# **RESPONSES TO COMMENTS**

# INTRODUCTION

This Responses to Comments document contains specific comments received during the public review period of the Delta Fair Village Project Initial Study/Mitigated Negative Declaration (IS/MND).

According to CEQA Guidelines Sections 15073 and 15074, the lead agency must consider the comments received during consultation and review periods together with the IS/MND. However, unlike with an Environmental Impact Report (EIR), comments received on an IS/MND are not required to be attached to the negative declaration, nor must the lead agency make specific written responses to public agencies. Nonetheless, the lead agency has chosen to provide responses to those specific public comments that are related to the environmental analysis contained in the IS/MND. Any non-environmental comments have been considered by the City as part of the staff report.

### BACKGROUND

The City of Antioch used the following methods to solicit public input on the IS/MND: a Notice of Completion of the IS/MND was posted with the State Clearinghouse on May 1, 2020. The IS/MND was distributed to applicable public agencies, responsible agencies, and interested individuals. In addition, electronic copies were available on the City's website, <u>https://www.antiochca.gov/community-development-department/planning-division/environmental-documents/</u>. The public review period ended June 1, 2020.

### **RESPONSES TO COMMENTS**

The Responses to Comments below address the comments provided by Adams Broadwell Joseph Cardazo on behalf of the Antioch Residents for Responsible Development. Where revisions to the IS/MND text were made, new text is <u>double underlined</u> and deleted text is <del>struck</del> through.

All such revisions to the IS/MND are relatively minor, and do not affect the adequacy of the conclusions presented therein. CEQA Guidelines Section 15073.5 states the following regarding recirculation requirements for negative declarations:

- (c) Recirculation is not required under the following circumstances:
  - (1) Mitigation measures are replaced with equal or more effective measures pursuant to Section 15074.1.
  - (2) New project revisions are added in response to written or verbal comments on the project's effects identified in the proposed negative declaration which are not new avoidable significant effects.
  - (3) Measures or conditions of project approval are added after circulation of the negative declaration which are not required by CEQA, which do not create new significant environmental effects and are not necessary to mitigate an avoidable significant effect.

(4) New information is added to the negative declaration which merely clarifies, amplifies, or makes insignificant modifications to the negative declaration.

Based on the above, pursuant to CEQA Guidelines Section 15073.5, recirculation of the IS/MND is not warranted.

# ADAMS BROADWELL JOSEPH & CARDAZO ON BEHALF OF THE ANTIOCH RESIDENTS FOR RESPONSIBLE DEVELOPMENT

The comments submitted by Adams Broadwell Joseph & Cardazo on behalf of the Antioch Residents for Responsible Development are primarily based on a memorandum prepared by Soil Water Air Protection Enterprise (SWAPE). Although the comments provided by Adams Broadwell Joseph & Cardazo are not limited to those issues raised by SWAPE, the SWAPE analysis provides the technical basis for the comments submitted by Adams Broadwell Joseph & Cardazo. Thus, to avoid duplication of responses, the following responses will first provide responses to the technical concerns raised by SWAPE, before providing responses to the comments of Adams Broadwell Joseph & Cardazo that have not already been addressed through the response to the SWAPE analysis. In so doing, this response to comments document will respond to all factual concerns raised by the commenter.

## Hazards and Hazardous Materials

The analysis of Hazards and Hazardous Materials was in part based on information derived from the California Environmental Protection Agency's (CalEPA's) Cortese List. The Cortese List is a legislatively defined list of sites known to contain, or be contaminated by, hazardous materials or substances, and is included as Section 69562.5 of the Government Code. The Cortese List is updated annually by various state agencies including the Department of Toxic Substances Control, the State Department of Health Services, the State Water Resources Control Board, and the California Integrated Waste Management Board (now CalRecycle). The information provided by the foregoing state agencies is compiled by the Secretary for Environmental Protection.<sup>1</sup> Due to the compilation of information from a variety of sources, the Cortese List provides a critical resource in determining whether a site is affected by hazardous material contamination. In fact, CEQA Guidelines Section 21092.6 require that lead agencies consult lists compiled pursuant to Section 65962.5 of the Government Code during the drafting and notification process for a negative declaration or a draft environmental impact report.

To ensure that new data had not been added to the Cortese List since publication of the IS/MND prepared for the project, the Cortese List was again consulted, as well as the California Office of Environmental Health Hazard Assessment's (OEHHA's) CalEnviroScreen 3.0. According to the CalEnvironScreen and the Cortese List, the project site does not contain any known hazardous materials sites, and the closest cleanup site is located at least 0.6 miles southwest of the project site, at the Los Medanos Tank Farm.<sup>2</sup> Consequently, the conclusion presented within the IS/MND is supported by existing resources related to the existing hazardous materials in the project region.

Pages 51 through 53 of the IS/MND present consideration and analysis of various potential sources of hazardous materials in addition to the use of the Cortese List. Because the project site is currently developed and overlain with impervious surfaces, testing of the site for contaminated

<sup>&</sup>lt;sup>2</sup> California Office of Environmental Health Hazard Assessment. *CalEnviroScreen 3.0.* Available at: <u>https://oehha.ca.gov/calenviroscreen/indicator/cleanup-sites</u>. Accessed July 13, 2020.



<sup>&</sup>lt;sup>1</sup> California Environmental Protection Agency. *Cortese List: Background and History*. Available at: <u>https://calepa.ca.gov/sitecleanup/corteselist/Background/</u>. Accessed July 2020.

soils would be onerous, and would only be necessary should evidence be provided that the soil underlying the project site was previously contaminated. As noted in the SWAPE analysis, the project may have been disturbed at various points in history; however, the mere fact that a site was disturbed does not mean that the site has been contaminated. Moreover, the commenter has not included the historic imagery purported to show such disturbance; thus, the veracity of the commenter's assertion that the site was previously disturbed can not be verified at this time. Nevertheless, site contamination would only arise from specific activities that involve the use or disposal of hazardous materials. The commenter has not provided evidence that hazardous materials were either used or disposed of within the property. According to the resources consulted during preparation of the IS/MND and this response to comments, the project site does not contain any known sources of hazardous wastes, from either prior or existing uses. Based on the analysis provided in the IS/MND, the updated research performed during preparation of this response to comments, and the lack of evidence provided by SWAPE indicating the likelihood of contamination, preparation of a Phase I ESA is not deemed necessary, and the conclusions of the IS/MND are adequate for the purposes of environmental analysis under CEQA.

## Air Quality

The following sections discuss the adequacy of the air quality analysis presented in the IS/MND, and, where needed, provide minor revisions to the text of the IS/MND to clarify or amplify the conclusions reached in the document.

### **Project Trip Generation Input Parameters**

The comment is introductory. The specific concerns expressed by the commenter are responded to in-depth below.

## Determination of Land Use Size

As shown in the portion of the Transportation Assessment (TA) prepared for the project by Fehr and Peers replicated by the commenter, note 6 of the Trip Generation Summary in the traffic report provides information related to the trip generation estimate produced for the existing shopping center. Note 6 of Table 4, Trip Generation, of the TA states the following, "[e]xisting shopping center trip generation taken from enter and exits from the peak hour turning movement counts."<sup>3</sup> Thus, the trip rates used in project analysis were based on real-world observed trip generation from the existing shopping center. Consequently, the trip generation attributed to the existing development is accurate, as is the analysis presented within the IS/MND, which is dependent on the observed trip rate.

In addition, use of project site wide square footage of 161,000 square feet (sf) is correct for the purposes of air quality modeling. The difference in square footage between 147,081 and 161,000 is due to a recently submitted application for operation of a church and preschool/daycare within the project site. The proposed application is included as project 8 in Table 6 of the TA, and includes operation of a 4,700-sf church as well as a 9,300-sf preschool/daycare for a total operational square footage of 14,000 sf. In order to avoid double-counting potential impacts from the church and preschool/daycare, the 14,000-sf operational area was excluded from much of the analysis presented in the IS/MND and treated as a pending future project. For instance, as discussed above, the trip generation rates in the TA were based on actual traffic counts from the project site, and, because the church and preschool/daycare were not operational at the time of analysis, existing traffic counts do not include trips related to the proposed church and preschool/daycare.

<sup>&</sup>lt;sup>3</sup> Fehr and Peers. *Transportation Assessment: Delta Fair Village* [pg. 18]. December 2019.



Although the church and preschool/daycare were excluded from much of the analysis in the IS/MND, inclusion of the full 161,000 sf of building space within the air quality and GHG emissions analysis portion of the IS/MND is justified for several reasons. Principally, the proposed church and preschool/daycare would be housed in existing building space within the project site. That is, the building area proposed for use as a church and preschool/daycare already exists within the site. Maintenance and upkeep of structures, even when non-tenanted, still results in emissions related to landscaping, building maintenance including painting, and the consumption of electricity for building security lighting. Moreover, to ensure that only emissions from the building itself were considered, the trip rate for the existing structures were updated in CalEEMod to reflect the trip rates from the existing site presented within the TA. The result of the method used to calculate emissions from the full 161,000 sf of existing development is not an overestimation of emissions as suggested by the commenter, but an accurate representation of the emissions that currently result from on-site activities.

# Selection of ITE Land Use Code

The future tenant of the proposed 4,000 sf stand-alone structure is not currently known. As noted on page 16 of the TA prepared for the project "For a conservative approach on the trip generation, the 4,000 square foot new facility was assumed to be daycare rather than retail." Although the future use of the 4,000-sf structure is speculative, Fehr and Peers chose a land use deemed conservative for the analysis of potential traffic related impacts.<sup>4</sup> In order to maintain consistency across the technical reports prepared for the project, the air quality analysis relied on the expertise of Fehr and Peers and used the trip generation rates presented in the TA. For perspective, according to the 10<sup>th</sup> edition of the Institute of Traffic Engineers *Trip Generation Manual* a daycare land use typically results a daily trip rate of 47.62 trips per 1,000 sf. A shopping center land use typically results in a comparatively lower trip rate of 37.75 trips per day per 1,000 sf. Because day cares are anticipated to result in a higher daily trip rate as compared to a shopping center, in contrast to the commenter's assertion, assuming a day care would be operated at the 4,000 sf structure is both reasonable and conservative, in that the day care use would result in a higher estimated daily trip rate, and higher daily emissions, as compared to a shopping center land use.

