	21.4379
Total	**0.0441**	**1.1826**	**0.3195**	**3.4300e-003**	**0.0936**	**3.9800e-003**	**0.0976**	**0.0255**	**3.8000e-003**	**0.0293**	**0.0000**	**330.2833**	**330.2833**	**0.0147**	**0.0000**	**330.6497**

3.5 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.2500e-003	0.0520	0.0661	1.0000e-004		2.7500e-003	2.7500e-003		2.5300e-003	2.5300e-003	0.0000	8.8519	8.8519	2.8600e-003	0.0000	8.9235
Total	**5.2500e-003**	**0.0520**	**0.0661**	**1.0000e-004**		**2.7500e-003**	**2.7500e-003**		**2.5300e-003**	**2.5300e-003**	**0.0000**	**8.8519**	**8.8519**	**2.8600e-003**	**0.0000**	**8.9235**

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	3.6000e-004	3.7500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0202	1.0202	3.0000e-005	0.0000	1.0209
Total	**5.0000e-004**	**3.6000e-004**	**3.7500e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.0202**	**1.0202**	**3.0000e-005**	**0.0000**	**1.0209**

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	1.2400e-003	5.3600e-003	0.0763	1.0000e-004		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	8.8519	8.8519	2.8600e-003	0.0000	8.9235
Total	**1.2400e-003**	**5.3600e-003**	**0.0763**	**1.0000e-004**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**8.8519**	**8.8519**	**2.8600e-003**	**0.0000**	**8.9235**

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	3.6000e-004	3.7500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0202	1.0202	3.0000e-005	0.0000	1.0209
Total	**5.0000e-004**	**3.6000e-004**	**3.7500e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.0202**	**1.0202**	**3.0000e-005**	**0.0000**	**1.0209**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0116	0.0941	0.0835	1.4000e-004		5.2700e-003	5.2700e-003		5.0300e-003	5.0300e-003	0.0000	11.5602	11.5602	2.4400e-003	0.0000	11.6210
Total	**0.0116**	**0.0941**	**0.0835**	**1.4000e-004**		**5.2700e-003**	**5.2700e-003**		**5.0300e-003**	**5.0300e-003**	**0.0000**	**11.5602**	**11.5602**	**2.4400e-003**	**0.0000**	**11.6210**

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	3.0000e-005	1.0200e-003	2.1000e-004	0.0000	1.7900e-003	0.0000	1.8000e-003	4.4000e-004	0.0000	4.4000e-004	0.0000	0.2670	0.2670	1.0000e-005	0.0000	0.2673
Vendor	1.7500e-003	0.0502	0.0134	1.2000e-004	2.9000e-003	2.5000e-004	3.1500e-003	8.4000e-004	2.4000e-004	1.0800e-003	0.0000	11.5296	11.5296	5.3000e-004	0.0000	11.5429
Worker	5.8600e-003	4.2100e-003	0.0442	1.3000e-004	0.0140	9.0000e-005	0.0141	3.7200e-003	8.0000e-005	3.8000e-003	0.0000	11.9978	11.9978	2.9000e-004	0.0000	12.0052
Total	**7.6400e-003**	**0.0554**	**0.0577**	**2.5000e-004**	**0.0187**	**3.4000e-004**	**0.0190**	**5.0000e-003**	**3.2000e-004**	**5.3200e-003**	**0.0000**	**23.7944**	**23.7944**	**8.3000e-004**	**0.0000**	**23.8153**

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	1.7300e-003	0.0167	0.0852	1.4000e-004		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	11.5602	11.5602	2.4400e-003	0.0000	11.6210
Total	**1.7300e-003**	**0.0167**	**0.0852**	**1.4000e-004**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**11.5602**	**11.5602**	**2.4400e-003**	**0.0000**	**11.6210**

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	3.0000e-005	1.0200e-003	2.1000e-004	0.0000	1.7900e-003	0.0000	1.8000e-003	4.4000e-004	0.0000	4.4000e-004	0.0000	0.2670	0.2670	1.0000e-005	0.0000	0.2673
Vendor	1.7500e-003	0.0502	0.0134	1.2000e-004	2.9000e-003	2.5000e-004	3.1500e-003	8.4000e-004	2.4000e-004	1.0800e-003	0.0000	11.5296	11.5296	5.3000e-004	0.0000	11.5429
Worker	5.8600e-003	4.2100e-003	0.0442	1.3000e-004	0.0140	9.0000e-005	0.0141	3.7200e-003	8.0000e-005	3.8000e-003	0.0000	11.9978	11.9978	2.9000e-004	0.0000	12.0052
Total	**7.6400e-003**	**0.0554**	**0.0577**	**2.5000e-004**	**0.0187**	**3.4000e-004**	**0.0190**	**5.0000e-003**	**3.2000e-004**	**5.3200e-003**	**0.0000**	**23.7944**	**23.7944**	**8.3000e-004**	**0.0000**	**23.8153**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3001	2.4972	2.3773	3.9800e-003		0.1313	0.1313		0.1252	0.1252	0.0000	335.2699	335.2699	0.0690	0.0000	336.9951
Total	**0.3001**	**2.4972**	**2.3773**	**3.9800e-003**		**0.1313**	**0.1313**		**0.1252**	**0.1252**	**0.0000**	**335.2699**	**335.2699**	**0.0690**	**0.0000**	**336.9951**

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	8.0000e-004	0.0271	5.9100e-003	8.0000e-005	2.2100e-003	8.0000e-005	2.2900e-003	5.9000e-004	8.0000e-005	6.7000e-004	0.0000	7.6433	7.6433	3.5000e-004	0.0000	7.6520
Vendor	0.0417	1.3142	0.3498	3.4500e-003	0.0841	2.9100e-003	0.0871	0.0243	2.7900e-003	0.0271	0.0000	331.2727	331.2727	0.0144	0.0000	331.6336
Worker	0.1576	0.1091	1.1702	3.7100e-003	0.4057	2.5500e-003	0.4083	0.1079	2.3500e-003	0.1103	0.0000	335.8605	335.8605	7.6400e-003	0.0000	336.0515
Total	**0.2001**	**1.4505**	**1.5260**	**7.2400e-003**	**0.4921**	**5.5400e-003**	**0.4976**	**0.1328**	**5.2200e-003**	**0.1380**	**0.0000**	**674.7765**	**674.7765**	**0.0224**	**0.0000**	**675.3371**

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	0.0502	0.4830	2.4699	3.9800e-003		5.7400e-003	5.7400e-003		5.7400e-003	5.7400e-003	0.0000	335.2695	335.2695	0.0690	0.0000	336.9947

Total	**0.0502**	**0.4830**	**2.4699**	**3.9800e-003**		**5.7400e-003**	**5.7400e-003**		**5.7400e-003**	**5.7400e-003**	**0.0000**	**335.2695**	**335.2695**	**0.0690**	**0.0000**	**336.9947**

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	8.0000e-004	0.0271	5.9100e-003	8.0000e-005	2.2100e-003	8.0000e-005	2.2900e-003	5.9000e-004	8.0000e-005	6.7000e-004	0.0000	7.6433	7.6433	3.5000e-004	0.0000	7.6520
Vendor	0.0417	1.3142	0.3498	3.4500e-003	0.0841	2.9100e-003	0.0871	0.0243	2.7900e-003	0.0271	0.0000	331.2727	331.2727	0.0144	0.0000	331.6336
Worker	0.1576	0.1091	1.1702	3.7100e-003	0.4057	2.5500e-003	0.4083	0.1079	2.3500e-003	0.1103	0.0000	335.8605	335.8605	7.6400e-003	0.0000	336.0515
Total	**0.2001**	**1.4505**	**1.5260**	**7.2400e-003**	**0.4921**	**5.5400e-003**	**0.4976**	**0.1328**	**5.2200e-003**	**0.1380**	**0.0000**	**674.7765**	**674.7765**	**0.0224**	**0.0000**	**675.3371**

3.6 Building Construction - 2022

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	0.0936	0.7803	0.8093	1.3700e-003		0.0386	0.0386		0.0368	0.0368	0.0000	115.6417	115.6417	0.0235	0.0000	116.2282
Total	**0.0936**	**0.7803**	**0.8093**	**1.3700e-003**		**0.0386**	**0.0386**		**0.0368**	**0.0368**	**0.0000**	**115.6417**	**115.6417**	**0.0235**	**0.0000**	**116.2282**

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	2.6000e-004	8.6000e-003	2.0000e-003	3.0000e-005	1.9300e-003	3.0000e-005	1.9500e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	2.6001	2.6001	1.2000e-004	0.0000	2.6030
Vendor	0.0134	0.4284	0.1136	1.1800e-003	0.0290	8.7000e-004	0.0299	8.3900e-003	8.4000e-004	9.2200e-003	0.0000	113.1391	113.1391	4.7500e-003	0.0000	113.2579
Worker	0.0507	0.0338	0.3709	1.2300e-003	0.1399	8.6000e-004	0.1408	0.0372	7.9000e-004	0.0380	0.0000	111.6072	111.6072	2.3600e-003	0.0000	111.6662
Total	**0.0644**	**0.4707**	**0.4865**	**2.4400e-003**	**0.1709**	**1.7600e-003**	**0.1726**	**0.0461**	**1.6500e-003**	**0.0477**	**0.0000**	**227.3464**	**227.3464**	**7.2300e-003**	**0.0000**	**227.5272**

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	0.0173	0.1666	0.8517	1.3700e-003		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	115.6416	115.6416	0.0235	0.0000	116.2281
Total	**0.0173**	**0.1666**	**0.8517**	**1.3700e-003**		**1.9800e-003**	**1.9800e-003**		**1.9800e-003**	**1.9800e-003**	**0.0000**	**115.6416**	**115.6416**	**0.0235**	**0.0000**	**116.2281**

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	2.6000e-004	8.6000e-003	2.0000e-003	3.0000e-005	1.9300e-003	3.0000e-005	1.9500e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	2.6001	2.6001	1.2000e-004	0.0000	2.6030
Vendor	0.0134	0.4284	0.1136	1.1800e-003	0.0290	8.7000e-004	0.0299	8.3900e-003	8.4000e-004	9.2200e-003	0.0000	113.1391	113.1391	4.7500e-003	0.0000	113.2579
Worker	0.0507	0.0338	0.3709	1.2300e-003	0.1399	8.6000e-004	0.1408	0.0372	7.9000e-004	0.0380	0.0000	111.6072	111.6072	2.3600e-003	0.0000	111.6662
Total	**0.0644**	**0.4707**	**0.4865**	**2.4400e-003**	**0.1709**	**1.7600e-003**	**0.1726**	**0.0461**	**1.6500e-003**	**0.0477**	**0.0000**	**227.3464**	**227.3464**	**7.2300e-003**	**0.0000**	**227.5272**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3200e-003	0.0235	0.0270	4.0000e-005		1.2200e-003	1.2200e-003		1.1300e-003	1.1300e-003	0.0000	3.6576	3.6576	1.1700e-003	0.0000	3.6868
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3200e-003**	**0.0235**	**0.0270**	**4.0000e-005**		**1.2200e-003**	**1.2200e-003**		**1.1300e-003**	**1.1300e-003**	**0.0000**	**3.6576**	**3.6576**	**1.1700e-003**	**0.0000**	**3.6868**

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	4.0000e-005	1.3200e-003	2.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.3728	0.3728	2.0000e-005	0.0000	0.3732
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	1.8000e-004	1.2000e-004	1.3400e-003	0.0000	4.6000e-004	0.0000	4.7000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.3841	0.3841	1.0000e-005	0.0000	0.3843
Total	**2.2000e-004**	**1.4400e-003**	**1.6300e-003**	**0.0000**	**6.2000e-004**	**0.0000**	**6.3000e-004**	**1.6000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.7568**	**0.7568**	**3.0000e-005**	**0.0000**	**0.7575**

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	5.0000e-004	2.1700e-003	0.0309	4.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	3.6576	3.6576	1.1700e-003	0.0000	3.6868
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0000e-004**	**2.1700e-003**	**0.0309**	**4.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**3.6576**	**3.6576**	**1.1700e-003**	**0.0000**	**3.6868**

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	4.0000e-005	1.3200e-003	2.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.3728	0.3728	2.0000e-005	0.0000	0.3732
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	1.8000e-004	1.2000e-004	1.3400e-003	0.0000	4.6000e-004	0.0000	4.7000e-004	1.2000e-004	0.0000	1.3000e-004	0.0000	0.3841	0.3841	1.0000e-005	0.0000	0.3843
Total	**2.2000e-004**	**1.4400e-003**	**1.6300e-003**	**0.0000**	**6.2000e-004**	**0.0000**	**6.3000e-004**	**1.6000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.7568**	**0.7568**	**3.0000e-005**	**0.0000**	**0.7575**

3.7 Paving - 2022

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	2.5100e-003	0.0248	0.0328	5.0000e-005		1.2500e-003	1.2500e-003		1.1500e-003	1.1500e-003	0.0000	4.4719	4.4719	1.4300e-003	0.0000	4.5075
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.5100e-003**	**0.0248**	**0.0328**	**5.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.1500e-003**	**1.1500e-003**	**0.0000**	**4.4719**	**4.4719**	**1.4300e-003**	**0.0000**	**4.5075**

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	4.0000e-005	1.4900e-003	3.5000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.4494	0.4494	2.0000e-005	0.0000	0.4500
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	2.1000e-004	1.4000e-004	1.5000e-003	1.0000e-005	5.7000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4524	0.4524	1.0000e-005	0.0000	0.4526
Total	**2.5000e-004**	**1.6300e-003**	**1.8500e-003**	**1.0000e-005**	**7.4000e-004**	**0.0000**	**7.4000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.9018**	**0.9018**	**3.0000e-005**	**0.0000**	**0.9026**

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	6.1000e-004	2.6500e-003	0.0378	5.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	4.4719	4.4719	1.4300e-003	0.0000	4.5075

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.1000e-004**	**2.6500e-003**	**0.0378**	**5.0000e-005**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**	**0.0000**	**4.4719**	**4.4719**	**1.4300e-003**	**0.0000**	**4.5075**

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	4.0000e-005	1.4900e-003	3.5000e-004	0.0000	1.7000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.4494	0.4494	2.0000e-005	0.0000	0.4500
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	2.1000e-004	1.4000e-004	1.5000e-003	1.0000e-005	5.7000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4524	0.4524	1.0000e-005	0.0000	0.4526
Total	**2.5000e-004**	**1.6300e-003**	**1.8500e-003**	**1.0000e-005**	**7.4000e-004**	**0.0000**	**7.4000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.9018**	**0.9018**	**3.0000e-005**	**0.0000**	**0.9026**