# **Emissions Modeling Input Parameters**

Pages 23 as well as 47-48 of the IS/MND provide information related to the project-specific modeling assumptions applied to the proposed land uses. Additional information is provided in the CalEEMod outputs themselves. In general, the information used to model emissions was based on project-specific information provided in the site plans, anticipated construction details provided by the project applicant, information provided in the TA, and publicly available information related to the application of statewide legislation, such as PG&E's compliance with the Renewable Portfolio Standards (RPS).

# **Existing Land Use Size**

Please refer to the section above titled "Determination of Land Use Size." As discussed therein, an existing square footage of 161,000 was used precisely for the purpose of capturing building related emissions that are currently occurring within the project site. Thus, the modeled emissions are sound and provide a credible base for the analysis of project-related emissions.

# **Electricity Emissions Factors**

The State's RPS is a legislative requirement mandating that public utilities source a certain percentage of their retail electricity from renewable sources. Producing electricity from renewable

<sup>&</sup>lt;sup>4</sup> Fehr and Peers. *Transportation Assessment: Delta Fair Village* [pg. 16]. December 2019.



sources reduces the GHG emissions intensity of electricity, thus reducing the amount of GHG emissions released per unit of energy consumed. The default values for the emissions intensity of PG&E electricity in CalEEMod are based on values from the year 2008.<sup>5</sup> Since that time, PG&E has increased the proportion of electricity produced by renewable sources from 14 percent<sup>6</sup> to 39 percent by the year 2018,<sup>7</sup> which is the most recent year for which data is currently available. PG&E will be required to continue increasing the renewable content of their electricity in-line with the RPS eventually reaching 60 percent renewable energy content by the year 2030. However, based on RPS requirements, in the year 2022, which was assumed to be the first year of project operations, PG&E would only be required to provide 38.4 percent of grid electricity through renewable sources. Although PG&E currently exceeds the RPS standard for 2022, in order to provide a conservative estimate of project-related emissions, the energy intensity factor in CalEEMod was adjusted under the assumption that PG&E would operate with a renewable content of 38.4 percent in the year 2022. Because PG&E has already exceeded this level of renewable energy content, the assumption relied upon in emissions modeling prepared for the project are reasonable and conservative.

## **Changes to Construction Schedule**

The construction schedule applied for the proposed project was based on applicant provided information. As noted in the CalEEMod User's Guide, "if the user has more detailed site-specific equipment and phase information, the user should override the default values."<sup>8</sup> The proposed project involves construction of several types of land uses in both a free-standing and mixed-use structure, which is generally a more complex type of project than a standard single-use type development. Given the complexity of the proposed development as well as the applicant provided construction schedule, the CalEEMod default construction schedule was adjusted to reflect an 18-month construction period, as discussed on page 23 of the IS/MND. Adjustment of the default construction schedule is supported by the CalEEMod user guide and reflects the best available information for the proposed project; therefore, the analysis presented within the IS/MND is adequate.

# Proposed Project Land Use Type and Size

Based on the most recent site plans submitted to the City, the technical analyses prepared for the proposed project correctly assume that the standalone structure noted by the commenter would be 4,000 sf. Although the technical analyses prepared for the project referenced a correct square footage, the IS/MND incorrectly states that the new standalone structure would be 4,174 sf. Therefore, several revisions to the text of the IS/MND are required as follows.

Page 2 of the IS/MND is hereby revised as follows:

12. Project Description Summary:

The proposed project would include demolition of 73,546 sf of the 147,081 sf Delta Fair Village Shopping Center to develop the site with approximately 210 multi-family residential units, which would be located in five four-story buildings above a single-story parking

<sup>&</sup>lt;sup>8</sup> California Air Pollution Control Officers Association. *California Emission Estimator Model Use Guide* [pg. 31]. November 2017.



<sup>&</sup>lt;sup>5</sup> California Air Pollution Control Officers Association. California Emission Estimator Model Use Guide: Appendix D. October 2017.

<sup>&</sup>lt;sup>6</sup> PG&E. Planning for California's Clean Energy Future. Available at: <u>http://www.pgecorp.com/corp\_responsibility/reports/2008/our\_environment/future\_planning.html</u>. Accessed July 14, 2020.

<sup>&</sup>lt;sup>7</sup> PG&E. Power Content Label. October 10, 2019.

garage. The apartment complex would include a courtyard with a clubhouse, pool, and playground. Additionally, a new 4,174-4,000 sf retail building would be constructed on the western portion of the site. The new development would total 411,511411,092 sf.

Similarly, page 8 of the IS/MND is hereby revised as follows:

#### Project Components

The proposed project would include demolition of approximately 73,546 sf of the existing Delta Fair Shopping Center. The area of demolition would be developed with a 210-unit multi-family apartment complex and a new 4,1744,000-sf retail building (see Figure 3). The apartment complex would consist of five buildings all located above a ground-level parking structure. The five buildings would be cohesively centered around a common courtyard area. The new retail building would be constructed north of the proposed apartment structure. The square footage of the proposed project would total 411,511411,092 sf. In addition, the project would include renovation of the remaining existing 73,535 sf of retail space. The proposed project would include new drive aisles and associated improvements, such as landscaping, utility connections, and parking development. The sections below describe the following project components in further detail: apartment buildings; circulation and parking; landscaping, common area and fencing; utilities; Rezone; Use Permit and Design Review; and Discretionary Actions.

Because the technical analyses prepared for the proposed project relied on the correct square footage, the foregoing changes do not affect the adequacy of the IS/MND.

With regard to the use of the "Day-Care Center" land use type in CalEEMod, the distinction between retail uses and educational uses, specifically daycares, noted by the commenter is not reflected in the City's General Plan Land Use and zoning designations. In fact, daycares are an allowable use within lands designated and zoned Regional Commercial. As discussed above, in the section titled Selection of ITE Land Use Code, the daycare land use was chosen to provide a conservative approach to the analysis of traffic-related impacts. Because daycares are an allowable use under the City's existing land use designations for the site and provides a conservative approach to analysis from a trip generation perspective, use of a daycare land use type is appropriate for the analysis presented within the IS/MND.

### Material Import and Export

The amounts and timing of material import and export applied in the CalEEMod emissions modeling are correct per applicant provided information regarding project construction. However, the IS/MND erroneously states that 100 cubic yards of material would be exported from the site during project grading; instead, the IS/MND should state that 100 cubic yards of material would be imported to the site during grading. Consequently, page 23 of the IS/MND is hereby revised as follows:

- Land uses include Apartments Mid-Rise and Retail;
- Construction would occur over an approximately 18-month period;
- A total of 73,546 sf of existing building would be demolished;
- Four acres would be disturbed during grading;
- A total of 50 cubic yards of material would be exported during site prep and 100 cubic yards would be exported <u>imported</u> during grading;
- Average daily trip rates of 5.44 trips per residential unit and 43.78 trips per thousand sf (ksf) of retail, were assumed based on the Transportation Impact Assessment (TIA) prepared for the proposed project by Fehr & Peers;
- The nearest transit station is located 0.01-mile away; and
- Pedestrian connection is provided on-site.

The method of calculating emissions related to material import/export is not dependent upon whether the material is entering or leaving the site. Rather, CalEEMod calculates emissions from import and export of material based on the total volume of material being moved and the number of haul trucks used to transport the material. Because CalEEMod calculates emissions based on the volume of material moved, even if emissions modeling had assumed that material was exported rather than imported during grading, such an error would not have an effect on the estimated emissions, and would not impact the analysis presented in the IS/MND.

Based on the above, only minor text changes are required to the IS/MND, and the analysis presented within the IS/MND remains valid.

# Hauling Trips

When a particular amount of soil material import or export is input into CalEEMod, the CalEEMod software generates an anticipated number of haul trucks required to transport the specified amount of material. Unless specific information is available regarding the number of trucks required to transport the material, CalEEMod defaults should be used. In the case of the project-modeling, the change to project modeling appears to be erroneous. Based on the comment, the construction modeling for the project has been updated to return the number of haul trucks to the default value. The updated modeling results are included as an appendix to this response to comments document. Based on the updated modeling, Table 3 on page 24 of the IS/MND is hereby revised as follows:

Maximum I	Table 3   Maximum Unmitigated Construction Emissions (lbs/day)											
Proposed Project Threshold of Exceeds												
Pollutant	Emissions	Significance	Threshold?									
ROG	<del>24.39<u>15.45</u></del>	54	NO									
NOx	<del>50.40<u>42.54</u></del>	54	NO									
PM <sub>10</sub> (exhaust)	2.20	82	NO									
PM <sub>10</sub> (fugitive)	18.22	None	N/A									
PM <sub>2.5</sub> (exhaust)	2.02	54	NO									
PM <sub>2.5</sub> (fugitive)	9.97	None	N/A									

Source: CalEEMod, October 2019July 2020 (see Appendix A).

It should be noted that the revisions to Table 3 also incorporate a staff-initiated change to address an error found in the emissions presented in Table 3. Specifically, the emissions of ROG and NO<sub>x</sub> presented in Table 3 of the IS/MND were retained from an earlier iteration of the project modeling, rather than the final project modeling contained in Appendix A of the IS/MND. However, the emissions presented in Table 3 of the IS/MND are conservative and the actual emissions, as included in the outputs contained in Appendix A of the IS/MND, would be lower.

As shown in the table above, construction-related emissions would remain below the BAAQMD's thresholds significance, despite the aforementioned change in modeling and staff-initiated change.

### **Trip Purpose and Percentages**

The commenter notes that CalEEMod assigns differing trip lengths through a system of "Trip Purposes." There are three types of trips in CalEEMod, primary trips, diverted trips, and pass-by trips, each of which is assigned a different trip length. CalEEMod automatically splits the total trips between the three categories based on the type of land use (e.g., commercial, residential, educational). In order to maintain consistency with the TA, the CalEEMod emissions modeling

prepared for the project applied the trip generation rates used within the TA. However, as noted by the commenter, the trip generation estimates presented within the TA prepared for the project also considered the potential for a portion of project trips to be comprised of pass-by trips. Thus, pass-by trips were inadvertently double-counted, with some pass-by trips accounted for in the TA and additional pass-by trips accounted for within the CalEEMod software through the default Trip Purpose assignments.

In response to the comment, updated emissions estimates have been prepared for the proposed project. To avoid double-counting pass-by trips in the estimation of project-related trips, the Trip Purpose in CalEEMod has been divided solely between primary and diverted trips, as suggested by the commenter. The updated modeling results are included as an appendix to this response to comments document. It should be noted that changes to the modeling prepared for the existing operations at the site have not been applied and are not needed. Based on the above, Table 4, on page 25 of the IS/MND is hereby revised as follows:

Unm	Table 4       Unmitigated Maximum Operational Emissions												
	Proposed	Project	Existing Fair Sh	g Delta opping									
Pollutant	Emiss	ions	Cen	ter	Net New	Emissions							
	lbs/day	tons/yr	lbs/day	tons/yr									
ROG	<del>14.5<u>14.68</u></del>	<del>2.43<u>2.46</u></del>	7.35	1.25	<del>7.15</del> 7.33	<del>1.81<u>1.21</u></del>							
NOx	<del>27.9<u>28.97</u></del>	4.99 <u>5.18</u>	14.2	2.55	<del>13.7<u>14.77</u></del>	<del>2.44<u>2.63</u></del>							
PM <sub>10</sub> (exhaust)	<del>0.31<u>0.33</u></del>	0.05	0.10	0.02	<del>0.21<u>0.23</u></del>	0.03							
PM <sub>10</sub> (fugitive)	<del>16.5<u>17.95</u></del>	<del>2.90<u>3.14</u></del>	8.85	1.55	<del>7.65</del> 9.1	<del>1.35<u>1.59</u></del>							
PM <sub>2.5</sub> (exhaust)	<del>0.30<u>0.31</u></del>	0.05	0.10	0.02	<del>0.20</del> 0.21	0.03							
PM <sub>2.5</sub> (fugitive)	<u>4.41</u> 4.80	<u>0.780.84</u>	2.37	0.42	2 <del>2.0<u>4.43</u></del>	<del>0.36<u>0.42</u></del>							
			Exceeds Th	resholds?	NO	NO							
Source: CalEEMod, Nov	rember 2019 <u>Ju</u>	l <u>y 2020</u> (see A	Appendix A).										

As demonstrated in the table above, adjusting the Trip Purpose as suggested by the commenter would not result in net emissions, or gross project emissions alone, exceeding the BAAQMD's thresholds of significance for maximum pounds per day or tons per year. Consequently, the conclusions reached within the IS/MND remain valid.

# **Area-Related Operational Mitigation Measures**

According to applicant provided information, the proposed residences would not include the installation of hearths, either natural gas or wood-fired. Thus, inclusion of the measure is warranted. Nevertheless, in response to the comment, page 23 of the IS/MND is hereby revised as follows:

- Land uses include Apartments Mid-Rise and Retail;
- Construction would occur over an approximately 18-month period;
- A total of 73,546 sf of existing building would be demolished;
- Four acres would be disturbed during grading;
- A total of 50 cubic yards of material would be exported during site prep and 100 cubic yards would be exported imported during grading;
- Average daily trip rates of 5.44 trips per residential unit and 43.78 trips per thousand sf (ksf) of retail, were assumed based on the Transportation Impact Assessment (TIA) prepared for the proposed project by Fehr & Peers;
- The proposed residences would not include natural gas or wood-fired hearths;

- The nearest transit station is located 0.01-mile away; and
- Pedestrian connection is provided on-site.

Based on the above, only minor text changes are required to the IS/MND, and the analysis presented within the IS/MND remains valid.

# Mobile-Related Operational Mitigation Measures

Existing pedestrian facilities connect the project site to other commercial and residential areas within the project vicinity. As noted on page 11 of the TA prepared for the project, "[t]hree routes operate in the vicinity of the Project site with Routes 380, 390, and 394 stopping at Delta Fair Boulevard and Buchanan Road, adjacent to the Project site." Route 380 provides service to Bay Point, Pittsburg, and Antioch, including two BART stations. Route 390 connects the Pittsburg BART with the Antioch BART station, and route 394 provides weekend service between Bay Point and the Antioch BART. All three routes connect various destinations including schools, public libraries, senior centers, city halls, BART stations, and commercial areas. Thus, the existing transit service within the vicinity of the project site is robust. The proposed project would include provision of internal pedestrian networks that would connect the proposed residences and non-residential uses with other on- and off-site uses, and would place more residents in close proximity to existing transit services. Consequently, inclusion of mobile-related mitigation measures is warranted for this project. The project plans included in the IS/MND for instance Figure 3 on page 8, depict the connection of all proposed uses with all existing on- and off-site uses.

The inclusion of inherent site features (such as existing transit and pedestrian facilities) is noted on page 23 of the IS/MND. Nevertheless, in order to provide greater clarity, page 23 of the IS/MND is hereby revised as follows:

- Land uses include Apartments Mid-Rise and Retail;
- Construction would occur over an approximately 18-month period;
- A total of 73,546 sf of existing building would be demolished;
- Four acres would be disturbed during grading;
- A total of 50 cubic yards of material would be exported during site prep and 100 cubic yards would be exported imported during grading;
- Average daily trip rates of 5.44 trips per residential unit and 43.78 trips per thousand sf (ksf) of retail, were assumed based on the Transportation Impact Assessment (TIA) prepared for the proposed project by Fehr & Peers;
- <u>The proposed residences would not include natural gas or wood-fired hearths;</u>
- The nearest transit station is located 0.01-mile away on Delta Fair Boulevard, with additional transit stops on Buchanan Road; and
- Pedestrian connection is provided on-site <u>and connects to existing off-site uses</u>.

The foregoing revisions are for clarification only, and serve to amplify the information already presented in the IS/MND. Thus, the analysis presented within the IS/MND remains valid.

# **Diesel Particulate Matter Health Risks**

As explained on pages 27 through 29, the only major source of diesel particulate matter (DPM) during project implementation would be construction activities. Because DPM would be a subset of the PM<sub>2.5</sub> emissions released by diesel-powered equipment, the estimated annual level of PM<sub>2.5</sub> emissions from project construction was used as the basis for the pollutant dispersion modeling prepared for the project. As shown in Appendix A of the IS/MND, total annual unmitigated construction emissions of PM<sub>2.5</sub> were anticipated to equal 0.1404 tons/yr during 2020 (the first year of project construction, and 0.0911 tons/yr in 2021. Based on the updated modeling included

as an appendix to this response to comments document, PM<sub>2.5</sub> emissions are anticipated to remain at 0.1404 tons/yr in 2020 and 0.0911 tons/yr in 2021. Consequently, the pollutant dispersion modeling prepared as part of the project health risk assessment does not underestimate construction-related emissions, and the conclusions presented within the IS/MND and based on the emissions modeling remain valid. Moreover, the use of total annual unmitigated construction emissions of PM<sub>2.5</sub> as a proxy for DPM emissions represents a conservative approach to analysis as the total annual emissions of PM<sub>2.5</sub> include emissions from both off-road diesel-powered equipment, as well as on-road diesel equipment. In practice, emissions from on-road vehicles would be dispersed throughout the roadway network of the region, and nearby receptors would only be exposed to a fraction of the total PM<sub>2.5</sub> emissions. Thus, actual health risks experienced by nearby receptors would likely be lower than the risks analyzed and presented in the IS/MND.

Health Risk Assessments (HRA) are only required where projects would involve substantial sources of toxic air contaminants (TACs). DPM is considered a TAC and would be emitted by construction-equipment, therefore, a construction HRA was prepared and presented in the IS/MND. Contrary to the commenter's assertion, operation of the project would not be considered to result in substantial emissions of TACs. As noted in the California Air Resources Board's (CARB's) Air Quality and Land Use Handbook: A Community Health Perspective (Handbook), common sources of TACs include freeways and high traffic roads, distribution centers, rail yards, ports, petroleum refineries, chrome plating operations, dry cleaners using percloroethylene, and gasoline dispensing facilities. The project does not include any of the foregoing uses. According to the TA prepared for the project, the project would only increase vehicle traffic within the project vicinity by 2,168 trips per day. The increased daily trips would be dispersed throughout the existing transportation network outside of the project site, and would not be anticipated to result in any roadways adjacent to nearby receptors experiencing a vehicle per day rate in excess of 100,000 vehicles, which is the level at which the CARB considers an urban roadway to be a high traffic road and a substantial source of TACs. Moreover, the existing commercial development at the project site may involve delivery of goods by way of heavy-duty diesel vehicles; however, the proposed project would result in a net reduction in on-site commercial space. A net reduction in on-site commercial space would be anticipated to reduce the number of heavy-duty diesel vehicles accessing the site. Thus, operational emissions of DPM would likely decrease with implementation of the project.

An operational HRA need only be completed if a project would involve operations that have the potential to emit substantial amounts of TACs. The proposed project does not include any substantial sources of TACs, and may ultimately reduce the long-term release of DPM from the project site. In compliance with Office of Environmental Health Hazard Assessment's (OEHHA's) guidance for the analysis of health risks from short-term projects, the health risks from short term projects should be evaluated for the duration of the project. In this case, health risks associated with construction were analyzed for the duration of the construction period, as recommended by OEHHA.<sup>9</sup> Consequently, a need for an operational HRA does not exist, and the HRA presented within the IS/MND remains a valid representation of the health risks that would occur due to construction of the proposed project.

<sup>&</sup>lt;sup>9</sup> Office of Environmental Health Hazard Assessment. *Air Toxics Hot Spots Program Risk Assessment Guidelines* [pg. 8-18]. February 2015.



As noted on page 28 of the IS/MND:

"[t]he associated cancer risk and non-cancer hazard index were calculated using the CARB's Hotspot Analysis Reporting Program Version 2 (HARP 2) Risk Assessment Standalone Tool (RAST), which calculates the cancer and non-cancer health impacts using the risk assessment guidelines of the 2015 Office of Environmental Health Hazard Assessment (OEHHA) Guidance Manual for Preparation of Health Risk Assessments."

The HARP 2 RAST modeling was adjusted to present a worst-case health risk by assuming that a nearby receptor would be exposed to the maximum concentration of pollutants from project construction, during the period of life when receptors are most vulnerable, which is the third-trimester of pregnancy. Because the age sensitivity factor is highest for individuals beginning in the third-trimester of pregnancy, the health risks to individuals that are exposed to project-related emissions starting at an older age would be comparatively less than the risk levels presented in the IS/MND.