3.8 Architectural Coating - 2022

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	2.9021					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0425	0.3534	0.5277	8.4000e-004		0.0162	0.0162		0.0160	0.0160	0.0000	73.0240	73.0240	0.0122	0.0000	73.3287
Total	**2.9446**	**0.3534**	**0.5277**	**8.4000e-004**		**0.0162**	**0.0162**		**0.0160**	**0.0160**	**0.0000**	**73.0240**	**73.0240**	**0.0122**	**0.0000**	**73.3287**

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	0.0146	9.7000e-003	0.1066	3.5000e-004	0.0402	2.5000e-004	0.0405	0.0107	2.3000e-004	0.0109	0.0000	32.0776	32.0776	6.8000e-004	0.0000	32.0946
Total	**0.0146**	**9.7000e-003**	**0.1066**	**3.5000e-004**	**0.0402**	**2.5000e-004**	**0.0405**	**0.0107**	**2.3000e-004**	**0.0109**	**0.0000**	**32.0776**	**32.0776**	**6.8000e-004**	**0.0000**	**32.0946**

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	2.9021					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.2064	0.5661	8.4000e-004		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	73.0239	73.0239	0.0122	0.0000	73.3286
Total	**2.9153**	**0.2064**	**0.5661**	**8.4000e-004**		**1.2200e-003**	**1.2200e-003**		**1.2200e-003**	**1.2200e-003**	**0.0000**	**73.0239**	**73.0239**	**0.0122**	**0.0000**	**73.3286**

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	0.0146	9.7000e-003	0.1066	3.5000e-004	0.0402	2.5000e-004	0.0405	0.0107	2.3000e-004	0.0109	0.0000	32.0776	32.0776	6.8000e-004	0.0000	32.0946
Total	**0.0146**	**9.7000e-003**	**0.1066**	**3.5000e-004**	**0.0402**	**2.5000e-004**	**0.0405**	**0.0107**	**2.3000e-004**	**0.0109**	**0.0000**	**32.0776**	**32.0776**	**6.8000e-004**	**0.0000**	**32.0946**

3.8 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3349					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6100e-003	0.0381	0.0608	1.0000e-004		1.6200e-003	1.6200e-003		1.6100e-003	1.6100e-003	0.0000	8.4259	8.4259	1.3800e-003	0.0000	8.4603
Total	**0.3395**	**0.0381**	**0.0608**	**1.0000e-004**		**1.6200e-003**	**1.6200e-003**		**1.6100e-003**	**1.6100e-003**	**0.0000**	**8.4259**	**8.4259**	**1.3800e-003**	**0.0000**	**8.4603**

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	1.5700e-003	1.0100e-003	0.0113	4.0000e-005	4.6400e-003	3.0000e-005	4.6700e-003	1.2300e-003	3.0000e-005	1.2600e-003	0.0000	3.5607	3.5607	7.0000e-005	0.0000	3.5624
Total	**1.5700e-003**	**1.0100e-003**	**0.0113**	**4.0000e-005**	**4.6400e-003**	**3.0000e-005**	**4.6700e-003**	**1.2300e-003**	**3.0000e-005**	**1.2600e-003**	**0.0000**	**3.5607**	**3.5607**	**7.0000e-005**	**0.0000**	**3.5624**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3349					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5200e-003	0.0238	0.0653	1.0000e-004		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	8.4258	8.4258	1.3800e-003	0.0000	8.4603
Total	**0.3364**	**0.0238**	**0.0653**	**1.0000e-004**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**8.4258**	**8.4258**	**1.3800e-003**	**0.0000**	**8.4603**

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	1.5700e-003	1.0100e-003	0.0113	4.0000e-005	4.6400e-003	3.0000e-005	4.6700e-003	1.2300e-003	3.0000e-005	1.2600e-003	0.0000	3.5607	3.5607	7.0000e-005	0.0000	3.5624
Total	**1.5700e-003**	**1.0100e-003**	**0.0113**	**4.0000e-005**	**4.6400e-003**	**3.0000e-005**	**4.6700e-003**	**1.2300e-003**	**3.0000e-005**	**1.2600e-003**	**0.0000**	**3.5607**	**3.5607**	**7.0000e-005**	**0.0000**	**3.5624**

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	0.7129	2.6877	7.8280	0.0282	2.7547	0.0223	2.7769	0.7373	0.0207	0.7580	0.0000	2,588.2197	2,588.2197	0.0827	0.0000	2,590.2883
Unmitigated	0.7129	2.6877	7.8280	0.0282	2.7547	0.0223	2.7769	0.7373	0.0207	0.7580	0.0000	2,588.2197	2,588.2197	0.0827	0.0000	2,590.2883

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,161.25	2,076.75	1904.50	4,879,045	4,879,045
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	1,793.81	1,701.53	826.88	2,529,493	2,529,493
Total	3,955.06	3,778.28	2,731.38	7,408,539	7,408,539

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704
Enclosed Parking with Elevator	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704
Strip Mall	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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	323.8328	323.8328	0.0324	6.7000e-003	326.6390
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	501.6558	501.6558	0.0502	0.0104	506.0029
NaturalGas Mitigated	0.0157	0.1341	0.0590	8.5000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	154.9549	154.9549	2.9700e-003	2.8400e-003	155.8757
NaturalGas Unmitigated	0.0157	0.1341	0.0590	8.5000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	154.9549	154.9549	2.9700e-003	2.8400e-003	155.8757

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					
Apartments Mid Rise	2.80782e+006	0.0151	0.1294	0.0551	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	149.8360	149.8360	2.8700e-003	2.7500e-003	150.7264
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Strip Mall	95923.4	5.2000e-004	4.7000e-003	3.9500e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1188	5.1188	1.0000e-004	9.0000e-005	5.1493
Total		**0.0157**	**0.1341**	**0.0590**	**8.6000e-004**		**0.0108**	**0.0108**		**0.0108**	**0.0108**	**0.0000**	**154.9549**	**154.9549**	**2.9700e-003**	**2.8400e-003**	**155.8757**

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					
Apartments Mid Rise	2.80782e+006	0.0151	0.1294	0.0551	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	149.8360	149.8360	2.8700e-003	2.7500e-003	150.7264
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	95923.4	5.2000e-004	4.7000e-003	3.9500e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1188	5.1188	1.0000e-004	9.0000e-005	5.1493
Total		**0.0157**	**0.1341**	**0.0590**	**8.6000e-004**		**0.0108**	**0.0108**		**0.0108**	**0.0108**	**0.0000**	**154.9549**	**154.9549**	**2.9700e-003**	**2.8400e-003**	**155.8757**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.34171e+006	176.4914	0.0177	3.6500e-003	178.0208
Enclosed Parking with Elevator	2.03928e+006	268.2505	0.0268	5.5500e-003	270.5751
Strip Mall	432667	56.9138	5.6900e-003	1.1800e-003	57.4070
Total		**501.6558**	**0.0502**	**0.0104**	**506.0029**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	915922	120.4821	0.0121	2.4900e-003	121.5261
Enclosed Parking with Elevator	1.30109e+006	171.1471	0.0171	3.5400e-003	172.6301
Strip Mall	244817	32.2037	3.2200e-003	6.7000e-004	32.4827
Total		**323.8328**	**0.0324**	**6.7000e-003**	**326.6390**

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	2.9789	0.0451	3.4538	2.1800e-003		0.1610	0.1610		0.1610	0.1610	14.8167	10.0455	24.8621	0.0276	9.7000e-004	25.8427
Unmitigated	2.9789	0.0451	3.4538	2.1800e-003		0.1610	0.1610		0.1610	0.1610	14.8167	10.0455	24.8621	0.0276	9.7000e-004	25.8427

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	0.3237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8320					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.7499	0.0173	1.0326	2.0500e-003		0.1476	0.1476		0.1476	0.1476	14.8167	6.0859	20.9026	0.0238	9.7000e-004	21.7875
Landscaping	0.0734	0.0279	2.4212	1.3000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	3.9596	3.9596	3.8300e-003	0.0000	4.0553
Total	**2.9790**	**0.0451**	**3.4538**	**2.1800e-003**		**0.1610**	**0.1610**		**0.1610**	**0.1610**	**14.8167**	**10.0455**	**24.8621**	**0.0276**	**9.7000e-004**	**25.8427**

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	0.3237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8320					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.7499	0.0173	1.0326	2.0500e-003		0.1476	0.1476		0.1476	0.1476	14.8167	6.0859	20.9026	0.0238	9.7000e-004	21.7875
Landscaping	0.0734	0.0279	2.4212	1.3000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	3.9596	3.9596	3.8300e-003	0.0000	4.0553
Total	**2.9790**	**0.0451**	**3.4538**	**2.1800e-003**		**0.1610**	**0.1610**		**0.1610**	**0.1610**	**14.8167**	**10.0455**	**24.8621**	**0.0276**	**9.7000e-004**	**25.8427**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	27.9830	0.7789	0.0188	53.0484
Unmitigated	31.4322	0.7793	0.0188	56.5276

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	21.1751 / 13.3495	27.9358	0.6921	0.0167	50.2244
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.66661 / 1.63437	3.4965	0.0872	2.1100e-003	6.3031
Total		**31.4322**	**0.7793**	**0.0188**	**56.5276**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	21.1751 / 6.67475	24.8627	0.6918	0.0167	47.1248
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.66661 / 0.817187	3.1202	0.0871	2.1000e-003	5.9237
Total		**27.9830**	**0.7789**	**0.0188**	**53.0484**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	38.0202	2.2469	0.0000	94.1935
Unmitigated	38.0202	2.2469	0.0000	94.1935

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	149.5	30.3472	1.7935	0.0000	75.1838
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	37.8	7.6731	0.4535	0.0000	19.0097
Total		**38.0202**	**2.2469**	**0.0000**	**94.1935**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	149.5	30.3472	1.7935	0.0000	75.1838
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	37.8	7.6731	0.4535	0.0000	19.0097
Total		**38.0202**	**2.2469**	**0.0000**	**94.1935**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

DSP - Full Buildout with Generators, Rev 3.2020 - Santa Clara County, Annual

DSP - Full Buildout with Generators, Rev 3.2020

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	867.63	1000sqft	19.92	867,633.00	0
Enclosed Parking with Elevator	3,013.00	Space	27.12	1,205,200.00	0
Parking Lot	22.00	Space	0.20	8,800.00	0
Apartments Mid Rise	843.00	Dwelling Unit	22.18	981,575.00	2411
Strip Mall	253.05	1000sqft	5.81	253,054.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 = 290

Land Use - Applicant provided land use from March 2020, default sqft for paking

Construction Phase - Operational model output no construction needed

Off-road Equipment - no construction equipment

Vehicle Trips - After reductions, Res = 3.97, 3.81, 3.50, Office = 9.00, 2.01, 0.86 Retail = 35.03, 33.23, 16.15

Woodstoves - No Wood all gas

Consumer Products - 0.0000175 factor for SC County

Energy Use -

Water And Wastewater - WTP Treatment 100% aerobic

Area Mitigation -

Energy Mitigation - Green Building Measures - energy efficient lighting, appliances, installing solar panels, 90% represents SVCE and is a conservative estimate

Water Mitigation - Green Building Measures - water efficient fixtures and landscaping

Stationary Sources - Emergency Generators and Fire Pumps - Altair- 150kw 185hp gen, Mathilda- 100kw 152hp gen, Macys- 2 150kw 240hp gens, Redwood- 1,000kw 1,528hp gen, Murphy- 450kw 555hp gen

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	60.00	0.00
tblConsumerProducts	ROG_EF	2.14E-05	1.75E-05
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	126.45	269.76
tblFireplaces	NumberWood	143.31	0.00
tblLandUse	LandUseSquareFeet	867,630.00	867,633.00
tblLandUse	LandUseSquareFeet	843,000.00	981,575.00
tblLandUse	LandUseSquareFeet	253,050.00	253,054.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	152.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,528.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	185.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	240.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	240.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	555.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00

tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	6.39	3.81
tblVehicleTrips	ST_TR	2.46	2.01
tblVehicleTrips	ST_TR	42.04	33.23
tblVehicleTrips	SU_TR	5.86	3.50
tblVehicleTrips	SU_TR	1.05	0.86
tblVehicleTrips	SU_TR	20.43	16.15
tblVehicleTrips	WD_TR	6.65	3.97
tblVehicleTrips	WD_TR	11.03	9.00
tblVehicleTrips	WD_TR	44.32	35.03
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercept	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercept	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercept	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercept	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercept	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	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	8.2883	0.1015	6.3072	5.2000e-004		0.0372	0.0372		0.0372	0.0372	0.0000	43.9755	43.9755	0.0107	6.2000e-004	44.4257
Energy	0.1191	1.0612	0.7523	6.5000e-003		0.0823	0.0823		0.0823	0.0823	0.0000	4,956.5749	4,956.5749	0.4004	0.0998	4,996.3169
Mobile	3.2902	12.4074	36.1540	0.1304	12.7289	0.1029	12.8318	3.4070	0.0957	3.5027	0.0000	11,958.0153	11,958.0153	0.3822	0.0000	11,967.5689
Stationary	0.1190	0.4377	0.3101	5.7000e-004		0.0175	0.0175		0.0175	0.0175	0.0000	55.2156	55.2156	7.7400e-003	0.0000	55.4091
Waste						0.0000	0.0000		0.0000	0.0000	296.4439	0.0000	296.4439	17.5193	0.0000	734.4273
Water						0.0000	0.0000		0.0000	0.0000	80.6229	226.9409	307.5638	0.3002	0.1800	368.7156
Total	**11.8166**	**14.0078**	**43.5237**	**0.1380**	**12.7289**	**0.2398**	**12.9687**	**3.4070**	**0.2327**	**3.6397**	**377.0668**	**17,240.7221**	**17,617.7890**	**18.6205**	**0.2804**	**18,166.8636**

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	8.2883	0.1015	6.3072	5.20E-04		0.0372	0.0372		0.0372	0.0372	0	43.9755	43.9755	0.0107	6.20E-04	44.4257

Energy	0.1191	1.0612	0.7523	6.50E-03		0.0823	0.0823		0.0823	0.0823	0	1,507.51	1,507.51	0.0555	0.0284	1,517.36
Mobile	3.2902	12.4074	36.154	0.1304	12.7289	0.1029	12.8318	3.407	0.0957	3.5027	0	11,958.02	11,958.02	0.3822	0	11,967.57
Stationary	0.119	0.4377	0.3101	5.70E-04		0.0175	0.0175		0.0175	0.0175	0	55.2156	55.2156	7.74E-03	0	55.4091
Waste						0	0		0	0	296.4439	0	296.4439	17.5193	0	734.4273
Water						0	0		0	0	80.6229	194.5684	275.1913	0.297	0.1794	336.0626
Total	**11.8166**	**14.0078**	**43.5237**	**0.138**	**12.7289**	**0.2398**	**12.9687**	**3.407**	**0.2327**	**3.6397**	**377.0668**	**13,759.28**	**14,136.35**	**18.2723**	**0.2084**	**14,655.25**

	ROG	NOx	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**	**20.19**	**19.76**	**1.87**	**25.69**	**19.33**

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	3.2902	12.4074	36.1540	0.1304	12.7289	0.1029	12.8318	3.4070	0.0957	3.5027	0.0000	11,958.0153	11,958.0153	0.3822	0.0000	11,967.5689
Unmitigated	3.2902	12.4074	36.1540	0.1304	12.7289	0.1029	12.8318	3.4070	0.0957	3.5027	0.0000	11,958.0153	11,958.0153	0.3822	0.0000	11,967.5689

4.2 Trip Summary Information

	Average Daily Trip Rate	Unmitigated	Mitigated

Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	3,346.71	3,211.83	2950.50	7,554,356	7,554,356
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	7,808.67	1,743.94	746.16	14,179,239	14,179,239
Parking Lot	0.00	0.00	0.00		
Strip Mall	8,864.34	8,408.85	4086.76	12,500,078	12,500,078
Total	20,019.72	13,364.62	7,783.42	34,233,673	34,233,673

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704
Enclosed Parking with Elevator	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704
General Office Building	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704
Parking Lot	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704
Strip Mall	0.614951	0.035734	0.181842	0.104158	0.013506	0.005015	0.012793	0.021727	0.002177	0.001514	0.005249	0.000632	0.000704

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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	328.9165	328.9165	0.0329	6.8100e-003	331.7667
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,777.9847	3,777.9847	0.3778	0.0782	3,810.7229
NaturalGas Mitigated	0.1191	1.0612	0.7523	6.5000e-003		0.0823	0.0823		0.0823	0.0823	0.0000	1,178.5902	1,178.5902	0.0226	0.0216	1,185.5940
NaturalGas Unmitigated	0.1191	1.0612	0.7523	6.5000e-003		0.0823	0.0823		0.0823	0.0823	0.0000	1,178.5902	1,178.5902	0.0226	0.0216	1,185.5940

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					
Apartments Mid Rise	7.28306e+006	0.0393	0.3356	0.1428	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	388.6516	388.6516	7.4500e-003	7.1300e-003	390.9612
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.42032e+007	0.0766	0.6962	0.5848	4.1800e-003		0.0529	0.0529		0.0529	0.0529	0.0000	757.9343	757.9343	0.0145	0.0139	762.4383
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	599738	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003	0.0000	32.0043	32.0043	6.1000e-004	5.9000e-004	32.1945
Total		**0.1191**	**1.0612**	**0.7524**	**6.5000e-003**		**0.0823**	**0.0823**		**0.0823**	**0.0823**	**0.0000**	**1,178.5902**	**1,178.5902**	**0.0226**	**0.0216**	**1,185.5940**

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					
Apartments Mid Rise	7.28306e+006	0.0393	0.3356	0.1428	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	388.6516	388.6516	7.4500e-003	7.1300e-003	390.9612
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.42032e+007	0.0766	0.6962	0.5848	4.1800e-003		0.0529	0.0529		0.0529	0.0529	0.0000	757.9343	757.9343	0.0145	0.0139	762.4383
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	599738	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003	0.0000	32.0043	32.0043	6.1000e-004	5.9000e-004	32.1945
Total		**0.1191**	**1.0612**	**0.7524**	**6.5000e-003**		**0.0823**	**0.0823**		**0.0823**	**0.0823**	**0.0000**	**1,178.5902**	**1,178.5902**	**0.0226**	**0.0216**	**1,185.5940**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	3.4802e+006	457.7916	0.0458	9.4700e-003	461.7586
Enclosed Parking with Elevator	7.06247e+006	929.0102	0.0929	0.0192	937.0605
General Office Building	1.54699e+007	2,034.9378	0.2035	0.0421	2,052.5716
Parking Lot	3080	0.4052	4.0000e-005	1.0000e-005	0.4087
Strip Mall	2.70515e+006	355.8399	0.0356	7.3600e-003	358.9234
Total		**3,777.9847**	**0.3778**	**0.0782**	**3,810.7229**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	316768	41.6683	4.1700e-003	8.6000e-004	42.0293
Enclosed Parking with Elevator	600792	79.0293	7.9000e-003	1.6400e-003	79.7141
General Office Building	1.37867e+006	181.3526	0.0181	3.7500e-003	182.9241
Parking Lot	154	0.0203	0.0000	0.0000	0.0204
Strip Mall	204088	26.8461	2.6800e-003	5.6000e-004	27.0787
Total		**328.9165**	**0.0329**	**6.8100e-003**	**331.7667**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	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	8.2883	0.1015	6.3072	5.2000e-004		0.0372	0.0372		0.0372	0.0372	0.0000	43.9755	43.9755	0.0107	6.2000e-004	44.4257
Unmitigated	8.2883	0.1015	6.3072	5.2000e-004		0.0372	0.0372		0.0372	0.0372	0.0000	43.9755	43.9755	0.0107	6.2000e-004	44.4257

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	1.3007					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.7926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.4000e-003	0.0291	0.0124	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	33.6767	33.6767	6.5000e-004	6.2000e-004	33.8768
Landscaping	0.1917	0.0724	6.2949	3.3000e-004		0.0348	0.0348		0.0348	0.0348	0.0000	10.2988	10.2988	0.0100	0.0000	10.5489
Total	**8.2883**	**0.1015**	**6.3072**	**5.2000e-004**		**0.0372**	**0.0372**		**0.0372**	**0.0372**	**0.0000**	**43.9755**	**43.9755**	**0.0107**	**6.2000e-004**	**44.4257**

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	1.3007					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.7926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.4000e-003	0.0291	0.0124	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	33.6767	33.6767	6.5000e-004	6.2000e-004	33.8768
Landscaping	0.1917	0.0724	6.2949	3.3000e-004		0.0348	0.0348		0.0348	0.0348	0.0000	10.2988	10.2988	0.0100	0.0000	10.5489
Total	**8.2883**	**0.1015**	**6.3072**	**5.2000e-004**		**0.0372**	**0.0372**		**0.0372**	**0.0372**	**0.0000**	**43.9755**	**43.9755**	**0.0107**	**6.2000e-004**	**44.4257**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	275.1913	0.2970	0.1794	336.0626
Unmitigated	307.5638	0.3002	0.1800	368.7156

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	54.9248 / 34.6265	74.4684	0.0724	0.0434	89.2107
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	154.207 / 94.514	207.8331	0.2031	0.1218	249.2128
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000

Strip Mall	18.7441 / 11.4883	25.2623	0.0247	0.0148	30.2921
Total		**307.5638**	**0.3002**	**0.1800**	**368.7156**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	54.9248 / 17.3133	66.4975	0.0716	0.0432	81.1707
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	154.207 / 47.257	186.0761	0.2009	0.1214	227.2673
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	18.7441 / 5.74414	22.6178	0.0244	0.0148	27.6246
Total		**275.1913**	**0.2970**	**0.1794**	**336.0626**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			

Mitigated	296.4439	17.5193	0.0000	734.4273
Unmitigated	296.4439	17.5193	0.0000	734.4273

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	387.78	78.7158	4.6520	0.0000	195.0152
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	806.9	163.7934	9.6799	0.0000	405.7912
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	265.7	53.9347	3.1875	0.0000	133.6209
Total		**296.4440**	**17.5193**	**0.0000**	**734.4273**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	387.78	78.7158	4.6520	0.0000	195.0152
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000

General Office Building	806.9	163.7934	9.6799	0.0000	405.7912
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	265.7	53.9347	3.1875	0.0000	133.6209
Total		**296.4440**	**17.5193**	**0.0000**	**734.4273**

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	50	152	0.73	Diesel
Emergency Generator	1	0	50	185	0.73	Diesel
Emergency Generator	1	0	50	240	0.73	Diesel
Emergency Generator	1	0	50	240	0.73	Diesel
Emergency Generator	1	0	50	555	0.73	Diesel
Emergency Generator	1	0	50	1528	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 (100 - 175 HP)	6.2400e-003	0.0174	0.0226	3.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004	0.0000	2.8941	2.8941	4.1000e-004	0.0000	2.9042
Emergency Generator - Diesel (175 - 300 HP)	0.0273	0.0763	0.0696	1.3000e-004		4.0100e-003	4.0100e-003		4.0100e-003	4.0100e-003	0.0000	12.6615	12.6615	1.7800e-003	0.0000	12.7059
Emergency Generator - Diesel (300 - 600 HP)	0.0228	0.0636	0.0581	1.1000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	10.5671	10.5671	1.4800e-003	0.0000	10.6042
Emergency Generator - Diesel (750 - 9999 HP)	0.0627	0.2803	0.1598	3.0000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	29.0929	29.0929	4.0800e-003	0.0000	29.1949
Total	**0.1190**	**0.4377**	**0.3101**	**5.7000e-004**		**0.0175**	**0.0175**		**0.0175**	**0.0175**	**0.0000**	**55.2156**	**55.2156**	**7.7500e-003**	**0.0000**	**55.4091**

11.0 Vegetation

DSP - Full Buildout with Generators 2030, Rev 3.2020

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	867.63	1000sqft	19.92	867,633.00	0
Enclosed Parking with Elevator	3,013.00	Space	27.12	1,205,200.00	0
Parking Lot	22.00	Space	0.20	8,800.00	0
Apartments Mid Rise	843.00	Dwelling Unit	22.18	981,575.00	2411
Strip Mall	253.05	1000sqft	5.81	253,054.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 = 290

Land Use - Applicant provided land use from March 2020, default sqft for paking

Construction Phase - Operational model output no construction needed

Off-road Equipment - no construction equipment

Vehicle Trips - After reductions, Res = 3.97, 3.81, 3.50, Office = 9.00, 2.01, 0.86 Retail = 35.03, 33.23, 16.15

Woodstoves - No Wood all gas

Consumer Products - 0.0000175 factor for SC County

Energy Use -

Water And Wastewater - WTP Treatment 100% aerobic

Area Mitigation -

Energy Mitigation - Green Building Measures - energy efficient lighting, appliances, installing solar panels, 90% represents SVCE and is a conservative estimate

Water Mitigation - Green Building Measures - water efficient fixtures and landscaping

Stationary Sources - Emergency Generators and Fire Pumps - Altair- 150kw 185hp gen, Mathilda- 100kw 152hp gen, Macys- 2 150kw 240hp gens, Redwood- 1,000kw 1,528hp gen, Murphy- 450kw 555hp gen

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	60.00	0.00
tblConsumerProducts	ROG_EF	2.14E-05	1.75E-05
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	126.45	269.76
tblFireplaces	NumberWood	143.31	0.00
tblLandUse	LandUseSquareFeet	867,630.00	867,633.00
tblLandUse	LandUseSquareFeet	843,000.00	981,575.00
tblLandUse	LandUseSquareFeet	253,050.00	253,054.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	152.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,528.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	185.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	240.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	240.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	555.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00

tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	6.39	3.81
tblVehicleTrips	ST_TR	2.46	2.01
tblVehicleTrips	ST_TR	42.04	33.23
tblVehicleTrips	SU_TR	5.86	3.50
tblVehicleTrips	SU_TR	1.05	0.86
tblVehicleTrips	SU_TR	20.43	16.15
tblVehicleTrips	WD_TR	6.65	3.97
tblVehicleTrips	WD_TR	11.03	9.00
tblVehicleTrips	WD_TR	44.32	35.03
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	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	8.2868	0.1014	6.2932	5.2000e-004		0.0372	0.0372		0.0372	0.0372	0.0000	43.9755	43.9755	0.0106	6.2000e-004	44.4239
Energy	0.1191	1.0612	0.7523	6.5000e-003		0.0823	0.0823		0.0823	0.0823	0.0000	4,956.5749	4,956.5749	0.4004	0.0998	4,996.3169
Mobile	2.4558	10.5185	26.5650	0.1114	12.7269	0.0757	12.8026	3.4059	0.0703	3.4763	0.0000	10,253.4584	10,253.4584	0.3026	0.0000	10,261.0234
Stationary	0.1190	0.4377	0.3101	5.7000e-004		0.0175	0.0175		0.0175	0.0175	0.0000	55.2156	55.2156	7.7400e-003	0.0000	55.4091
Waste						0.0000	0.0000		0.0000	0.0000	296.4439	0.0000	296.4439	17.5193	0.0000	734.4273
Water						0.0000	0.0000		0.0000	0.0000	80.6229	226.9409	307.5638	0.3002	0.1800	368.7156
Total	**10.9807**	**12.1188**	**33.9206**	**0.1190**	**12.7269**	**0.2126**	**12.9396**	**3.4059**	**0.2073**	**3.6132**	**377.0668**	**15,536.1652**	**15,913.2321**	**18.5408**	**0.2804**	**16,460.3163**

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	8.2868	0.1014	6.2932	5.2000e-004		0.0372	0.0372		0.0372	0.0372	0.0000	43.9755	43.9755	0.0106	6.2000e-004	44.4239
Energy	0.1191	1.0612	0.7523	6.5000e-003		0.0823	0.0823		0.0823	0.0823	0.0000	1,507.5067	1,507.5067	0.0555	0.0284	1,517.36
Mobile	2.4558	10.5185	26.5650	0.1114	12.7269	0.0757	12.8026	3.4059	0.0703	3.4763	0.0000	10,253.4584	10,253.4584	0.3026	0.0000	10,261.02
Stationary	0.1190	0.4377	0.3101	5.7000e-004		0.0175	0.0175		0.0175	0.0175	0.0000	55.2156	55.2156	7.7400e-003	0.0000	55.4091
Waste						0.0000	0.0000		0.0000	0.0000	296.4439	0.0000	296.4439	17.5193	0.0000	734.4273
Water						0.0000	0.0000		0.0000	0.0000	80.6229	194.5684	275.1913	0.2970	0.1794	336.0626
Total	**10.9807**	**12.1188**	**33.9206**	**0.1190**	**12.7269**	**0.2126**	**12.9396**	**3.4059**	**0.2073**	**3.6132**	**377.0668**	**12,054.7245**	**12,431.7914**	**18.1927**	**0.2084**	**12,948.71**