The HARP 2 RAST tool was designed by the CARB in compliance with the OEHHA's guidance, and presents the maximum health risks based on the pollutant concentrations input by the user. To analyze health risks, the HARP 2 RAST software allows the user to input a starting age of exposure for a receptor and the exact duration of exposure. Based on toxicity studies conducted or reviewed by OEHHA, young animals are more sensitive to exposure to carcinogens as compared to adult animals. Thus, OEHHA uses age sensitivity factors that are higher for younger age groups, and lower for older age groups. In particular, individuals in the third-trimester of age through two years of age are considered the most sensitive age group to air toxics.

For the proposed project, the exposure age was set to begin in the third-trimester of the maximally exposed receptor and last throughout the entirety of project construction. In so doing, the maximally exposed receptor was assumed to experience risk during the highest susceptibility times of the receptor's life, where the receptor would be exposed through the entirety of the thirdtrimester and into the 0-2-year age group. HARP 2 RAST inherently calculates the risk experienced during the approximately three-month period of the third-trimester of pregnancy, then sums that risk with the risk experienced during the remaining period of exposure, which would be within the 0-2-year age group, given the anticipated construction timeline for the project. Because HARP 2 RAST inherently provides a summation of health risks for the maximally exposed receptor during the exposure period, further post-processing summation of health risks would artificially inflate the risks posed by the project. For instance, BAAQMD's threshold of significance is based on the number of increased cases of cancer per million individuals. If the cancer risk to a receptor in the third trimester at the start of construction was summed with the health risks experienced by a different receptor in the 16-70-year age group, the resulting cancer risk would no longer represent the individual risk per million individuals. The approach of considering risks additively from every age group is better suited towards determining a population wide risk, which is considered in both the BAAQMD's and OEHHA's guidance for analyzing health risks from longterm or large-scale industrial projects with a widespread area of emissions influence. Thus, the health risks presented within the IS/MND are valid, and supported by the CARB's guidance.<sup>10</sup>

In conclusion, the HRA conducted for construction health risks presents an accurate representation of the potential for unmitigated project construction to result in health risks to nearby receptors. Because the project would not include operational sources of TACs, an

<sup>&</sup>lt;sup>10</sup> California Air Resources Board. User Manual for the Hotspots Analysis and Reporting Program Health Risk Assessment Standalone Tool Version 2. March 17, 2015.



operational HRA is not warranted. The IS/MND compares project-related health risks to BAAQMD's adopted threshold of significance. Accordingly, the analysis provided in the IS/MND is valid.

Considering the validity of the analysis provided in the IS/MND, the commenter's conclusions based on their own emissions modeling and health risk screening analysis are not considered indepth, as the IS/MND provides a more detailed health risk analysis that is based on project-specific data.

# **GHG Emissions**

The following sections discuss the adequacy of the GHG emissions analysis presented in the IS/MND, and, where needed, provide minor revisions to the text of the IS/MND to clarify or amplify the conclusions reached in the document.

## Adequate Evaluation of GHG Impacts

The comment provides a summary of the commenter's concerns regarding the analysis of GHG emissions in the IS/MND. The following sections provide in-depth responses to the commenter's concerns.

## Conclusions of the GHG Analysis

As discussed above, the majority of the commenter's concerns do not affect the emissions estimated for the project. Nevertheless, in response to the comments received on the IS/MND, updated emissions modeling was prepared for the proposed project as part of this response to comments. In particular, updated emissions modeling was prepared to address concerns regarding the import and export of construction material, including the number of haul trucks required for such material movement, and to address concerns related to the default assignment of Trip Purposes.

With regard to construction emissions, the changes to project modeling have resulted in a change in construction-related emissions in the year 2020 from a level of 590.08 metric tons of carbon dioxide equivalence per year ( $MTCO_2e/yr$ ) to 590.11  $MTCO_2e/yr$ . The estimated emissions in the year 2021 have not changed. The change in emissions of 0.03  $MTCO_2e/yr$  would not change the amortized rate of annual construction emissions of 572.9, which is presented in Table 7 of the IS/MND. Because the amortized rate of construction is used in the analysis of project-related emissions, the changes to construction modeling are not considered substantial, and do not have the potential to affect the conclusions presented in the IS/MND. Nevertheless, Table 7 on page 48 of the IS/MND is hereby revised as follows:

Table 7										
Unmitigated Annual Project Construction GHG Emissions										
Year	Annual GHG Emissions (MTCO <sub>2</sub> e/yr)									
2020	590. <del>08<u>11</u></del>									
2021	555.75									
Total Construction Emissions	1,145. <del>83<u>86</u></del>									
Amortized Annual Construction Emissions	572.9									
Source: CalEEMod, November 2019 July 2020 (Appendix A	A).									

The foregoing revisions are minor and, as discussed above and in further depth below, do not result in changes to the significance of impacts identified in the IS/MND.

In terms of operational emissions, the changes to Trip Purpose discussed previously have resulted in a change to the estimated operational emissions. It should be noted that changes to the modeling prepared for the existing operations at the site have not been applied and are not needed. Therefore, the discussion of emissions of page 49 is hereby revised as follows:

Based on the total annual GHG emissions shown in the table, including amortized annual construction emissions, and a total service population of 661 residents and 11 employees, the proposed project would result in annual per service population emissions of approximately 3.313.69 MTCO<sub>2</sub>e/yr (2,227.22.477.7 MTCO<sub>2</sub>e/yr / 672 residents and employees = 3.313.69 MTCO<sub>2</sub>e/yr-resident and employees). Thus, implementation of the proposed project would result in emissions below the applicable 4.6 MTCO<sub>2</sub>e/yr per service population threshold of significance, and the proposed project would not be expected to have a significant impact related to GHG emissions.

In addition to the textual changes presented above, Table 8 on page 49 of the IS/MND is hereby revised as follows:

Table 8												
Unmitigated Opera	ational GHG Em	<u>nissions Year (MTC</u>	:O₂e/yr)									
Emission Source	Proposed Project Annual GHG Emissions	Existing Delta Fair Center Annual GHG Emissions	Net New Annual GHG Emissions									
Area	2.62	0.00	2.62									
Energy	420.95	268.6	152.35									
Mobile	<del>3,163.6<u>3,</u>414.01</del>	1,686.4	<del>1,477.2<u>1,727.61</u></del>									
Solid Waste	90.02	85.0	5.02									
Water	44.51	27.3	17.21									
Amortized Construction Emissions	572.9	-	572.9									
Total Annual GHG Emissions	<del>4,294.6<u>4,545.02</u></del>	2,067.3	<del>2,227.2<u>2,</u>477.7</del>									
Total Annual GHG Emissions Per Service Population			<del>3.31<u>3.69</u></del>									
BAAQMD Threshold			4.6									
Exceeds Threshold?			NO									
Source: CalEEMod, November 2019	) <u>and July 2020</u> (see Ap	pendix A).										

As shown in the table above, the updated GHG emissions would not exceed BAAQMD's adopted thresholds of significance. Compared to the level of emissions contemplated in the IS/MND the updated emissions analysis presents a total GHG emissions rate that has increased from the IS/MND anticipated level of 2,227.2 MTCO<sub>2</sub>e/yr to 2,477.72 MTCO<sub>2</sub>e/yr, which is an increase of 250.2 MTCO<sub>2</sub>e/yr, and results in a per service population emission rate increase from 3.31 MTCO<sub>2</sub>e/SP/yr to 3.69 MTCO<sub>2</sub>e/SP/yr, an increase of 0.38 MTCO<sub>2</sub>e/SP/yr. Because the emissions remain below the thresholds applied in the IS/MND, the revisions do not change the conclusions presented within the IS/MND.

As stated on page 47 of the IS/MND, the analysis presented in the IS/MND relies on BAAQMD's adopted thresholds of significance at the time that the environmental analysis of the project was prepared. In the absence of any other adopted thresholds or any formally adopted guidance from BAAQMD for the analysis of GHG emission beyond the year 2020, BAAQMD's adopted thresholds of significance for project-level operational GHG emissions of 1,100 MTCO<sub>2</sub>e/yr or 4.6 MTCO<sub>2</sub>e/yr per service population were deemed appropriate for use in the IS/MND.

In the absence of updated emissions thresholds adopted by BAAQMD, further consideration of substantial progress may be warranted to provide additional information regarding the project. Based on the comment, a service population threshold of 2.6 MTCO<sub>2</sub>e/SP/yr may be required for projects that begin operations in the year 2030. However, according to the analysis presented within the IS/MND, the project was anticipated to begin operations in the year 2022. A more reasonable and accurate method of estimating a project's compliance with substantial progress towards statewide emissions goals would be to interpolate the BAAQMD's service population threshold of 4.6 MTCO<sub>2</sub>e/SP/yr in the year 2020 to the year 2022. Assuming the commenter is correct that a service population threshold of 2.6 MTCO<sub>2</sub>e/SP/yr would be needed to meet the substantial progress required for statewide emissions in the year 2030, then the BAAQMD's adopted service population threshold of 4.6 MTCO<sub>2</sub>e/SP/yr per year between 2020 and 2030. Thus, in the year 2022, the first year of project operations anticipated in the IS/MND, the BAAQMD's efficiency threshold would be 4.2 MTCO<sub>2</sub>e/SP/yr.

As shown in the table above, the updated emissions modeling prepared for the project demonstrates that in the year 2022, the project would result in an emissions rate of 3.69 MTCO<sub>2</sub>e/SP/yr, which would be below the interpolated efficiency threshold of 4.2 MTCO<sub>2</sub>e/SP/yr. Consequently, the proposed project would continue to comply with the BAAQMD's thresholds of significance. Because BAAQMD has not formally adopted guidance directing that environmental documents analyze project-related emissions in the year 2030, for the purposes of this response to comments document, demonstration that the project would comply with BAAQMD's interpolated thresholds in the first year of operations is considered sufficient to support the conclusion presented in the IS/MND that implementation of the proposed project would result in a less-than-significant impact. It should be noted that project-related emissions would be anticipated to continue to decline into the future as PG&E continues to comply with the RPS program, and on-road vehicles within the state become more fuel efficient and less emitting due to fleet turnover and other statewide programs such as the Low Carbon Fuel Standard.

### Discussion of the City's Community Climate Action Plan

The commenter misinterprets the use of the City's Climate Action Plan in the analysis of GHG emissions presented within the IS/MND. The City's Climate Action Plan is not considered a qualified Climate Action Plan per section 15183.5 of the CEQA Guidelines. Consequently, the IS/MND did not rely on the project's compliance or conflict with the City's Climate Action Plan to determine the significance of the project's GHG emissions. Rather, the IS/MND relied on the quantitative analysis of GHG emissions presented in the IS/MND and verified in this response to comments document.

Because the City's Climate Action Plan was not relied upon to reach the significance conclusions in the IS/MND, but rather was presented for informational purposes, the analysis within the IS/MND remains adequate. To clarify the use of the City's Climate Action Plan in the IS/MND page 49 of the IS/MND is hereby revised as follows:

It should be noted that the City's Climate Action Plans were established to ensure the City's compliance with the statewide GHG reduction goals required by AB 32. <u>The City's Climate Action Plans is not considered a qualified Climate Action Plan under CEQA Guidelines Section 15183.5, and, thus, the following discussion of the City's Climate Action Plan is presented for informational purposes only. Although the Climate Action Plans do not include quantitative thresholds to assess a project's compliance, projects that are in compliance with the Climate Action Plans would be considered compliant with the GHG reduction goals required by AB 32. For instance, projects showing emissions reductions</u>



as required by the Climate Action Plans, or projects incorporating reduction strategies from the Climate Action Plans are understood to be in compliance with the Climate Action Plans' GHG emissions reductions goals, and, thus, in compliance with AB 32.

The foregoing revisions serve to clarify the informational nature of the discussion of the City's Climate Action Plan presented within the IS/MND, but do not serve to alter the significance conclusions presented in the IS/MND.

Considering that the City's Climate Action Plan was included in the IS/MND purely for informational purposes, a full consistency analysis of the project against all measures of the City's Climate Action Plan was not deemed necessary. Compliance with the City's Climate Action Plan would be of relevant concern during the planning process, not the CEQA process. Furthermore, some of the details requested by the commenter, such as the exact location of proposed trees, specifications regarding the renovation of existing structures, and the incorporation of low-maintenance landscaping, can more easily be determined during the planning process when landscaping plans and other specific improvement plans have been submitted to and approved by the City.

Finally, the IS/MND prepared for the project was released for public review on May 1, 2020, whereas the City's Climate Action Resilience Plan was adopted on May 12, 2020. Because the City's Climate Action Resilience Plan was not yet adopted at the time that the IS/MND was prepared and released for public review, an analysis of the project's compliance with the City's Climate Action Resilience Plan was not feasible or warranted.

### Updated Analysis Continues to Indicate a Less-Than-Significant Environmental Impact

Although the commenter did not provide SWAPE's CalEEMod files for review, and thus the veracity of the commenter's modeling results can not be determined, the commenter's conclusions can be shown to be false without consulting the CalEEMod files.

The commenter asserts that the project would result in "construction-related GHG emissions of approximately 777.64 MT CO2e/yr (sum of 2020 and 2021 emissions)." This statement is misleading as the units of emissions are incorrect. By using the units of MT CO<sub>2</sub>e/yr, the commenter is claiming that the emissions of 777.64 MTCO<sub>2</sub>e are occurring per year (/yr) during each year of project construction. However, the commenter's parenthetical note clarifies that the construction-related emissions estimate is, in reality, the sum of two years' worth of construction emissions. The annual rate of emissions and/or amortized emission rate would likely be much lower than the total emissions presented by the commenter. Furthermore, as discussed above. estimation of emissions prepared for the project correctly relied upon a project-specific construction schedule that was provided by the project applicant. Through the responses provided in this response to comments document, the construction analysis has been proven to be accurate, and the slight changes made to construction information have resulted in only minor changes to estimated emissions (a change of 0.03 MTCO<sub>2</sub>e/yr during one year of project construction). Thus, the commenter's estimated emissions of 777.64 MTCO<sub>2</sub>e/yr are not only presented in a misleading manner, but are also demonstrably false. Regardless of these issues with the commenter's estimation of construction-related emissions, if 777.64 MTCO<sub>2</sub>e is indeed the sum of the estimated construction emissions, the commenter's analysis demonstrates that the estimation of construction-related emissions presented within the IS/MND is conservative. As demonstrated in Table 7 of the IS/MND, total project construction emissions were estimated to equal 1,145.83 MTCO<sub>2</sub>e, which is a higher rate of emissions than assumed by the commenter, and proves that the analysis presented in the IS/MND is conservative.

The commenter states that the operational emissions from the project would equate to 998 MTCO<sub>2</sub>e/yr. Again, without providing the CalEEMod outputs, the accuracy of this estimate cannot be conclusively determined. However, the analysis of project emissions presented within this response to comments document has been shown to be accurate and supported by substantial evidence. Based on the analysis presented within this response to comments document, net operational GHG emissions would equate to 1,904.82 MTCO<sub>2</sub>e/yr prior to the consideration of amortized construction emissions. The rate of emissions presented in this response to comments document is higher than the operational emissions provided by the commenter, demonstrating that the commenter's approach to analysis is less conservative than the approach taken by the City in analyzing potential project impacts.

Although the commenter's methods are not clearly presented, the commenter's updated calculation of a service population efficiency seem to be misleading and inaccurate. The commenter calculates an updated service population emissions rate based on an assumed annual GHG emissions rate of 2,907.2 MTCO<sub>2</sub>e/yr. Even if the commenter's total construction emissions of 777.64 MTCO<sub>2</sub>e are summed with the commenter's operational emissions of 998 MTCO<sub>2</sub>e/yr, the sum of the two emissions equals only 1,775.64 MTCO<sub>2</sub>e/yr. Yet, without explanation, the commenter claims that annual emissions of the project are 2,907.2 MTCO<sub>2</sub>e/yr resulting in a service population emission rate of 4.32 MTCO<sub>2</sub>e/SP/yr. If instead the actual sum of the construction and operational emissions presented by the commenter was used, that is a total emission rate of 1,775.64 MTCO<sub>2</sub>e/yr, the service population emission rate is lower than the estimated service population emission rate presented in the IS/MND and revised within this response to comments document.

Considering the above, the emissions calculations presented by the commenter are misleading and inaccurate. The information presented by the commenter does not provide sufficient evidence to find that the conclusions of the IS/MND are incorrect or inadequate.

### Adams Broadwell Joseph & Cardazo Comments

The commenter makes three claims that serve as the foundation of their assertion that the analysis presented within the IS/MND is inaccurate or insufficient.

First, the commenter claims that the analysis of air quality impacts including health risks from project construction and operations are inadequately analyzed. As demonstrated under the discussion of Air Quality above, the analysis presented within the IS/MND is adequate, and the slight modifications to emissions estimation presented as part of this response to comments document do not affect the conclusions reached in the IS/MND. Therefore, the commenter's assertion is not supported and the IS/MND remains adequate under this claim.

Second, contrary to the commenter's assertion, the GHG analysis presented in the IS/MND fully disclosed and analyzed potential impacts related to GHGs. The assumptions relied upon to in the IS/MND were provided within the IS/MND, and, in order to address the commenter's concerns, have been amplified or clarified through minor revisions presented in the GHG Emissions section of this response to comments document. Therefore, the commenter's assertion is not supported and the IS/MND remains adequate under this claim.

Third, as discussed in the Hazards and Hazardous Materials section of this response to comments document, a Phase I Environmental Site Assessment was not deemed necessary for the project, and the IS/MND presents a full analysis of potential hazards that could occur with

implementation of the project. Therefore, the commenter's assertion is not supported and the IS/MND remains adequate under this claim.

Taken together, the commenter's assertion that the City has failed to comply with the requirements of CEQA is not accurate.

As needed, the following sections will respond to specific issues raised by the commenter. Each of the following sections are numbered to indicate the section of the comment letter being responded to.

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As discussed throughout this response to comments document, the conclusions presented within the IS/MND are supported by substantial evidence. Even in the case that revisions to the IS/MND have been made in response to the commenter's concerns, such revisions have served to clarify and reinforce the conclusions reached in the IS/MND. Indeed, the commenter has not presented any new information or analysis that has resulted in revision of the conclusions presented in the IS/MND. Because all of the commenter's concerns have been addressed through this response to comments document, substantial evidence does not exist that would support the commenter's assertion that the IS/MND fails to disclose potential environmental impacts. Furthermore, where the technical analysis presented by the commenter purports to demonstrate a previously undisclosed impact, such analyses have been proven to be either unsubstantiated or inaccurate. Considering the analysis presented above, a conflict between evidence and a fair argument against the conclusions of the IS/MND do not exist.

# II(A)

An analysis of impacts related to air quality is presented on pages 22 through 31 of the IS/MND. As discussed in the IS/MND, and further discussed in the Air Quality section of this response to comments document, all project-related impacts can be mitigated to a less-than-significant level. The emissions modeling inputs were disclosed in the IS/MND and have been clarified or amplified through minor revisions to text. Moreover, the HRA for the project properly considered the only major health risk posed by the project on nearby receptors, which is DPM from construction. Because the conclusions of the IS/MND have not changed, and only minor revisions to text are required, preparation of an Environmental Impact Report for the project is not required.

# II(A)(1)

Please refer to the Air Quality section of this response to comments document for an in-depth discussion of the input parameters for the project. As shown in the Air Quality section, even with minor updates to the emissions modeling prepared for the project, the analysis and conclusions of the IS/MND remain valid. The minor alterations do not result in any changes to the significance of conclusions related to health risks.

# II(A)(1)(a)

Please refer to the sections of this response to comments document entitled Determination of Land Use Size, Selection of ITE Land Use Code, Emissions Modeling Input Parameters, Existing Land Use Size, and Electricity Emissions Factors for in-depth responses to the commenter's assertions.

In addition to the information provided in the aforementioned sections of this response to comments document, it should be noted that the IS/MND does not claim that the PG&E would reach a 60 percent renewable electricity content by the year 2022. As noted in the Electricity



Emissions Factors section of this response to comments document, the reduction in CO<sub>2</sub> emissions intensity factors for PG&E provided electricity is based off of publicly available data from PG&E as well as the RPS requirement for the year 2022. PG&E already produces electricity from renewable sources in excess of the amount mandated by the RPS program for the year 2022. Therefore, the assumptions relied upon in emissions modeling prepared for the project are reasonable and conservative. The RPS program includes mandated renewable energy production for all publicly owned utilities in California. Compliance with the RPS program is mandatory based on state legislation.