	ROG	NOx	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**	**22.41**	**21.88**	**1.88**	**25.69**	**21.33**

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	2.4558	10.5185	26.5650	0.1114	12.7269	0.0757	12.8026	3.4059	0.0703	3.4763	0.0000	10,253.4584	10,253.4584	0.3026	0.0000	10,261.0234
Unmitigated	2.4558	10.5185	26.5650	0.1114	12.7269	0.0757	12.8026	3.4059	0.0703	3.4763	0.0000	10,253.4584	10,253.4584	0.3026	0.0000	10,261.0234

4.2 Trip Summary Information

	Average Daily Trip Rate	Unmitigated	Mitigated

Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	3,346.71	3,211.83	2950.50	7,554,356	7,554,356
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	7,808.67	1,743.94	746.16	14,179,239	14,179,239
Parking Lot	0.00	0.00	0.00		
Strip Mall	8,864.34	8,408.85	4086.76	12,500,078	12,500,078
Total	20,019.72	13,364.62	7,783.42	34,233,673	34,233,673

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651
Enclosed Parking with Elevator	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651
General Office Building	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651
Parking Lot	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651
Strip Mall	0.621541	0.034056	0.180136	0.101248	0.011859	0.005060	0.013110	0.022881	0.002221	0.001470	0.005122	0.000646	0.000651

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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	328.9165	328.9165	0.0329	6.8100e-003	331.7667
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3,777.9847	3,777.9847	0.3778	0.0782	3,810.7229
NaturalGas Mitigated	0.1191	1.0612	0.7523	6.5000e-003		0.0823	0.0823		0.0823	0.0823	0.0000	1,178.5902	1,178.5902	0.0226	0.0216	1,185.5940
NaturalGas Unmitigated	0.1191	1.0612	0.7523	6.5000e-003		0.0823	0.0823		0.0823	0.0823	0.0000	1,178.5902	1,178.5902	0.0226	0.0216	1,185.5940

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					
Apartments Mid Rise	7.28306e+006	0.0393	0.3356	0.1428	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	388.6516	388.6516	7.4500e-003	7.1300e-003	390.9612
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.42032e+007	0.0766	0.6962	0.5848	4.1800e-003		0.0529	0.0529		0.0529	0.0529	0.0000	757.9343	757.9343	0.0145	0.0139	762.4383
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	599738	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003	0.0000	32.0043	32.0043	6.1000e-004	5.9000e-004	32.1945
Total		**0.1191**	**1.0612**	**0.7524**	**6.5000e-003**		**0.0823**	**0.0823**		**0.0823**	**0.0823**	**0.0000**	**1,178.5902**	**1,178.5902**	**0.0226**	**0.0216**	**1,185.5940**

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					
Apartments Mid Rise	7.28306e+006	0.0393	0.3356	0.1428	2.1400e-003		0.0271	0.0271		0.0271	0.0271	0.0000	388.6516	388.6516	7.4500e-003	7.1300e-003	390.9612
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.42032e+007	0.0766	0.6962	0.5848	4.1800e-003		0.0529	0.0529		0.0529	0.0529	0.0000	757.9343	757.9343	0.0145	0.0139	762.4383
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	599738	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003	0.0000	32.0043	32.0043	6.1000e-004	5.9000e-004	32.1945
Total		**0.1191**	**1.0612**	**0.7524**	**6.5000e-003**		**0.0823**	**0.0823**		**0.0823**	**0.0823**	**0.0000**	**1,178.5902**	**1,178.5902**	**0.0226**	**0.0216**	**1,185.5940**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	3.4802e+006	457.7916	0.0458	9.4700e-003	461.7586
Enclosed Parking with Elevator	7.06247e+006	929.0102	0.0929	0.0192	937.0605
General Office Building	1.54699e+007	2,034.9378	0.2035	0.0421	2,052.5716
Parking Lot	3080	0.4052	4.0000e-005	1.0000e-005	0.4087
Strip Mall	2.70515e+006	355.8399	0.0356	7.3600e-003	358.9234
Total		**3,777.9847**	**0.3778**	**0.0782**	**3,810.7229**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	316768	41.6683	4.1700e-003	8.6000e-004	42.0293
Enclosed Parking with Elevator	600792	79.0293	7.9000e-003	1.6400e-003	79.7141
General Office Building	1.37867e+006	181.3526	0.0181	3.7500e-003	182.9241
Parking Lot	154	0.0203	0.0000	0.0000	0.0204
Strip Mall	204088	26.8461	2.6800e-003	5.6000e-004	27.0787
Total		**328.9165**	**0.0329**	**6.8100e-003**	**331.7667**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	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	8.2868	0.1014	6.2932	5.2000e-004		0.0372	0.0372		0.0372	0.0372	0.0000	43.9755	43.9755	0.0106	6.2000e-004	44.4239
Unmitigated	8.2868	0.1014	6.2932	5.2000e-004		0.0372	0.0372		0.0372	0.0372	0.0000	43.9755	43.9755	0.0106	6.2000e-004	44.4239

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	1.3007					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.7926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.4000e-003	0.0291	0.0124	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	33.6767	33.6767	6.5000e-004	6.2000e-004	33.8768
Landscaping	0.1902	0.0723	6.2808	3.3000e-004		0.0349	0.0349		0.0349	0.0349	0.0000	10.2988	10.2988	9.9300e-003	0.0000	10.5472
Total	**8.2868**	**0.1014**	**6.2932**	**5.2000e-004**		**0.0372**	**0.0372**		**0.0372**	**0.0372**	**0.0000**	**43.9755**	**43.9755**	**0.0106**	**6.2000e-004**	**44.4239**

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	1.3007					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.7926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.4000e-003	0.0291	0.0124	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	33.6767	33.6767	6.5000e-004	6.2000e-004	33.8768
Landscaping	0.1902	0.0723	6.2808	3.3000e-004		0.0349	0.0349		0.0349	0.0349	0.0000	10.2988	10.2988	9.9300e-003	0.0000	10.5472
Total	**8.2868**	**0.1014**	**6.2932**	**5.2000e-004**		**0.0372**	**0.0372**		**0.0372**	**0.0372**	**0.0000**	**43.9755**	**43.9755**	**0.0106**	**6.2000e-004**	**44.4239**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	275.1913	0.2970	0.1794	336.0626
Unmitigated	307.5638	0.3002	0.1800	368.7156

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	54.9248 / 34.6265	74.4684	0.0724	0.0434	89.2107
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	154.207 / 94.514	207.8331	0.2031	0.1218	249.2128
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000

Strip Mall	18.7441 / 11.4883	25.2623	0.0247	0.0148	30.2921
Total		**307.5638**	**0.3002**	**0.1800**	**368.7156**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	54.9248 / 17.3133	66.4975	0.0716	0.0432	81.1707
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	154.207 / 47.257	186.0761	0.2009	0.1214	227.2673
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	18.7441 / 5.74414	22.6178	0.0244	0.0148	27.6246
Total		**275.1913**	**0.2970**	**0.1794**	**336.0626**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			

Mitigated	296.4439	17.5193	0.0000	734.4273
Unmitigated	296.4439	17.5193	0.0000	734.4273

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	387.78	78.7158	4.6520	0.0000	195.0152
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	806.9	163.7934	9.6799	0.0000	405.7912
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	265.7	53.9347	3.1875	0.0000	133.6209
Total		**296.4440**	**17.5193**	**0.0000**	**734.4273**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	387.78	78.7158	4.6520	0.0000	195.0152
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000

General Office Building	806.9	163.7934	9.6799	0.0000	405.7912
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	265.7	53.9347	3.1875	0.0000	133.6209
Total		**296.4440**	**17.5193**	**0.0000**	**734.4273**

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	50	152	0.73	Diesel
Emergency Generator	1	0	50	185	0.73	Diesel
Emergency Generator	1	0	50	240	0.73	Diesel
Emergency Generator	1	0	50	240	0.73	Diesel
Emergency Generator	1	0	50	555	0.73	Diesel
Emergency Generator	1	0	50	1528	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 (100 - 175 HP)	6.2400e-003	0.0174	0.0226	3.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004	0.0000	2.8941	2.8941	4.1000e-004	0.0000	2.9042
Emergency Generator - Diesel (175 - 300 HP)	0.0273	0.0763	0.0696	1.3000e-004		4.0100e-003	4.0100e-003		4.0100e-003	4.0100e-003	0.0000	12.6615	12.6615	1.7800e-003	0.0000	12.7059
Emergency Generator - Diesel (300 - 600 HP)	0.0228	0.0636	0.0581	1.1000e-004		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	10.5671	10.5671	1.4800e-003	0.0000	10.6042
Emergency Generator - Diesel (750 - 9999 HP)	0.0627	0.2803	0.1598	3.0000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	29.0929	29.0929	4.0800e-003	0.0000	29.1949
Total	**0.1190**	**0.4377**	**0.3101**	**5.7000e-004**		**0.0175**	**0.0175**		**0.0175**	**0.0175**	**0.0000**	**55.2156**	**55.2156**	**7.7500e-003**	**0.0000**	**55.4091**

11.0 Vegetation

Appendix H Insert the following pages before the first page in Appendix H:

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
429 E. Cotati Avenue
Cotati, CA 94931

Memo

Date: March 17, 2020

To: Amy Wang
David J. Powers & Associates, Inc.

From: Dana Lodico, PE, INCE Bd. Cert.
Illingworth & Rodkin, Inc.

SUBJECT: **Downtown Specific Plan Land Use Update, Sunnyvale, California**
Memo to Address Revisions to the Project
(IR Job # 18-010)

The City of Sunnyvale originally adopted the Downtown Specific Plan (DSP) in 1993 and updated it in 2003 and 2013. In April 2019, Illingworth & Rodkin, Inc. submitted an Environmental Noise and Vibration Assessment (ENA) addressing the noise and vibration impacts due to proposed amendments to six sites within the DSP area, located within Blocks 1a, 18 and 22. The ENA was based in part on the traffic volumes in the March 19, 2019 Traffic Impact Analysis (TIA). A subsequent noise memo, dated April 22, 2019, addressed differences in the traffic noise impacts calculated in the ENA, which was based on traffic volumes in the March 19, 2019 TIA, and updated traffic volumes in the March 19, 2019 Revised TIA from the addition of 50 residential dwelling units. Currently (March 2020), a newly revised project description is being considered, resulting in changes in land use development assumptions and the resulting vehicular trip generation estimates for the project. A traffic memorandum, dated March 6, 2020, was provided describing the differences between the land use development evaluated in the March 19, 2019 Revised TIA and the March 2020 revised project description, along with a summary comparison of the trip generation estimates and significant transportation impacts.

This noise memorandum describes the differences between the original April 2019 ENA, using the March 19, 2019 TIA, and the most current March 2020 land use descriptions and presents a summary comparison of the noise and vibration impacts. This memorandum supersedes the April 22, 2019 noise memo and supplements the April 2019 ENA.

Table 1 presents the land use summaries for the ENA and the 2020 revised project description, along with the net changes between the two documents.

Table 1: Summary of Land Use Descriptions

Scenario	Residential Units	Commercial Square Footage	Office Square Footage
2019 ENA	793	260,063	860,624
2020 Description	843	253,054	867,633
Difference	**+50**	**-7,009**	**+7,009**

As shown in Table 1, the 2020 revised project description includes an increase in 50 residential units, a decrease in 7,009 square feet of commercial space, and an increase in 7,009 square feet of office space compared to the land use program analyzed in the ENA.

The locations and specifications of noise generating mechanical equipment and other on-site project operations studied in the ENA were based on project plans and would not be impacted by the project description change. Likewise, for construction information and duration of construction. Aircraft noise impacts are based on the project's location with respect to nearby airport operations, which again does not change between the two descriptions.

Turning volumes along individual roadway segments, which are used to calculate traffic noise impacts, are not given in the March 6, 2020 traffic memo; however, the memo does provide overall trip generation estimates. Based on a comparison of the trip generation estimates provided previously for the ENA, the addition of 50 residential units and the conversion of 7,009 square feet of commercial space to office space would generate 52 fewer daily trips, 19 more AM peak hour trips and 8 fewer PM peak hour trips compared to those used in the analysis for the ENA. This small change in traffic volumes would account for less than 1% of the trip generation allowed under the DSP with Proposed Amendments. For reference, a 15% increase in traffic volumes along an individual roadway segment would result in a 1 dBA increase in traffic noise levels and a doubling (100% increase) of traffic volumes would result in a 3 dBA increase in traffic noise. As such, a 1% decrease in traffic volumes would not be measurable or noticeable and would not change the traffic noise impacts from those described in the ENA.

With the addition of 50 residential units and the conversion of 7,009 square feet of commercial space to office space to the project, operational noise impacts (Impact 1a in the ENA), traffic noise impacts (Impact 1b in the ENA) temporary noise and vibration impacts due to construction (Impacts 1c and 2 in the ENA), and aircraft noise impacts (Impact 3 in ENA) would be the same as those discussed in the ENA. Mitigation Measures 1a and 1c from the ENA would reduce these impacts to **less-than-significant** levels.

Appendix I Insert the following pages before the first page in Appendix I:

FEHR PEERS

MEMORANDUM

Date: March 6, 2020

To: Ralph Garcia, City of Sunnyvale

From: Ryan Caldera, Mark Soendjojo, and Franziska Church, Fehr & Peers

Subject: Sunnyvale Downtown Specific Plan Ammendments Project - Land Use Update Transportation Memorandum

SJ17-1787

In March 2019, Fehr & Peers submitted the Final Transportation Impact Analysis (TIA) for the Sunnyvale Downtown Specific Plan (DSP) Amendments Project in Sunnyvale, California. A revised project description is being considered. This memorandum describes the differences between the land uses evaluated in the TIA and the revised project descriptions, along with a summary comparison of the trip generation estimates and significant transportation impacts.

LAND USE DESCRIPTIONS

The DSP area is located on a 36-acre site in the heart of downtown Sunnyvale generally bounded by the railroad/Caltrain tracks to the north, Bayview Avenue to the east, El Camino Real to the south, and Charles Street to the west.

Table 1 presents the land use summaries for both the TIA and the revised project description, along with the net land use differences. As shown in **Table 1**, the revised project description will convert 7,009 square feet of commercial space to office space compared to the land use program analyzed in the TIA.

TABLE 1: SUMMARY OF LAND USE DESCRIPTIONS

Scenario	Residential Units	Commercial Square Footage	Office Square Footage
TIA Description (A)	843	260,063	860,624
Revised Project Description (B)	843	253,054	867,633
Net Difference (B-A)	**0**	**-7,009**	**+7,009**

Source: David J. Powers & Associates, 2020; Fehr & Peers, 2020.

PROJECT TRIP GENERATION

Trip generation for the revised project description was estimated using the methods outlined in Chapter 3 of the Final TIA. **Table 2** presents the net new trip generation for the land use description studied in the TIA and the revised project description, along with the differences between the two. Compared to the TIA land use program, the revised project description would generate 199 fewer daily trips, 4 more AM peak hour trips, and 20 fewer PM peak hour trips.

TABLE 2: TRIP GENERATION ESTIMATES

Scenario	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
TIA Description (A) (from March 2019 TIA)	13,250	870	316	1,186	430	994	1,424
Revised Project Description (B)	13,051	875	315	1,190	418	986	1,404
Net Difference (B-A)	**-199**	**5**	**-1**	**4**	**-12**	**-8**	**-20**

Source: Fehr & Peers, 2020.

Detailed trip generation tables are presented in **Attachment A.**

TRANSPORTATION IMPACTS

Fehr & Peers identified the original project's significant transportation impacts in the TIA report under Existing, Background, and Cumulative conditions. The increase in AM peak hour trips and decrease in PM peak hour trips associated with the revised project description would have negligible effects on the TIA analysis results. Thus, the conclusions of the TIA, including significant impacts and mitigation measures, are still valid with the conversion of 7,009 square feet of commercial space to office space.

ATTACHMENTS

Attachment A: Detailed Trip Generation Tables

DOWNTOWN SPECIFIC PLAN LAND USE DESCRIPTION - TRIP GENERATION ESTIMATES

Land Use	ITE Code	Size	Units	Daily		AM Peak Hour				PM Peak Hour			
				Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
(A) Existing													
Multi-Family Housing (Mid-Rise)	221	20	du	5.44	109	0.36	2	5	7	0.44	5	4	9
Transit Reduction (Housing near Employment)				*3%*	*-3*	*3%*	*0*	*(1)*	*(1)*	*3%*	*(1)*	*0*	*(1)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*-10*	*9%*	*0*	*(1)*	*(1)*	*9%*	*(1)*	*0*	*(1)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*-16*	*15%*	*0*	*(1)*	*(1)*	*15%*	*(1)*	*0*	*(1)*
Existing Housing Subtotal (E)				-	**80**	-	**2**	**2**	**4**	-	**2**	**4**	**6**
Shopping Center	820	181	ksf	37.75	6,833	0.94	106	64	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(16)*	-	*(1)*	*0*	*(1)*	-	*0*	*(1)*	*(1)*
Existing Retail Subtotal (F)				-	**6,817**	-	**105**	**64**	**169**	-	**331**	**358**	**689**
General Office Building	710	8	ksf	9.74	78	1.16	8	1	9	1.15	1	8	9
Transit Reduction (Housing near Employment)				*3%*	*(3)*	*3%*	*(1)*	*0*	*(1)*	*3%*	*0*	*(1)*	*(1)*
Transit Reduction (Employment near Caltrain Station)				*6%*	*(5)*	*6%*	*(1)*	*0*	*(1)*	*6%*	*0*	*(1)*	*(1)*
Existing Office Subtotal (G)				-	**70**	-	**6**	**1**	**7**	-	**1**	**6**	**7**
Net Existing Project Trips (H) = (E) + (F) + (G)				-	**6,967**	-	**113**	**67**	**180**	-	**334**	**368**	**702**
(B) Existing Plus Approved But Not Yet Constructed or Occupied													
Multi-Family Housing (Mid-Rise)	221	70	du	5.44	381	0.36	7	18	25	0.44	19	12	31
Transit Reduction (Housing near Employment)				*3%*	*(11)*	*3%*	*0*	*0*	*0*	*3%*	*0*	*0*	*0*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(34)*	*9%*	*(1)*	*(2)*	*(3)*	*9%*	*(2)*	*(1)*	*(3)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(57)*	*15%*	*(1)*	*(2)*	*(3)*	*15%*	*(2)*	*(2)*	*(4)*
Approved Housing Subtotal (I)				-	**279**	-	**5**	**14**	**19**	-	**15**	**9**	**24**
Shopping Center	820	181	ksf	37.75	6833	0.94	106	64	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(57)*	-	*(2)*	*(1)*	*(3)*	-	*(2)*	*(2)*	*(4)*
Approved Retail Subtotal (J)				-	**6,776**	-	**104**	**63**	**167**	-	**329**	**357**	**686**
General Office Building	710	8	ksf	9.74	78	1.16	8	1	9	1.15	1	8	9
Transit Reduction (Housing near Employment)				3%	*(11)*	3%	*0*	*0*	*0*	3%	*0*	*0*	*0*
Transit Reduction (Employment near Caltrain Station)				6%	(5)	6%	0	0	0	6%	0	0	0
Approved Office Subtotal (K)				-	**62**	-	**8**	**1**	**9**	-	**1**	**8**	**9**
Net Approved Project Trips (L) = (I) + (J) + (K)				-	**7,117**	-	**117**	**78**	**195**	-	**345**	**374**	**719**
(C) Allowed by Adopted DSP													
Multi-Family Housing (Mid-Rise)	221	93	du	5.44	506	0.36	9	24	33	0.44	25	16	41
Transit Reduction (Housing near Employment)				*3%*	*(15)*	*3%*	*0*	*(1)*	*(1)*	*3%*	*(1)*	*0*	*(1)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(46)*	*9%*	*(1)*	*(2)*	*(3)*	*9%*	*(2)*	*(1)*	*(4)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(76)*	*15%*	*(1)*	*(4)*	*(5)*	*15%*	*(4)*	*(2)*	*(6)*
Allowed Housing Subtotal (M)				-	**369**	-	**7**	**17**	**24**	-	**18**	**13**	**30**
Shopping Center	820	181	ksf	37.75	6833	0.94	105	65	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(76)*	-	*(4)*	*(1)*	*(5)*	-	*(2)*	*(4)*	*(6)*
Mixed-Use Development Reduction (Hotel and Retail Reduction)				-	*(167)*	-	*(4)*	*(5)*	*(9)*	-	*(6)*	*(6)*	*(12)*
Allowed Retail Subtotal (N)				-	**6,590**	-	**97**	**59**	**156**	-	**323**	**349**	**672**
General Office Building	710	18	ksf	9.74	174	1.16	18	3	21	1.15	3	18	21
Transit Reduction (Housing near Employment)				3%	*(15)*	3%	*(1)*	*0*	*(1)*	3%	*0*	*(1)*	*(1)*
Transit Reduction (Employment near Caltrain Station)				6%	(10)	6%	(1)	0	(2)	6%	0	(1)	(1)
Allowed Office Subtotal (O)				-	**149**	-	**16**	**3**	**18**	-	**3**	**16**	**19**
Hotel	310	200	rm	8.36	1,672	0.47	55	39	94	0.60	61	59	120
Mixed-Use Development Reduction (Hotel and Retail Reduction)				*10%*	*(167)*	*10%*	*(5)*	*(4)*	*(9)*	*10%*	*(6)*	*(6)*	*(12)*
Allowed Hotel Subtotal (P)				-	**1,505**	-	**50**	**35**	**85**	-	**55**	**53**	**108**
Net Allowed Project Trips (Q) = (M) + (N) + (O) + (P)				-	**8,613**	-	**170**	**114**	**283**	-	**399**	**431**	**829**
(D) Allowed by DSP w/ Proposed Amendments													
Multi-Family Housing (Mid-Rise)	221	843	du	5.44	4,586	0.36	79	224	303	0.44	226	145	371
Transit Reduction (Housing near Employment)				*3%*	*(138)*	*3%*	*(2)*	*(7)*	*(9)*	*3%*	*(7)*	*(4)*	*(11)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(413)*	*9%*	*(7)*	*(20)*	*(27)*	*9%*	*(20)*	*(13)*	*(33)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(688)*	*15%*	*(14)*	*(23)*	*(37)*	*15%*	*(34)*	*(22)*	*(56)*
Proposed Housing Subtotal (R)				-	**3,347**	-	**56**	**174**	**230**	-	**165**	**106**	**271**
Shopping Center	820	260	ksf	37.75	9,817	0.94	151	93	244	3.81	476	515	991
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(688)*	*15%*	*(23)*	*(14)*	*(37)*	*15%*	*(22)*	*(34)*	*(56)*
Proposed Retail Subtotal (S)				-	**9,129**	-	**128**	**79**	**207**	-	**454**	**481**	**935**
General Office Building	710	861	ksf	9.74	8,382	1.16	858	140	998	1.15	158	832	990
Transit Reduction (Housing near Employment)				*3%*	*(138)*	*3%*	*(7)*	*(2)*	*(9)*	*3%*	*(4)*	*(7)*	*(11)*
Transit Reduction (Employment near Caltrain Station)				*6%*	*(503)*	*6%*	*(52)*	*(8)*	*(60)*	*6%*	*(9)*	*(50)*	*(59)*
Proposed Office Subtotal (T)				-	**7,741**	-	**799**	**130**	**929**	-	**145**	**775**	**920**
Net Proposed Project Trips (U) = (R) + (S) + (T)				-	**20,217**	-	**983**	**383**	**1,366**	-	**764**	**1,362**	**2,126**
Cityline TIA Analysis Net New Trip Generation													
Net New Office = (T) - (G) = Proposed - Existing					7,671		793	129	922		144	769	913
Net New Residential= (R) - (E) = Proposed - Existing					3,267		54	172	226		163	102	265
Net New Retail = (S) - (F) = Proposed - Existing					2,312		23	15	38		123	123	246
Net New Total					**13,250**		**870**	**316**	**1,186**		**430**	**994**	**1,424**

REVISED PROJECT DESCRIPTION - TRIP GENERATION ESTIMATES

Land Use	ITE Code	Size	Units	Daily		AM Peak Hour				PM Peak Hour			
				Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
(A) Existing													
Multi-Family Housing (Mid-Rise)	221	20	du	5.44	109	0.36	2	5	7	0.44	5	4	9
Transit Reduction (Housing near Employment)				*3%*	*-3*	*3%*	*0*	*(1)*	*(1)*	*3%*	*(1)*	*0*	*(1)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*-10*	*9%*	*0*	*(1)*	*(1)*	*9%*	*(1)*	*0*	*(1)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*-16*	*15%*	*0*	*(1)*	*(1)*	*15%*	*(1)*	*0*	*(1)*
Existing Housing Subtotal (E)				-	**80**	-	**2**	**2**	**4**	-	**2**	**4**	**6**
Shopping Center	820	181	ksf	37.75	6,833	0.94	106	64	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(16)*	-	*(1)*	*0*	*(1)*	-	*0*	*(1)*	*(1)*
Existing Retail Subtotal (F)				-	**6,817**	-	**105**	**64**	**169**	-	**331**	**358**	**689**
General Office Building	710	8	ksf	9.74	78	1.16	8	1	9	1.15	1	8	9
Transit Reduction (Housing near Employment)				*3%*	*(3)*	*3%*	*(1)*	*0*	*(1)*	*3%*	*0*	*(1)*	*(1)*
Transit Reduction (Employment near Caltrain Station)				*6%*	*(5)*	*6%*	*(1)*	*0*	*(1)*	*6%*	*0*	*(1)*	*(1)*
Existing Office Subtotal (G)				-	**70**	-	**6**	**1**	**7**	-	**1**	**6**	**7**
Net Existing Project Trips (H) = (E) + (F) + (G)				-	**6,967**	-	**113**	**67**	**180**	-	**334**	**368**	**702**
(B) Existing Plus Approved But Not Yet Constructed or Occupied													
Multi-Family Housing (Mid-Rise)	221	70	du	5.44	381	0.36	7	18	25	0.44	19	12	31
Transit Reduction (Housing near Employment)				*3%*	*(11)*	*3%*	*0*	*0*	*0*	*3%*	*0*	*0*	*0*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(34)*	*9%*	*(1)*	*(2)*	*(3)*	*9%*	*(2)*	*(1)*	*(3)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(57)*	*15%*	*(1)*	*(2)*	*(3)*	*15%*	*(2)*	*(2)*	*(4)*
Approved Housing Subtotal (I)				-	**279**	-	**5**	**14**	**19**	-	**15**	**9**	**24**
Shopping Center	820	181	ksf	37.75	6833	0.94	106	64	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(57)*	-	*(2)*	*(1)*	*(3)*	-	*(2)*	*(2)*	*(4)*
Approved Retail Subtotal (J)				-	**6,776**	-	**104**	**63**	**167**	-	**329**	**357**	**686**
General Office Building	710	8	ksf	9.74	78	1.16	8	1	9	1.15	1	8	9
Transit Reduction (Housing near Employment)				3%	*(11)*	3%	*0*	*0*	*0*	3%	*0*	*0*	*0*
Transit Reduction (Employment near Caltrain Station)				6%	(5)	6%	0	0	0	6%	0	0	0
Approved Office Subtotal (K)				-	**62**	-	**8**	**1**	**9**	-	**1**	**8**	**9**
Net Approved Project Trips (L) = (I) + (J) + (K)				-	**7,117**	-	**117**	**78**	**195**	-	**345**	**374**	**719**
(C) Allowed by Adopted DSP													
Multi-Family Housing (Mid-Rise)	221	93	du	5.44	506	0.36	9	24	33	0.44	25	16	41
Transit Reduction (Housing near Employment)				*3%*	*(15)*	*3%*	*0*	*(1)*	*(1)*	*3%*	*(1)*	*0*	*(1)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(46)*	*9%*	*(1)*	*(2)*	*(3)*	*9%*	*(2)*	*(1)*	*(4)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(76)*	*15%*	*(1)*	*(4)*	*(5)*	*15%*	*(4)*	*(2)*	*(6)*
Allowed Housing Subtotal (M)				-	**369**	-	**7**	**17**	**24**	-	**18**	**13**	**30**
Shopping Center	820	181	ksf	37.75	6833	0.94	105	65	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(76)*	-	*(4)*	*(1)*	*(5)*	-	*(2)*	*(4)*	*(6)*
Mixed-Use Development Reduction (Hotel and Retail Reduction)				-	*(167)*	-	*(4)*	*(5)*	*(9)*	-	*(6)*	*(6)*	*(12)*
Allowed Retail Subtotal (N)				-	**6,590**	-	**97**	**59**	**156**	-	**323**	**349**	**672**
General Office Building	710	18	ksf	9.74	174	1.16	18	3	21	1.15	3	18	21
Transit Reduction (Housing near Employment)				3%	*(15)*	3%	*(1)*	*0*	*(1)*	3%	*0*	*(1)*	*(1)*
Transit Reduction (Employment near Caltrain Station)				6%	(10)	6%	(1)	0	(2)	6%	0	(1)	(1)
Allowed Office Subtotal (O)				-	**149**	-	**16**	**3**	**18**	-	**3**	**16**	**19**
Hotel	310	200	rm	8.36	1,672	0.47	55	39	94	0.60	61	59	120
Mixed-Use Development Reduction (Hotel and Retail Reduction)				*10%*	*(167)*	*10%*	*(5)*	*(4)*	*(9)*	*10%*	*(6)*	*(6)*	*(12)*
Allowed Hotel Subtotal (P)				-	**1,505**	-	**50**	**35**	**85**	-	**55**	**53**	**108**
Net Allowed Project Trips (Q) = (M) + (N) + (O) + (P)				-	**8,613**	-	**170**	**114**	**283**	-	**399**	**431**	**829**
(D) Allowed by DSP w/ Proposed Amendments													
Multi-Family Housing (Mid-Rise)	221	843	du	5.44	4,586	0.36	79	224	303	0.44	226	145	371
Transit Reduction (Housing near Employment)				*3%*	*(138)*	*3%*	*(2)*	*(7)*	*(9)*	*3%*	*(7)*	*(4)*	*(11)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(413)*	*9%*	*(7)*	*(20)*	*(27)*	*9%*	*(20)*	*(13)*	*(33)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(688)*	*15%*	*(14)*	*(22)*	*(36)*	*15%*	*(34)*	*(22)*	*(56)*
Proposed Housing Subtotal (R)				-	**3,347**	-	**56**	**175**	**231**	-	**165**	**106**	**271**
Shopping Center	820	253	ksf	37.75	9,553	0.94	148	90	238	3.81	463	501	964
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(688)*	*15%*	*(22)*	*(14)*	*(36)*	*15%*	*(22)*	*(34)*	*(56)*
Proposed Retail Subtotal (S)				-	**8,865**	-	**126**	**76**	**202**	-	**441**	**467**	**908**
General Office Building	710	868	ksf	9.74	8,451	1.16	865	141	1,006	1.15	160	838	998
Transit Reduction (Housing near Employment)				*3%*	*(138)*	*3%*	*(7)*	*(2)*	*(9)*	*3%*	*(4)*	*(7)*	*(11)*
Transit Reduction (Employment near Caltrain Station)				*6%*	*(507)*	*6%*	*(52)*	*(8)*	*(60)*	*6%*	*(10)*	*(50)*	*(60)*
Proposed Office Subtotal (T)				-	**7,806**	-	**806**	**131**	**937**	-	**146**	**781**	**927**
Net Proposed Project Trips (U) = (R) + (S) + (T)				-	**20,018**	-	**988**	**382**	**1,370**	-	**752**	**1,354**	**2,106**
Cityline TIA Analysis Net New Trip Generation													
Net New Office = (T) - (G) = Proposed - Existing					7,736		800	130	930		145	775	920
Net New Residential= (R) - (E) = Proposed - Existing					3,267		54	173	227		163	102	265
Net New Retail = (S) - (F) = Proposed - Existing					2,048		21	12	33		110	109	219
Net New Total					**13,051**		**875**	**315**	**1,190**		**418**	**986**	**1,404**