The modeling inputs applied were substantiated within the CalEEMod output files, the IS/MND, and the TA prepared for the project. As discussed previously, the construction schedule assumed for project modeling was provided in the IS/MND and is presented within the modeling outputs in Appendix A of the document.

This response to comments document provides clarifications and revisions to text as needed. All such information and revisions prove that the conclusions of the IS/MND remain valid. Through this process the City has fully addressed the commenter's concerns related to project emissions modeling.

# II(A)(1)(b)

Please refer to the sections of this response to comments document titled Area-Related Operational Mitigation Measures and Mobile-Related Operational Mitigation Measures for an explanation of the justification provided in the IS/MND as well as revisions to the text of the IS/MND that clarify the CalEEMod inputs.

# II(A)(2)

As discussed in the section of this response to comments document titled Diesel Particulate Matter Health Risks, the HRA prepared for the proposed project is based on substantial evidence, and accurately depicts the potential health risks that would result from implementation of the proposed project. Contrary to the commenter's assertion, the IS/MND presents a reasonable analysis against BAAQMD's specific numeric threshold for the health risks that would occur to nearby receptors as a result of project implementation. Based on the proposed operations, further analysis of project-related health risks is not required.

# II(A)(3)

The comment does not provide the modeling outputs used to justify SWAPE's screening analysis, which prohibits verification of the accuracy of the claims made by the commenter. Nevertheless, because the HRA prepared for the project remains valid, SWAPE's conclusions need not be further considered.

# II(B)

Please refer to the section of this response to comments document titled GHG Emissions for an in-depth discussion of the commenter's concerns regarding GHG emissions estimation and the continued validity of the conclusions presented within the IS/MND.

It should be noted that the project buildout year was anticipated to be 2022. However, the SWAPE analysis only presents analysis under a threshold for the year 2030. Although the threshold for the year 2030 has not been adopted by BAAQMD, and SWAPE has not presented the methodology used to determine the 2030 threshold, the commenter states "the IS/MND fails to use a threshold which is applicable to the Project's built-out year." By presenting a threshold for

the year 2030, the commenter has failed to meet their own standard because buildout of the project is anticipated by the year 2022. Furthermore, BAAQMD has not adopted any formal guidance referencing the thresholds used by SWAPE nor outlining a suitable methodology for such an analysis. Nevertheless, the section of this response to comments document title Conclusions of the GHG Analysis (as well as other sections in the GHG Emissions section of this response to comments document), provides further analysis of GHG emissions and demonstrates that the conclusions of the IS/MND remain valid.

# II(B)(1)

Please refer to the additional analysis and response to comments provided in the Conclusions of the GHG Analysis section of this response to comments document. It should be noted that the quoted text from the BAAQMD comment letter on the Downtown Oakland Specific Plan states that "the CEQA guidelines/thresholds and current thresholds for GHGs should not be used for this plan." The quoted section of the letter makes it clear that BAAQMD was providing guidance specifically for the specific project under consideration by the City of Oakland. BAAQMD does not state that the guidance/thresholds should not be used for any project whatsoever. The City of Antioch did not receive a similar comment letter for this project during the public review period for the project. Furthermore, the comment letter was submitted on the Downtown Oakland Specific Plan not a specific development project. Environmental concerns regarding a Specific Plan are notably different than environmental concerns regarding a discrete development project. For instance, whereas a Specific Plan may not be fully implemented for decades after the adoption of the plan, an individual development project may be fully implemented within a few years following approval. Thus, for a Specific Plan that would continue to be implemented for decades, consideration of impacts for 10 or 30 years in the future may be warranted. However, for a development project that will be immediately implemented, it is warranted to assess the shortterm potential impacts of a project. The analysis of the proposed project presented within the IS/MND, and amplified in this response to comments document, provides a reasonable scope given the nature of the project and the timeline of project implementation that was anticipated at the time of publication of the IS/MND. Critically, on February 25, 2020, which was after BAAQMD submitted the comment letter to the City of Oakland regarding the Downtown Oakland Specific Plan, BAAQMD again posted their thresholds of significance, which reiterates the thresholds of significance for GHG emissions included in the IS/MND.<sup>11</sup> Considering the above, BAAQMD continues to promulate their GHG thresholds and the example comment letter cited by the commenter is not directly applicable to the project at hand.

# II(B)(2)(a-b)

Please refer to the sections of his document titled Conclusions of the GHG Analysis and Updated Analysis Continues to Indicate a Less-Than-Significant Environmental Impact. As shown in the aforementioned sections, the analysis presented in the IS/MND remains valid, and the analysis presented by SWAPE contains fundamental inaccuracies that render the conclusions unusable and misleading. Considering the factual inaccuracies presented within SWAPE's analysis, a fair argument against the conclusions presented in the IS/MND has not been presented.

# II(B)(3)

Please refer to the section of this response to comments document titled Discussion of the City's Community Climate Action Plan, and the revisions to texts offered within that section.

<sup>11</sup> 

# II (C)

Please refer to the section of this response to comments document titled Hazards and Hazardous Materials. All of the commenter's concerns have been addressed and the analysis presented within the IS/MND remains valid.

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As discussed throughout this response to comments document, the commenter's concerns have been addressed. Where necessary revisions to text have been offered to address the concerns of the commenter. The revisions offered in response to the commenter's concerns have not changed the significance conclusions within the IS/MND, and, in most cases, serve to amplify the information already provided in the IS/MND. Consequently, the IS/MND is adequate, meets the requirements of CEQA, and a fair argument against the adequacy of the document has not been provided.

# APPENDIX CalEEMOD Outputs

# APPENDIX CalEEMOD Outputs

#### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Annual

#### **Delta Fair Village - Unmitigated**

Bay Area AQMD Air District, Annual

# **1.0 Project Characteristics**

## 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	4.00	1000sqft	0.09	4,000.00	0
Enclosed Parking with Elevator	328.00	Space	0.00	141,440.00	0
Parking Lot	79.00	Space	0.90	31,600.00	0
Apartments Mid Rise	210.00	Dwelling Unit	3.00	210,000.00	601
Regional Shopping Center	73.53	1000sqft	1.69	73,535.00	0

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

Urbanization Urban		Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Com	ipany			
CO2 Intensity (Ib/MWhr)	269.5	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

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

CalEEMod Version: CalEEMod.2016.3.2

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Project Characteristics - CO2 Intensity adjusted per PG&E's state-mandated progress towards RPS

Land Use - modified per site plans and as recommended by CalEEMod for Mixed-Use Development

Construction Phase - Construction schedule provided by applicant

Demolition -

Grading - per applicant provided construction information

Vehicle Trips - Proposed Project only from Traffic Report; Trip purpose updated per Traffic Report

Energy Use -

Mobile Land Use Mitigation - Based on site plans (inclusion of pedestrian facilities), and distance to nearest existing transit

Mobile Commute Mitigation -

Area Mitigation - Applicant provided information

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	10.00	24.00
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	230.00	327.00
tblConstructionPhase	NumDays	20.00	327.00
tblGrading	AcresOfGrading	11.50	4.00
tblGrading	MaterialExported	0.00	50.00
tblGrading	MaterialImported	0.00	100.00
tblLandUse	LandUseSquareFeet	131,200.00	141,440.00
tblLandUse	LandUseSquareFeet	73,530.00	73,535.00
tblLandUse	LotAcreage	2.95	0.00
tblLandUse	LotAcreage	0.71	0.90
tblLandUse	LotAcreage	5.53	3.00

tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblVehicleTrips	DV_TP	58.00	67.00
tblVehicleTrips	DV_TP	35.00	39.00
tblVehicleTrips	PB_TP	14.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	28.00	33.00
tblVehicleTrips	PR_TP	54.00	61.00
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	ST_TR	6.21	30.75
tblVehicleTrips	ST_TR	49.97	46.70
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	SU_TR	5.83	30.75
tblVehicleTrips	SU_TR	25.24	46.70
tblVehicleTrips	WD_TR	6.65	5.44
tblVehicleTrips	WD_TR	74.06	30.75
tblVehicleTrips	WD_TR	42.70	46.70

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## 2.0 Emissions Summary

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#### 2.1 Overall Construction

#### **Unmitigated Construction**

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr									MT/yr						
2020	1.1965	3.2887	2.7427	6.5500e- 003	0.5384	0.1499	0.6883	0.2207	0.1404	0.3611	0.0000	587.9625	587.9625	0.0863	0.0000	590.1190
2021	1.3859	2.3337	2.3836	6.1600e- 003	0.2482	0.0963	0.3445	0.0669	0.0911	0.1580	0.0000	554.1945	554.1945	0.0623	0.0000	555.7524
Maximum	1.3859	3.2887	2.7427	6.5500e- 003	0.5384	0.1499	0.6883	0.2207	0.1404	0.3611	0.0000	587.9625	587.9625	0.0863	0.0000	590.1190

#### Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr									MT/yr						
2020	1.1965	3.2887	2.7427	6.5500e- 003	0.5384	0.1499	0.6883	0.2207	0.1404	0.3611	0.0000	587.9622	587.9622	0.0863	0.0000	590.1187
2021	1.3859	2.3337	2.3836	6.1600e- 003	0.2482	0.0963	0.3445	0.0669	0.0911	0.1580	0.0000	554.1942	554.1942	0.0623	0.0000	555.7522
Maximum	1.3859	3.2887	2.7427	6.5500e- 003	0.5384	0.1499	0.6883	0.2207	0.1404	0.3611	0.0000	587.9622	587.9622	0.0863	0.0000	590.1187
	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-2-2020	6-1-2020	1.1680	1.1680
2	6-2-2020	9-1-2020	1.3512	1.3512
3	9-2-2020	12-1-2020	1.4423	1.4423
4	12-2-2020	3-1-2021	1.3638	1.3638
5	3-2-2021	6-1-2021	1.3548	1.3548
6	6-2-2021	9-1-2021	1.3520	1.3520
7	9-2-2021	9-30-2021	0.1422	0.1422
		Highest	1.4423	1.4423