Appendix I, Page 19 2.1 Existing Roadway Network: **ADD** the following text to the description of McKinley Avenue

- McKinley Avenue is a two- to four-lane east-west roadway extending from Sunset Avenue to Bayview Avenue and continues in an alignment approximately 190 feet south on Bayview Avenue to Britton Avenue. McKinley Avenue runs parallel to Washington Avenue, and the roadway passes directly through the Project area between Mathilda Avenue and Sunnyvale Avenue.

Appendix I, Page 19 2.1 Existing Roadway Network: **REVISE** the following text to the description of Washington Avenue:

- Washington Avenue is a two-lane east-west roadway that extends from Acalanes Drive ~~to~~ and terminates at Evelyn Avenue, although there is no direct vehicular access to Evelyn Avenue, and passes through the Project area. Washington Avenue connects to Aries Way and Taaffe Street which provide direct access to the Project sites.

Comment Letter A

Santa Clara Valley Transportation Authority

January 6, 2020

City of Sunnyvale
Department of Community Development, Planning Division
456 West Olive Avenue, Sunnyvale, CA 94088

Attn: David Hogan
By Email: dhogan@sunnyvale.ca.gov

Subject: Draft Environmental Impact Report (DEIR), Downtown Specific Plan Amendments and Specific Developments Project

Dear David,

Thank you for the opportunity to provide comments on DEIR for the Downtown Specific Plan for the City of Sunnyvale. VTA is excited about the opportunity that this project represents for Sunnyvale and the growth for transit ridership it will bring to the downtown area. VTA has reviewed the DEIR and has the following comments:

Transit Vehicle Delay

VTA commends the City of Sunnyvale for committing feasible transit-priority measures to improve the reliability and speed of transit affected by auto congestion in downtown Sunnyvale. VTA recommends updating the Transit Vehicle Delay analysis (Chapter 7.4) and Appendix B in the Final Draft Environmental Impact Report to reflect VTA's current bus network that began on December 28, 2019. Routes 20 and 21 are new services that operate in the downtown and Route 54 has been discontinued. Accurately depicting the new VTA bus network will help identify transit-related amenities to increase the reliability of those services.

For accurate information about VTA's new network please visit http://newservice.vta.org VTA requests discussing potential transit improvements at a future VTA-City of Sunnyvale Coordination Meeting.

If you have any questions or concerns please contact me at [redacted]

Sincerely,

[redacted]

Brent Pearse
Transportation Planner

SU1803

From: [redacted]
To: David Hogan
Cc: [redacted]
Subject: NOA EIR-Proposed Amendments to the Downtown Specific Plan
Date: Monday, January 6, 2020 3:17:37 PM
Importance: High

January 6, 2020

David Hogan, Senior Planner
dhogan@sunnyvale.ca.gov
City of Sunnyvale
Community Development Department, Planning Division
[redacted]

SUBJECT: NOA EIR-Proposed Amendments to the Downtown Specific Plan

Dear Mr. Hogan:

The County of Santa Clara Roads and Airports Department appreciates the opportunity to review the NOA EIR-Proposed Amendments to the Downtown Specific Plan and is submitting the following comments:

- The County agrees to **MM TRN1.3: All Project Sites pg. xxv**. That the County designates Lawrence-Homestead Road grade separation as priority 8B in the Measure B Expressway Project Implementation Plan, and this Downtown Specific Plan project shall pay a fair-share contribution to this improvement.
- It appears that Mathilda Square-Loop ramps at Central and Lawrence/Arques were excluded from the list of study intersections we recommended on the NOP. So Please include these intersections.

If you have any questions or concerns about these comments, please contact me at [redacted]

Thank you,

Ben Aghegnehu
Associate Transportation Planner
County of Santa Clara | Roads & Airports
[redacted]

From: [redacted]
To: David Hogan
Subject: project #2017-8047 2016-7848 2017-7872
Date: Sunday, December 1, 2019 8:35:48 AM

ATTN: Email is from an external source; Stop, Look, and Think before opening attachments or links.

Dear David,

As 30 year Sunnyvale residents, we continue to be very excited about the redevelopment. That said, we are experiencing a very high degree of through traffic on Lincoln avenue where we live, as well as Bayview.

Per the Sunnyvale specific plan, these neighborhoods should be quiet and have “Residential gateways establish boundaries and convey a sense of “residents only”” as expressed on Page 4 of the 2003 Sunnyvale Specific Plan.

Traffic flow through our neighborhood is chaotic. Drivers use the non-stop Bayview as a speedy alternative to Sunnyvale Ave which has multiple traffic signals. Lincoln Avenue is also an expeditious alternative to drivers who use it to avoid the one lane congestion on Evelyn during the morning, and use Lincoln Ave as a speedy alternative to congested one-lane Sunnyvale (between El Camino and McKinley) during the evening hours.

In your planning, we will greatly appreciate if you can devise methods to keep cars downtown instead of using residential streets as speedy alternatives. Neighbors have reached out and have expressed desires for bulbouts, roundabouts or any other traffic alternatives that will help drivers prefer main streets for through traffic.

Thank you for your consideration.

Steve Burke

[redacted]

Comment Letter D

To Whom It May or May not Concern

Our family has lived on Sunnyvale since the early 1920's. Alot of changes have taken place but not all for the good, especially for the down town area of Sunnyvale. Mistakes have been made in the past and the downtown area has been a mess, an eye sore and very inconvenient for its residents and visitors for many years. The malls built only to be torn down and left in rubble. Town and Country Center, Murphy Estate etc. Parking is a joke. You are proposing 7 story buildings and underground parking but do not state how much parking will be available or how much is being eliminated. My father was in the underground parking in Sunnyvale during an earthquake and conveyed that it was a frightening experience and would not park underground ever again. Seven stories in an earthquake zone. Keep your fingers crossed! Sunnyvale is not San Francisco nor should it be. What a mess for the extreme amount of water sewer, and traffic issues way beyond anyones comfort zone. Increased pollution, police & fire needed. I can understand the housing shortage but what if the high tech companies start leaving the area? Will these new buildings become slum areas? What about schools for all the new families. Big business, money is the bottom line for these projects, not for the good of Sunnyvales residents.

The only project that makes sence is the residential unit on the 300 block of W. Washington. The quality of life as it is now will decline. What mitigation measures do you propose? None what so ever will ever remedy the damage done in all areas of life in this city and its environment. Please don't rush to make another huge mistake. This is alot of change all at once after a tremenous change already. How about one project at a time if you must. Not tear up the whole down town area at once, <u>once again</u>. Then say opps! Sorry folks Please don't make the same mistakes over + over again.

Sincerely

Janet J Caprino

[redacted]

[redacted]

Dec. 31, 2019

From: Don Dubocq
To: David Hogan
Subject: NOA/EIR Comment
Date: Saturday, November 30, 2019 12:23:35 PM

As many years have passed with the Downtown Plan, it's quite obvious that confusion and mayhem have become a reality. Along with a bond between Sunnyvale Town Officials and Developers where the constructing of residential and commercial structures on any available land is the only priority, with no planning or thought of what may or may not be the effects to Sunnyvale's future needs. Such as economic shortfalls which may result in drastic losses of employment which in turn will cause an increase of unaffordable housing units along with a lack of revenue for small retail and other businesses. By overestimating present needs with unnecessary development is a recipe for disaster. Development can always be done when needed. Otherwise, considering the future of economic growth, Sunnyvale could be left a ghost town with empty structures and empty residential units by the thousands. So, to those few ,who will profit now from no thought of the future and mindless greed I ask- Are you not Wiser than that?

From: [redacted]
To: David Hogan
Subject: Opposition to Potential Changes
Date: Friday, December 6, 2019 1:50:15 PM

Greetings,
For the reasons stated in the "Identified Potential Environmental Impacts" section of the Notice of Availability, I am opposed to the additional construction. Why not convert the space to a park?
Furthermore, before additional construction is allowed, kindly explain to the current residents how this will improve our quality of life. People voting for the additional offices and residential boxes should drive Mathilda Avenue after 4PM through 8PM on weeknights to endure what we have been condemned to suffer thus far. Additional people coming into the area will only exacerbate the situation.
Yours Sincerely,
Patricia E. Fox

From: Angel Hill
To: David Hogan
Subject: Opposition to Construction
Date: Monday, January 6, 2020 10:33:10 AM

Dear David Hogan,

I am a resident who lives and works here in Sunnyvale and I'm opposed to the projects slated for downtown Sunnyvale for the reasons stated in EIR. I believe it would decrease the quality of life as well as increase traffic.

Thank you,
Angel

From: Mark Hanlon
To: David Hogan
Subject: DSP Draft EIR comments
Date: Wednesday, January 8, 2020 10:09:16 AM

ATTN: Email is from an external source; Stop, Look, and Think before opening attachments or links.

Dear Mr. Hogan:

Thank you for the opportunity to comment on the EIR for the proposed changes to the Downtown Specific Plan. My concerns focus on transportation impact to the adjacent residential neighborhood.

Through the 1200+ pages of the Final Transportation Impact Analysis, there is no consideration of the impact to adjacent residential neighborhood traffic. Any degradation of LOS along either Sunnyvale Avenue or Fair Oaks – even slight and brief - will result in increased traffic along Central Ave, Bayview Ave and Carroll St.

Appendix I: Final Transportation Impact Analysis, page 19 states McKinley Avenue extends "from Sunset Avenue to Bayview Avenue" and Washington Avenue extends "to Evelyn Avenue."

Both of these statements are not accurate. McKinley extends from Sunset past Fair Oaks to Britton Ave. And there is no access from Washington to Evelyn. The statements on page 19 show several issues

1. The authors have not gone into the adjacent residential neighborhood.

2. The authors are only concerned about flow on major streets.

3. The authors are oblivious to Waz and how many people re-route thorough the neighborhood to avoid lights on Fair Oaks or Sunnyvale. It only takes one trip through the neighborhood to realize it is a "keeper" to avoid the 5 lights on Sunnyvale between El Camino and Evelyn.

I believe there are numerous traffic calming measure the City can and should take along Central, Bayview and Carroll to radically reduce through traffic. However, I have specific steps that should be taken as a result of changes to the DSP to propose.

DSP Changes recommended traffic remediation measures:

1- install a traffic calming roundabout in the existing right of way at Washington and Bayview to reduce through-trips on Bayview (north or south bound).

2 – prohibit westbound McKinley and Washington traffic from going straight past Sunnyvale into the existing residential neighborhood – so that all westbound traffic must go north or south on Sunnyvale. This will cut down on trips along both Carroll and Bayview. Further, it will actually prohibit access to Evelyn/Fair Oaks as the existing signage on Washington is clearly ineffective and unenforced.

Thank you for your thoughtful consideration and inclusion in the Final EIR. I would appreciate acknowledgment of receiving this, as well as notification of future actions on the Downtown Specific Plan.

Respectfully,

Mark Hanlon

[redacted]

From: [redacted]
To: David Hogan
Subject: Comment on draft EIR - proposed amendments to the downtown specific plan and 3 development projects
Date: Friday, December 20, 2019 9:05:57 AM

Mr. Hogan,

My household is strongly in favor of this proposed project since it increases the density of housing and offices near transit: Caltrain and El Camino.

Regards,
Diane Larrabee
[redacted]

From: David V. Lis
To: David Hogan
Subject: Agenda item 1 19-1020
Date: Monday, January 6, 2020 6:02:17 PM

David Hogan:

I have lived in Sunnyvale since 1980. Our little city is turning into downtown New York City.

I know we need progress and need to develop property to provide housing and to keep up with business needs that provides taxes for the city.

I am not happy with the city turning our streets from 2 lane to 1 car lane. I don't know if you noticed but there are more cars on the streets. And I am not the only person who thinks so but most people will not say anything because they say there is nothing they can do. We are getting grid locked. When I leave my home and get onto Fair Oaks and want to go toward El Camino, I have to turn right, then cross over and make a left hand turn and circle back.

I believe that over developing downtown Sunnyvale with office buildings is not the answer.
Where are they going to park?
How about visitors to these businesses?
How about the services these businesses need?

How about the sewer system?

How much is enough?
If you cannot get to work because of the traffic, what is the benefit?
And I believe that forcing people to ride bikes is not the answer. How do you take your kids to school on a bike?
The train is not the answer either, it is getting close to full now.

Related item: why is the city letting mobile home parks be converted from $800 – %1,000 month lot rents to $1.2 and $1.4 million town homes.
Where are the low income people going to live?
Who is going to work the minimum wage jobs like restaurants, grocery stores, retail, etc?
Sunnyvale is going to be for the high paying tech people and hope that never goes away.
Do you see all the help wanted signs?
Are people going to drive an hour to work a retail or service job? Sunnyvale is going to collapse in on itself.

David Lis

Comment Letter K

December 3, 2019

RE: Sunnyvale Planning Project # 2017-8047

To: David Hogan, Contract Planner;

We have received the new plan for Downtown Sunnyvale. We have struggled with the changes in Sunnyvale over the last several years. We were once a home town, we have rapidly become a high rise village.

No consideration has been given to the residents. You have built additional parking for the train commuters, yet they still park on the streets preventing us from parking in front of our own homes. We have come to the city for permit parking and as usual we were ignored.

Your newest plan for downtown has several negatives!

There is a severe housing crisis yet in your proposal there are many units listed, which will be high priced out of reach for our residents and cause horrendous traffic problem. Which already exists. Again no consideration to existing residents.

Environmental Impacts, you stated all the hazards, temporary and ongoing. Yet you still want to proceed.

At some point in time Target will no longer meet your esthetic parameters and will be pushed out of your high rise village.

We are not San Jose, Oakland or San Francisco. The high rise buildings we have now, look out of place. With your new project single story homes will be the ones out of place .

Living near Washington Park, the Broadcom building lights shine in our front room window at night, I can only imagine what your other skyscrapers will do.

On a personal note, this family has been in Sunnyvale since the 40's, born and raised. Bought their first home in the 60's, which we still live in. Handed down over the generations.

Please be more mindful of our town history.

Thank You,

Marshall Loya and Elizabeth Loya

[redacted]

[redacted]

[redacted]

From: Lidia Marchioni
To: David Hogan
Subject: Proposed Sunnyvale Downtown Development
Date: Monday, January 6, 2020 [redacted]

ATTN: Email is from an external source; Stop, Look, and Think before opening attachments or links.

I'm writing with regards to the proposed development in our downtown. I'm very happy to hear that we will yet again have a cinema in our downtown area. I also welcome Whole Foods and the idea of having ground floor of all buildings devoted to commercial use.

However, I'm deeply concerned with the use and height of the proposed buildings, specifically the proposed **five office buildings,** three of which **7 story high**. We have enough office buildings erected in downtown and elsewhere in Sunnyvale. We do not need any more office buildings in downtown. They can be built elsewhere in the city, just not in downtown. Otherwise, we are not building downtown but creating a business district and the city cannot afford it for many reasons. We do not have another area that can serve as downtown. We need to preserve and restore what we have, because once gone, it won't come back. We cannot afford it because people need a breathing space, specifically in our modern, busy and stressfull lives. We need spaces where we can relax and unwind, where we can find peace. Such qualities are found in places of beauty and harmony, places that have charm and that's what we need to create and preserve in our downtown. We cannot afford it because tall office buildings drive people away: nobody wants to be around soulless, dwarfing buildings. We cannot afford it, because it will completely choke Mathilda during rush hour traffic.

Whenever current downtown development is brought up in public conversations, the reactions I see are those of anger and disgust. In the best case, indifference. Nobody I talked to yet was approving of the office buildings that have been erected in downtown to date. We cannot afford to evoke more of the negative emotions in people. We need to remedy the situation.

New architecture that was introduced in our downtown, does not follow style of the area. Any residential property owner needs to follow style of the surrounding area, why not downtown? The new style clashes with other buildings, and those it replaced. And it is devoid of beauty, does not offer anything to the eye that would be pleasing or relaxing. It does not relate in any way to Sunnyvale's history, nor the history of California. **It robs Sunnyvale residents of their identity**. It's a crime.

We live in one of the richest areas of the USA, we should be able to afford beauty in our downtown. Beauty will attract more visitors and fuel businesses and taxes. We don't need to take chances on this - it has been done before. One example is Santana Row, another example - downtown Santa Barbara. A 6.3 magnitude earthquake hit Santa Barbara in 1925. "In an odd twist of fate, by leveling much of Santa Barbara's commercial district, the earthquake proved a boon to Santa Barbara's businesses. City officials seized the opportunity that the earthquake gave them to enforce a stricter building code, requiring commercial buildings along State Street to conform to a Spanish-Moorish style of architecture. Thus the 1925 earthquake is responsible for the distinctive architecture in the city that has made Santa Barbara a popular tourist destination for over 70 years." (from The 1925 Santa Barbara Earthquake in Brief) . Here is a proof that **mandating a consistent, beautiful style** that relates to the history of the area, **is beneficial to commerce**. We need more commerce in downtown, we need more

beauty. We don't need an earthquake to enforce certain style in our downtown. If we enforce Spanish style it will only benefit the city by bringing much needed harmony and historical reference. It will create a lively downtown, a downtown that people will **want to visit**. And they will visit on the weekends, so it won't add as much to the rush hour traffic.

If we allow for more office buildings, more ugly, modern, indifferent architecture we are going to keep many people away. Business districts create depressing urban deserts - nobody wants to walk there unless they have to. Tall office buildings are destructive to the downtown life. Sunnyvale will be mostly avoided and people will go elsewhere, where beauty was preserved or created, Mountain View, Los Altos, Santana Row. We should seize this opportunity we have and create a downtown that will be loved.

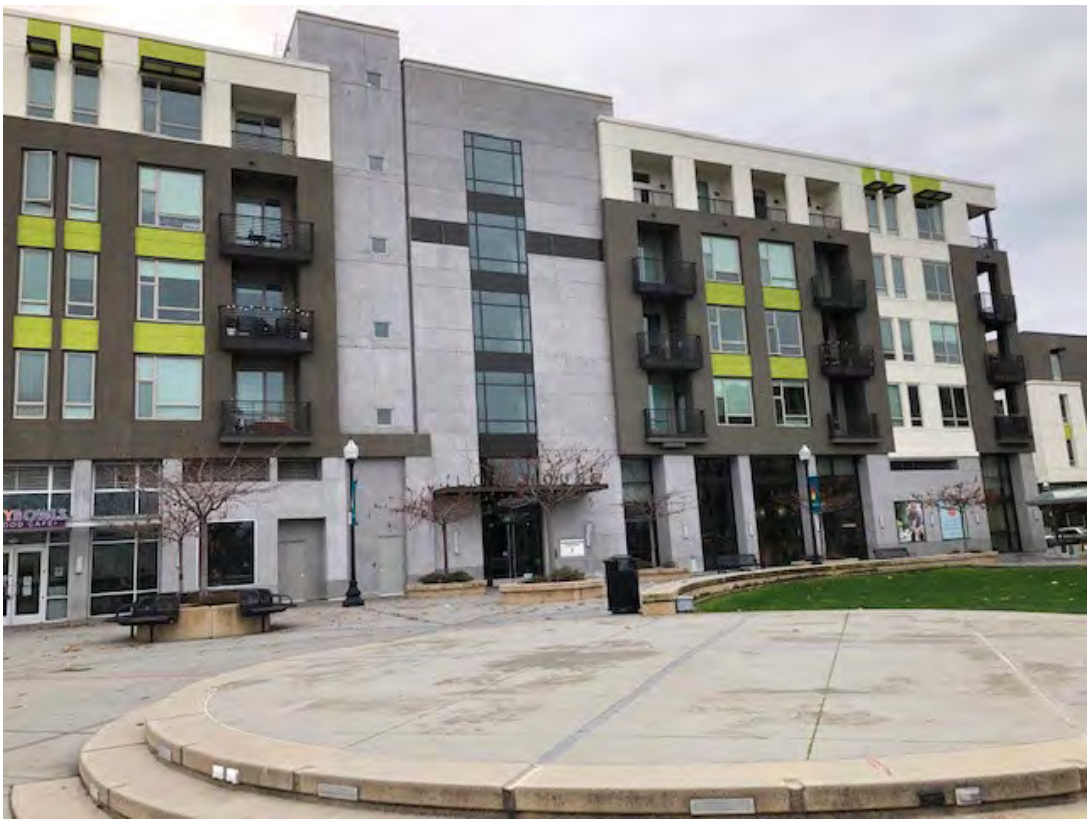
Architecture has an effect on how we feel and that aspect should be carefully considered. It can make us feel happier and more relaxed or anxious and depressed. Choice of architecture can also make us feel more safe, trusting and generous. This is not just my opinion, this is a result of scientific experiments and I highly recommend watching The Happy City Experiment talk on the topic.

We have examples of what people are drawn to - Santana Row, Santa Barbara and in our own town - Murphy Street. We need more of its charm, we need to extend it keeping the style. We need pedestrian only areas. We should not only extend Murphy street, keeping its height (no more than 2 story buildings) and consistent style, we should close it to traffic, or at least make it a one way street with a very low speed limit.

We need a downtown. There is nowhere else to go. It cannot all be a jungle of dehumanized office buildings, with complete lack of grace, beauty and charm that become deserts in the evenings and on the weekends. We can't afford to create a downtown that nobody will care about. We need to create a downtown people will love.

I don't believe we are put on this planet to create ugliness. We are here to create beauty.

Since a picture is worth a thousand words, here are some illustrations.. Current development that evokes negative emotions:



What people are drawn to:


ostale
COCKTAILS
Paul & Harvey
Rok

The above photographs were taken on the same day, (weekend), around the same time.

Sincerely
Lidia Marchioni

From: [redacted]
To: David Hogan
Subject: Buildings in Sunnyvale
Date: Sunday, December 8, 2019 12:20:20 PM

Hello Dave Hogan,

As a long time Sunnyvale resident since the mid-seventies, I'm against more building structures in downtown Sunnyvale.
Parking is at a premium and traffic congestion is overwhelming.

Have you given some thought to traffic on Matilda, Iowa, Mary, Lawrence Expressway, El Camino, and Sunnyvale Ave ?
They were not designed to handle the traffic load if more buildings for office space and residential housing were t increase in the Sunnyvale Downtown area.

Sincerely,
A concerned Resident.
Lou Messina

From: [redacted]
To: David Hogan
Subject: Concerns regaarding the Draft EIR of Downtown Specific Plan
Date: Tuesday, December 31, 2019 7:34:35 AM

Dear Mr. Hogan,
I have a few deep concerns regarding the Downtown Specific Plan. They are as follows:

1. School crowding: I have been a substitute teacher at Cumberland Elementary school for over 15 years. During that time I have seen the school add several portable classrooms more than once to accommodate the ever increasing number of students. As well, there are more students in each classroom than even a few years ago. Schools already have had to start having multiple lunch and recess times to accommodate the number of students. One of my main concerns with the amended Downtown Specific Plan is the question of where all the children who may live in the residential units will be going to attend school? Ellis and Cumberland as well as the other Sunnyvale elementary schools are already crowded. I am well aware that Sunnyvale needs more housing, however, adding residential units without opening a new school or reclaiming the Stratford school across from Washington Park is a huge disservice to our children.

2. Increased traffic: My husband and I have lived on Purisima Avenue for over 27 years. In the last several years the traffic in our area of Sunnyvale has increased exponentially. Increasing the number of people going to and from by increasing the office space and residential units will result in crushing traffic problems.

3. Seven story building: I am very opposed to the proposed seven story building! That tall of a building will diminish the feel of a welcoming downtown and turn it into a more high rise city feeling environment. I am afraid it will also begin a trend of taller and taller buildings that will forever harm the Sunnyvale environment which residents love.

Thank you for hearing the voice of a concerned resident,

Tonya Oravetz

From: [redacted]
To: David Hogan
Subject: disapproval of Proposed Amendments to Downtown specific plan and 3 development projects. #2017-8047,2016-7438, #2017-7872
Date: Monday, January 6, 2020 10:45:16 AM

ATTN: Email is from an external source; Stop, Look, and Think before opening attachments or links.

To whom it may concern,
I reviewed the plan and think it is unfortunate that the 45 day public review period was during the holidays.....a very distracting time. I ask, how will this improve the quality of life for residents and business owners in Sunnyvale?? It is already congested beyond recognition and I think this will create more pollution, frustration, commute time, and overall crowds everywhere.

Mera Tawfik-Oshana, AIF®
Vertex Wealth Management
[redacted]

From: Karen Reilly
To: David Hogan
Date: Friday, November 29, 2019 1:27:08 PM

Please consider my input regarding the downtown plan. I live in the heritage neighborhood and am open to development, however the school infrastructure is lacking in the proposed plan. Case in point is Ellis Elementary. The school has doubled in size. The poor kids are crowded onto a playground that is now about half the size of what is was when there were half the children. The drop off area is dangerous for parents, children and neighbors and the portables keep growing. It is time for Sunnyvale to open more schools. The high schoolers that live in the Lakewood area have to ride about an hour each way via bus. There is a neglect by the school district in that the high schools are geographically clustered together in the wealthier areas. I never see this being addressed by the city or the school board. In fact, when a former mayor was campaigning door to door, I asked him where all of the kids who occupy the new apartments would attend school and he replied “They won’t had kids.” I “kid” you not!!
Please accept my comments and consider the impact upon the schools. Sincerely, Ms. Reilly

From: Michelle King
To: Lillian Tsang; David Hogan
Subject: Fwd: Feedback on bicycle improvement related to downtown plan
Date: Tuesday, December 3, 2019 12:58:44 PM

Fyi

Get Outlook for Android

From: Swaminathan Sundaramurthy [redacted]
Sent: Sunday, December 1, 2019 9:17:25 AM
To: Michelle King [redacted]>
Subject: Feedback on bicycle improvement related to downtown plan

ATTN: Email is from an external source; Stop, Look, and Think before opening attachments or links.