## 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	1.8581	0.0292	2.2326	1.4100e- 003		0.1040	0.1040	, , ,	0.1040	0.1040	9.5738	6.4881	16.0620	0.0179	6.3000e- 004	16.6958
Energy	0.0111	0.0958	0.0458	6.1000e- 004		7.6800e- 003	7.6800e- 003		7.6800e- 003	7.6800e- 003	0.0000	417.4339	417.4339	0.0352	8.8600e- 003	420.9541
Mobile	1.1176	5.3828	11.9702	0.0416	3.5654	0.0380	3.6034	0.9570	0.0356	0.9926	0.0000	3,824.174 9	3,824.174 9	0.1454	0.0000	3,827.809 3
Waste	n					0.0000	0.0000	 , , , ,	0.0000	0.0000	36.3374	0.0000	36.3374	2.1475	0.0000	90.0244
Water	F;		1			0.0000	0.0000		0.0000	0.0000	6.1231	18.0740	24.1972	0.6309	0.0153	44.5136
Total	2.9868	5.5078	14.2486	0.0437	3.5654	0.1497	3.7151	0.9570	0.1473	1.1043	52.0344	4,266.171 0	4,318.205 4	2.9768	0.0247	4,399.997 1

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#### 2.2 Overall Operational

### Mitigated Operational

	ROG	NC	Эх	СО	SO:	2	Fugitive PM10	e Exh PN	naust M10	PM10 Total	Fugit PM:	tive Ex 2.5 F	xhaust PM2.5	PM2.5 Tota	I Bio	- CO2	NBio- C	CO2 Tot	al CO2	CH4	1	N2O	CO2e	e
Category								tons/yr											MT	/yr				
Area	1.3736	0.01	180	1.5654	8.000 005	0e- 5		8.64 0	400e- )03	8.6400e- 003		8.	6400e- 003	8.6400e- 003	0.0	0000	2.555	7 2	5557	2.4800 003	e- 0.	0000	2.617	7
Energy	0.0111	0.09	958	0.0458	6.100 004	0e- 1		7.68 0	800e- )03	7.6800e- 003	 	7.	6800e- 003	7.6800e- 003	0.0	0000	417.43	39 41	7.4339	0.035	2 8.8	600e- 003	420.95	41
Mobile	1.0743	5.06	672	10.9793	0.03	71	3.1447	0.0	0341	3.1788	0.84	441 C	).0319	0.8760	0.0	0000	3,410.6 0	68 3,4	10.668 0	0.133	9 0.	0000	3,414.0 1	)14
Waste								0.0	0000	0.0000	 	(	0.0000	0.0000	36	.3374	0.000	0 36	.3374	2.147	5 0.	0000	90.024	44
Water								0.0	0000	0.0000		(	0.0000	0.0000	6.	1231	18.07	40 24	.1972	0.630	9 0.	0153	44.513	36
Total	2.4590	5.18	310	12.5905	0.03	78	3.1447	0.0	0504	3.1951	0.84	441 (	0.0483	0.8923	42.	.4606	3,848.7 6	731 3,8	91.192 1	2.949	9 0.	0241	3,972.1 9	23
	ROG		NO	x	со	SO2	2 F	ugitive PM10	Exha PN	aust Pl 110 T	VI10 otal	Fugitive PM2.5	e Exh PN	aust PM 12.5 To	2.5 otal	Bio- C	CO2 N	Bio-CO2	Total	CO2	CH4	N2	20	CO2e
Percent Reduction	17.67		5.9	3 1	1.64	13.3	5	11.80	66	.31 1	4.00	11.80	67	7.24 19	.19	18.4	10	9.78	9.8	9	0.90	2.5	55	9.72

# 3.0 Construction Detail

**Construction Phase** 

#### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/2/2020	3/16/2020	5	11	
2	Site Preparation	Site Preparation	3/17/2020	4/17/2020	5	24	
3	Grading	Grading	4/20/2020	5/20/2020	5	23	
4	Paving	Paving	5/21/2020	6/4/2020	5	11	
5	Building Construction	Building Construction	6/5/2020	9/6/2021	5	327	
6	Architectural Coating	Architectural Coating	6/19/2020	9/20/2021	5	327	

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

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.9

Residential Indoor: 425,250; Residential Outdoor: 141,750; Non-Residential Indoor: 116,303; Non-Residential Outdoor: 38,768; Striped Parking Area: 10,382 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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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	335.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	6.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	13.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	249.00	64.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

#### 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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0362	0.0000	0.0362	5.4800e- 003	0.0000	5.4800e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0182	0.1826	0.1196	2.1000e- 004		9.1200e- 003	9.1200e- 003		8.4800e- 003	8.4800e- 003	0.0000	18.6992	18.6992	5.2800e- 003	0.0000	18.8312
Total	0.0182	0.1826	0.1196	2.1000e- 004	0.0362	9.1200e- 003	0.0453	5.4800e- 003	8.4800e- 003	0.0140	0.0000	18.6992	18.6992	5.2800e- 003	0.0000	18.8312

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#### 3.2 Demolition - 2020

#### Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	1.4000e- 003	0.0490	9.8400e- 003	1.3000e- 004	2.8300e- 003	1.6000e- 004	2.9900e- 003	7.8000e- 004	1.5000e- 004	9.3000e- 004	0.0000	12.8368	12.8368	6.6000e- 004	0.0000	12.8533
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e- 004	2.0000e- 004	2.0300e- 003	1.0000e- 005	6.5000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5711	0.5711	1.0000e- 005	0.0000	0.5715
Total	1.6700e- 003	0.0492	0.0119	1.4000e- 004	3.4800e- 003	1.6000e- 004	3.6500e- 003	9.5000e- 004	1.5000e- 004	1.1100e- 003	0.0000	13.4079	13.4079	6.7000e- 004	0.0000	13.4248

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0362	0.0000	0.0362	5.4800e- 003	0.0000	5.4800e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0182	0.1826	0.1196	2.1000e- 004		9.1200e- 003	9.1200e- 003		8.4800e- 003	8.4800e- 003	0.0000	18.6992	18.6992	5.2800e- 003	0.0000	18.8312
Total	0.0182	0.1826	0.1196	2.1000e- 004	0.0362	9.1200e- 003	0.0453	5.4800e- 003	8.4800e- 003	0.0140	0.0000	18.6992	18.6992	5.2800e- 003	0.0000	18.8312

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#### 3.2 Demolition - 2020

#### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	1.4000e- 003	0.0490	9.8400e- 003	1.3000e- 004	2.8300e- 003	1.6000e- 004	2.9900e- 003	7.8000e- 004	1.5000e- 004	9.3000e- 004	0.0000	12.8368	12.8368	6.6000e- 004	0.0000	12.8533
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e- 004	2.0000e- 004	2.0300e- 003	1.0000e- 005	6.5000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5711	0.5711	1.0000e- 005	0.0000	0.5715
Total	1.6700e- 003	0.0492	0.0119	1.4000e- 004	3.4800e- 003	1.6000e- 004	3.6500e- 003	9.5000e- 004	1.5000e- 004	1.1100e- 003	0.0000	13.4079	13.4079	6.7000e- 004	0.0000	13.4248

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.2168	0.0000	0.2168	0.1192	0.0000	0.1192	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0489	0.5090	0.2582	4.6000e- 004		0.0264	0.0264		0.0243	0.0243	0.0000	40.1168	40.1168	0.0130	0.0000	40.4412
Total	0.0489	0.5090	0.2582	4.6000e- 004	0.2168	0.0264	0.2432	0.1192	0.0243	0.1434	0.0000	40.1168	40.1168	0.0130	0.0000	40.4412

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#### 3.3 Site Preparation - 2020

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	3.0000e- 005	8.8000e- 004	1.8000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	2.0000e- 005	0.0000	0.2299	0.2299	1.0000e- 005	0.0000	0.2302
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e- 004	5.1000e- 004	5.3100e- 003	2.0000e- 005	1.7100e- 003	1.0000e- 005	1.7200e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.4953	1.4953	4.0000e- 005	0.0000	1.4962
Total	7.5000e- 004	1.3900e- 003	5.4900e- 003	2.0000e- 005	1.7600e- 003	1.0000e- 005	1.7700e- 003	4.6000e- 004	1.0000e- 005	4.8000e- 004	0.0000	1.7252	1.7252	5.0000e- 005	0.0000	1.7264

#### 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			1		0.2168	0.0000	0.2168	0.1192	0.0000	0.1192	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Off-Road	0.0489	0.5090	0.2582	4.6000e- 004		0.0264	0.0264		0.0243	0.0243	0.0000	40.1168	40.1168	0.0130	0.0000	40.4411		
Total	0.0489	0.5090	0.2582	4.6000e- 004	0.2168	0.0264	0.2432	0.1192	0.0243	0.1434	0.0000	40.1168	40.1168	0.0130	0.0000	40.4411		

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#### 3.3 Site Preparation - 2020

#### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr											MT/yr						
Hauling	3.0000e- 005	8.8000e- 004	1.8000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	2.0000e- 005	0.0000	0.2299	0.2299	1.0000e- 005	0.0000	0.2302		
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Worker	7.2000e- 004	5.1000e- 004	5.3100e- 003	2.0000e- 005	1.7100e- 003	1.0000e- 005	1.7200e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.4953	1.4953	4.0000e- 005	0.0000	1.4962		
Total	7.5000e- 004	1.3900e- 003	5.4900e- 003	2.0000e- 005	1.7600e- 003	1.0000e- 005	1.7700e- 003	4.6000e- 004	1.0000e- 005	4.8000e- 004	0.0000	1.7252	1.7252	5.0000e- 005	0.0000	1.7264		

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	tons/yr											MT/yr							
Fugitive Dust					0.0714	0.0000	0.0714	0.0383	0.0000	0.0383	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Off-Road	0.0279	0.3034	0.1846	3.4000e- 004		0.0146	0.0146		0.0135	0.0135	0.0000	29.9676	29.9676	9.6900e- 003	0.0000	30.2099			
Total	0.0279	0.3034	0.1846	3.4000e- 004	0.0714	0.0146	0.0860	0.0383	0.0135	0.0518	0.0000	29.9676	29.9676	9.6900e- 003	0.0000	30.2099			

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## 3.4 Grading - 2020

# Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr											MT/yr						
Hauling	5.0000e- 005	1.9000e- 003	3.8000e- 004	1.0000e- 005	1.1000e- 004	1.0000e- 005	1.2000e- 004	3.0000e- 005	1.0000e- 005	4.0000e- 005	0.0000	0.4981	0.4981	3.0000e- 005	0.0000	0.4988		
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	5.7000e- 004	4.1000e- 004	4.2400e- 003	1.0000e- 005	1.3600e- 003	1.0000e- 005	1.3700e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.1942	1.1942	3.0000e- 005	0.0000	1.1949		
Total	6.2000e- 004	2.3100e- 003	4.6200e- 003	2.0000e- 005	1.4700e- 003	2.0000e- 005	1.4900e- 003	3.9000e- 004	2.0000e- 005	4.1000e- 004	0.0000	1.6923	1.6923	6.0000e- 005	0.0000	1.6937		