Hi Michelle,

Re: https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?t=50894.64&BlobID=26688

Thanks for sharing the new downtown plan; the improvements to the downtown seem very exciting and forward looking.

However, vastly improving commercial regions and high density housing always comes with substantially increased vehicular traffic. The gridlocks we've been experiencing on Mathilda Ave and E Maude Ave due to the new Google and Apple campuses in N Sunnyvale are examples of this.

My family and I are avid bicyclers. This was one the main reasons for us to decide to settle down in Sunnyvale. I used to bike with my kid to school and parks from around N Sunnyvale Ave x E Maude Ave to Washington Park. However, due to being stuck in traffic, drivers are frustrated, tend to drive rashly, run traffic lights and not wait for bikes at pedestrian crossing. I've sometimes had to wait for 10 mins just to cross the N Bayview Ave x E Maude Ave intersection. It also made my bike ride with kids extremely unsafe. Therefore, over the past 6 months I have had to stop doing that due to the increased traffic. I also use bike and Caltrain to commute to work, again, at peak times that sometimes becomes challenging. Biking back home in the evening/night isn't very safe on streets with shared bike lanes.

I am quite dissatisfied with proposed bike improvements proposed as part of the downtown improvements - they do not seem to be substantial. In fact, I fear that the improvements are going to make it nearly impossible for more people to take sustainable means of transportations (bikes, electric scooters, etc) to downtown, since biking will be more unsafe than it is right now. Also, it may not support any increased bike ridership.

Please consider
1) Increasing reach of bike lanes, so more families can bike downtown
2) Create dedicated (not shared) bike lanes, to improve bike rider safety, and encourage more kids to bike to schools and parks (paths to schools and parks do pass through downtown)

3) Adding more bike parking at important points (Caltrain station, movie theater, parks, etc)

Let us make Sunnyvale better designed for sustainable modes of transportations (day and night) and encourage greater usage of of public transportation (Caltrain, buses). It would be awesome to be able to bike to and from movie theaters with family.

I would be happy to help in any way possible to provide feedback on bicycle route and safety improvements.

Cheers,
Swami

From: [redacted]
To: David Hogan
Subject: environmental impact report comment
Date: Sunday, December 8, 2019 5:34:21 PM

To whom it may concern:

I have read the "Proposed Amendments to the Downtown Specific Plan and Three Development Projects" and would like to express my concern and objections for the changes proposed.

It is apparent that the identified potential environmental impacts are significant. To ignore the impact of noise, transportation, systems, and emissions, even with the proposed mitigation efforts would be reckless. Already, for the size of Sunnyvale, Sunnyvale already has too many office buildings and hotels. The traffic brought on by continuous adding more of these buildings (height and density, especially) has contributed greatly to a degradation in the quality of life here.

I have lived in Sunnyvale around the block from city hall and the library for almost three decades. Mathilda and El Camino are heavily congested, leading to heavy traffic backups. Large retail stores, such as the Emporium, Montgomery Wards, JC Penneys, and now Macys have disappeared over time. To visit even a large retail store such as Kohls or Office Depot, we now need to drive to another city. If anything, instead of adding more office buildings, retail space development should be added, and the city should try to attract retailers back to the city. As a worker, I am in favor of office buildings, but not to the extent that Sunnyvale has pushed for the past decade.

I also am opposed to the numerous amendments to existing development plans that have come before the city. What is the point of soliciting community comments where many have pushed against such amendments (for example, increasing building height to seven stories and density), only to have the proposed changes implemented?

Please consider the quality of life in Sunnyvale. We need to improve it and not by increasing the density and height of the buildings and traffic that has become a problem here.

Thank you,

Lucille Woo
[redacted]

Additional public comments on the Draft EIR were taken during a Planning Commission Hearing on December 16, 2019. Refer to the audio recording of the Planning Commission hearing for full details of the comments raised. A copy of the recording can be found on the City's website at: https://sunnyvaleca.legistar.com/Calendar.aspx.

FEHR PEERS

MEMORANDUM

Date: January 21, 2020

To: Ralph Garcia, City of Sunnyvale

From: Ryan Caldera and Sara Sadeghi, Fehr & Peers

Subject: Updated Transit Delay Analysis for the Downtown Specific Plan Transportation Impact Analysis (TIA) and Environmental Impact Report (EIR), Sunnyvale, California

SJ17-1787

This memorandum includes an updated transit delay analysis requested by the Santa Clara County Valley Transportation Authority (VTA) in its comments on the Sunnyvale Downtown Specific Plan Amendments Project Draft EIR.

BACKGROUND

The Downtown Specific Plan EIR presented a transit delay analysis for the transit network that was current at the time of the final TIA (March 2019). Since then, VTA implemented their New Transit Service Plan system update in December 2019, which includes changes to the bus network in the study area for the Sunnyvale Downtown Specific Plan. VTA noted in their comments that the transit delay analysis should be updated to reflect changes to the bus network that were effective December 2019, including the addition of new services (Routes 20 and 21) and discontinuation of Route 54. A summary of the new routes is provided below:

- *Route 20* – Service from the Milpitas BART station to the Sunnyvale Transit Center via Fair Oaks Avenue and Washington Avenue. On weekdays, frequencies are 15 minutes during the AM and PM peak periods and 30 minutes during off-peak time periods. Route 20 stops at the Sunnyvale Transit Center, a walking distance of approximately 0.3 miles from the Project area.
- *Route 21* – Service from the Stanford Shopping Center and the Santa Clara Transit Center via Mathilda Avenue, Evelyn Avenue, and Reed Street. On weekdays, frequencies are 30 minutes during the AM and PM peak periods as well as off-peak. Route 21 stops at the

Sunnyvale Transit Center, a walking distance of approximately 0.3 miles from the Project area.

ANALYSIS RESULTS

Table 1 presents the updated list of bus routes presented in Table 7 in section 2.4 of the Final TIA, eliminating Route 54 and adding Routes 20 and 21. **Figure 1** attached presents the updated transit network near the Project area. (**Figure 1** is included in the Final TIA as Figure 5.)

TABLE 1: EXISTING TRANSIT SERVICE

Route	From	To	Weekdays		Weekends	
			Operating Hours[1]	Peak Headway[2] (minutes)	Operating Hours[1]	Headway (minutes)[2]
VTA Route 20	Milpitas BART	Sunnyvale Transit Center	5:30 AM – 8:50 PM	15	N/A	N/A
VTA Route 21	Stanford Shopping Center	Santa Clara Transit Center	5:55 AM – 9:30 PM	30	8:20 AM – 9:00 PM	45
VTA Route 22	Palo Alto Transit Center	Eastridge Transit Center	24 Hours	15	24 Hours	15
VTA Route 26	Sunnyvale/ Lockheed Martin Transit Center	Eastridge Transit Center	5:15 AM – 11:50 PM	30	6:15 AM – 10:55 PM	30
VTA Route 32	San Antonio Shopping Center	Santa Clara Transit Center	5:45 AM – 8:15 PM	30	8:45 AM – 6:00 PM	60
VTA Route 53	West Valley College	Sunnyvale/ Lockheed Martin Transit Center	7:00 AM – 7:00 PM	60	N/A	N/A
VTA Route 55	De Anza College	Great America Station	5:30 AM – 10:50 PM	15	7:40 AM – 9:05 PM	30
VTA Route 304	Sunnyvale/ Lockheed Martin Transit Center	Santa Teresa Light Rail Station	5:50 AM – 8:50 AM, 3:30 PM – 7:10 PM	45	N/A	N/A
VTA Route 522	Palo Alto Transit Center	Eastridge Transit Center	5:00 AM – 11:00 PM	12	6:00 AM – 11:00 PM	15
VTA Route 822	Kifer Road & Uranium Drive	Great America Station	6:15 AM – 9:40 AM, 3:10 PM – 6:40 PM	60	N/A	N/A

Caltrain	San Jose Diridon (Gilroy)	San Francisco	4:30 AM – 12:40 AM	15	7:00 AM – 12:15 AM Saturday 8:40 AM -11:50 PM Sunday	60

Notes:

1. Operating hours rounded to the nearest 5-minute interval.

2. Headways are defined as the time interval between two transit vehicles traveling in the same direction over the same route. Caltrain headways are measured from Sunnyvale Station.

Source: VTA, Caltrain, January 2020.

Table 2 presents the updated transit delay analysis presented in Table 31 in the Final TIA. The Project is projected to add less than 60 seconds of delay to the two new routes (Routes 20 and 21).

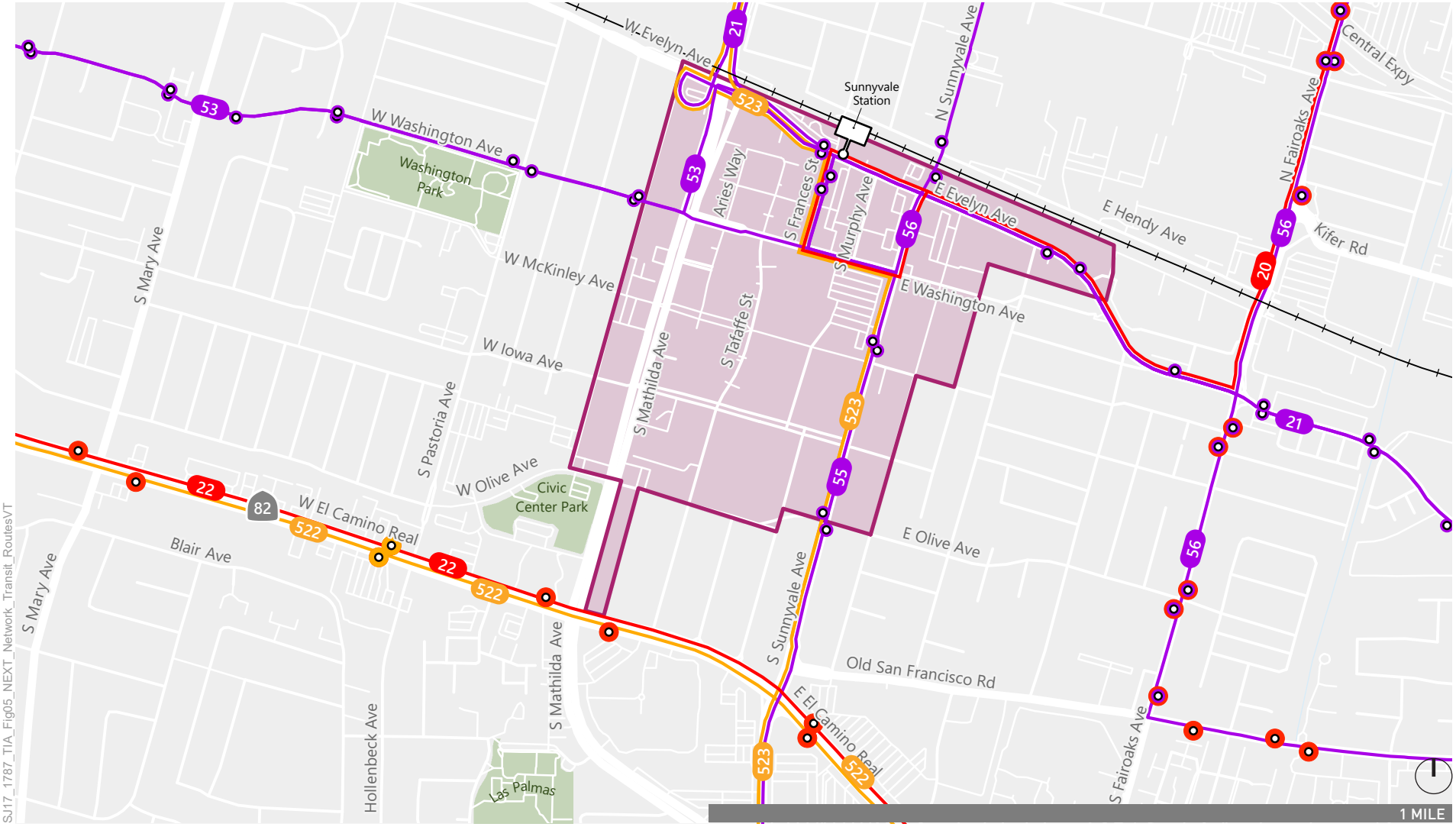
TABLE 2: ADDITIONAL TRANSIT VEHICLE DELAY BY ROUTE

VTA Transit Route	Peak Hour	Projected Additional Delay (seconds per vehicle)						Affected Corridors
		Existing Plus Project		Background Plus Project		Cumulative Plus Project		
		NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	
20	AM PM	NC NC	NC NC	NC NC	NC NC	NC 6	6 11	Fair Oaks Avenue, Washington Avenue
21	AM PM	NC 5	6 NC	NC 39	16 17	NC 36	19 51	Mathilda Avenue, Evelyn Avenue, Reed Street
22/522	AM PM	NC NC	NC NC	NC 8	10 NC	NC 28	30 NC	El Camino Real
26	AM PM	NC NC	NC NC	NC 7	NC 9	NC 21	5 20	Fair Oaks Avenue, Wolfe Road
32	AM PM	NC NC	6 NC	6 17	25 14	61 18	36 49	Mathilda Avenue, Evelyn Avenue
53	AM PM	NC 8	NC 5	NC NC	NC 23	NC 8	NC 38	Washington Avenue, Frances Street, Evelyn Avenue, Mathilda Avenue
55	AM PM	17 6	8 18	33 17	16 51	93 34	31 120	Sunnyvale Avenue, Evelyn Avenue, Frances Street, Washington Avenue

Notes:
NC = The Project was considered to have no change if the increase in travel time was less than five seconds or the travel time improved slightly (due to changes in critical movement changes, lane geometry changes, etc.).
Source: Fehr & Peers, January 2020.

CONCLUSION

The findings in the Final TIA stated that all routes, except Routes 54 and 55 would see delay increases of 60 seconds or less. VTA's New Transit Service Plan discontinued service for Route 54. Therefore, with the updated transit delay analysis, all routes except Route 55 would see delay increases of 60 seconds or less, and no further analysis or improvements are recommended based on the updated analysis.



Project Site

Caltrain Rail & Station

Rapid: every 15 minutes or better and limited stops

Express: every 15 minutes or longer at peak periods

Frequent: every 15 minutes

Route 522 Bus Stops

Route 21, 53, 55, and 185 Bus Stops

Route 22 and 26 Route Bus Stops

Figure 1

VTA New Transit Service Plan Transit Routes

Cityline Sunnyvale TIA