#### 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		1 1 1	1		0.0714	0.0000	0.0714	0.0383	0.0000	0.0383	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0279	0.3034	0.1846	3.4000e- 004		0.0146	0.0146		0.0135	0.0135	0.0000	29.9675	29.9675	9.6900e- 003	0.0000	30.2098	
Total	0.0279	0.3034	0.1846	3.4000e- 004	0.0714	0.0146	0.0860	0.0383	0.0135	0.0518	0.0000	29.9675	29.9675	9.6900e- 003	0.0000	30.2098	
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# 3.4 Grading - 2020

### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	5.0000e- 005	1.9000e- 003	3.8000e- 004	1.0000e- 005	1.1000e- 004	1.0000e- 005	1.2000e- 004	3.0000e- 005	1.0000e- 005	4.0000e- 005	0.0000	0.4981	0.4981	3.0000e- 005	0.0000	0.4988
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	5.7000e- 004	4.1000e- 004	4.2400e- 003	1.0000e- 005	1.3600e- 003	1.0000e- 005	1.3700e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.1942	1.1942	3.0000e- 005	0.0000	1.1949
Total	6.2000e- 004	2.3100e- 003	4.6200e- 003	2.0000e- 005	1.4700e- 003	2.0000e- 005	1.4900e- 003	3.9000e- 004	2.0000e- 005	4.1000e- 004	0.0000	1.6923	1.6923	6.0000e- 005	0.0000	1.6937

3.5 Paving - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	7.4600e- 003	0.0774	0.0806	1.3000e- 004		4.1400e- 003	4.1400e- 003		3.8100e- 003	3.8100e- 003	0.0000	11.0155	11.0155	3.5600e- 003	0.0000	11.1046
Paving	1.1800e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.6400e- 003	0.0774	0.0806	1.3000e- 004		4.1400e- 003	4.1400e- 003		3.8100e- 003	3.8100e- 003	0.0000	11.0155	11.0155	3.5600e- 003	0.0000	11.1046

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### 3.5 Paving - 2020

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e- 004	2.0000e- 004	2.0300e- 003	1.0000e- 005	6.5000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5711	0.5711	1.0000e- 005	0.0000	0.5715
Total	2.7000e- 004	2.0000e- 004	2.0300e- 003	1.0000e- 005	6.5000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5711	0.5711	1.0000e- 005	0.0000	0.5715

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	7.4600e- 003	0.0774	0.0806	1.3000e- 004		4.1400e- 003	4.1400e- 003		3.8100e- 003	3.8100e- 003	0.0000	11.0155	11.0155	3.5600e- 003	0.0000	11.1046
Paving	1.1800e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.6400e- 003	0.0774	0.0806	1.3000e- 004		4.1400e- 003	4.1400e- 003		3.8100e- 003	3.8100e- 003	0.0000	11.0155	11.0155	3.5600e- 003	0.0000	11.1046

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# 3.5 Paving - 2020

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e- 004	2.0000e- 004	2.0300e- 003	1.0000e- 005	6.5000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5711	0.5711	1.0000e- 005	0.0000	0.5715
Total	2.7000e- 004	2.0000e- 004	2.0300e- 003	1.0000e- 005	6.5000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5711	0.5711	1.0000e- 005	0.0000	0.5715

3.6 Building Construction - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	'/yr		
Off-Road	0.1590	1.4390	1.2636	2.0200e- 003		0.0838	0.0838	;	0.0788	0.0788	0.0000	173.7075	173.7075	0.0424	0.0000	174.7670
Total	0.1590	1.4390	1.2636	2.0200e- 003		0.0838	0.0838		0.0788	0.0788	0.0000	173.7075	173.7075	0.0424	0.0000	174.7670

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### 3.6 Building Construction - 2020

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0186	0.5538	0.1392	1.3100e- 003	0.0315	2.7000e- 003	0.0342	9.1000e- 003	2.5800e- 003	0.0117	0.0000	125.6733	125.6733	6.4800e- 003	0.0000	125.8354
Worker	0.0619	0.0443	0.4587	1.4300e- 003	0.1476	9.9000e- 004	0.1486	0.0393	9.2000e- 004	0.0402	0.0000	129.2834	129.2834	3.1300e- 003	0.0000	129.3616
Total	0.0805	0.5981	0.5979	2.7400e- 003	0.1791	3.6900e- 003	0.1827	0.0484	3.5000e- 003	0.0519	0.0000	254.9567	254.9567	9.6100e- 003	0.0000	255.1970

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.1590	1.4390	1.2636	2.0200e- 003		0.0838	0.0838		0.0788	0.0788	0.0000	173.7073	173.7073	0.0424	0.0000	174.7667
Total	0.1590	1.4390	1.2636	2.0200e- 003		0.0838	0.0838		0.0788	0.0788	0.0000	173.7073	173.7073	0.0424	0.0000	174.7667

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### 3.6 Building Construction - 2020

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0186	0.5538	0.1392	1.3100e- 003	0.0315	2.7000e- 003	0.0342	9.1000e- 003	2.5800e- 003	0.0117	0.0000	125.6733	125.6733	6.4800e- 003	0.0000	125.8354
Worker	0.0619	0.0443	0.4587	1.4300e- 003	0.1476	9.9000e- 004	0.1486	0.0393	9.2000e- 004	0.0402	0.0000	129.2834	129.2834	3.1300e- 003	0.0000	129.3616
Total	0.0805	0.5981	0.5979	2.7400e- 003	0.1791	3.6900e- 003	0.1827	0.0484	3.5000e- 003	0.0519	0.0000	254.9567	254.9567	9.6100e- 003	0.0000	255.1970

3.6 Building Construction - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	'/yr		
Off-Road	0.1682	1.5427	1.4669	2.3800e- 003		0.0848	0.0848	;	0.0798	0.0798	0.0000	204.9990	204.9990	0.0495	0.0000	206.2354
Total	0.1682	1.5427	1.4669	2.3800e- 003		0.0848	0.0848		0.0798	0.0798	0.0000	204.9990	204.9990	0.0495	0.0000	206.2354

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### 3.6 Building Construction - 2021

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0180	0.5916	0.1477	1.5300e- 003	0.0371	1.2900e- 003	0.0384	0.0107	1.2300e- 003	0.0120	0.0000	146.8924	146.8924	7.2200e- 003	0.0000	147.0730
Worker	0.0676	0.0467	0.4943	1.6300e- 003	0.1741	1.1400e- 003	0.1753	0.0463	1.0500e- 003	0.0474	0.0000	147.2016	147.2016	3.3000e- 003	0.0000	147.2841
Total	0.0856	0.6383	0.6419	3.1600e- 003	0.2113	2.4300e- 003	0.2137	0.0571	2.2800e- 003	0.0593	0.0000	294.0940	294.0940	0.0105	0.0000	294.3571

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1682	1.5427	1.4669	2.3800e- 003		0.0848	0.0848		0.0798	0.0798	0.0000	204.9988	204.9988	0.0495	0.0000	206.2352
Total	0.1682	1.5427	1.4669	2.3800e- 003		0.0848	0.0848		0.0798	0.0798	0.0000	204.9988	204.9988	0.0495	0.0000	206.2352

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### 3.6 Building Construction - 2021

### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0180	0.5916	0.1477	1.5300e- 003	0.0371	1.2900e- 003	0.0384	0.0107	1.2300e- 003	0.0120	0.0000	146.8924	146.8924	7.2200e- 003	0.0000	147.0730
Worker	0.0676	0.0467	0.4943	1.6300e- 003	0.1741	1.1400e- 003	0.1753	0.0463	1.0500e- 003	0.0474	0.0000	147.2016	147.2016	3.3000e- 003	0.0000	147.2841
Total	0.0856	0.6383	0.6419	3.1600e- 003	0.2113	2.4300e- 003	0.2137	0.0571	2.2800e- 003	0.0593	0.0000	294.0940	294.0940	0.0105	0.0000	294.3571

3.7 Architectural Coating - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.8215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0170	0.1179	0.1282	2.1000e- 004		7.7700e- 003	7.7700e- 003		7.7700e- 003	7.7700e- 003	0.0000	17.8728	17.8728	1.3800e- 003	0.0000	17.9074
Total	0.8384	0.1179	0.1282	2.1000e- 004		7.7700e- 003	7.7700e- 003		7.7700e- 003	7.7700e- 003	0.0000	17.8728	17.8728	1.3800e- 003	0.0000	17.9074

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### 3.7 Architectural Coating - 2020

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0116	8.3000e- 003	0.0860	2.7000e- 004	0.0277	1.9000e- 004	0.0278	7.3600e- 003	1.7000e- 004	7.5300e- 003	0.0000	24.2298	24.2298	5.9000e- 004	0.0000	24.2445
Total	0.0116	8.3000e- 003	0.0860	2.7000e- 004	0.0277	1.9000e- 004	0.0278	7.3600e- 003	1.7000e- 004	7.5300e- 003	0.0000	24.2298	24.2298	5.9000e- 004	0.0000	24.2445

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.8215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0170	0.1179	0.1282	2.1000e- 004		7.7700e- 003	7.7700e- 003		7.7700e- 003	7.7700e- 003	0.0000	17.8728	17.8728	1.3800e- 003	0.0000	17.9074
Total	0.8384	0.1179	0.1282	2.1000e- 004		7.7700e- 003	7.7700e- 003		7.7700e- 003	7.7700e- 003	0.0000	17.8728	17.8728	1.3800e- 003	0.0000	17.9074

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### 3.7 Architectural Coating - 2020

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0116	8.3000e- 003	0.0860	2.7000e- 004	0.0277	1.9000e- 004	0.0278	7.3600e- 003	1.7000e- 004	7.5300e- 003	0.0000	24.2298	24.2298	5.9000e- 004	0.0000	24.2445
Total	0.0116	8.3000e- 003	0.0860	2.7000e- 004	0.0277	1.9000e- 004	0.0278	7.3600e- 003	1.7000e- 004	7.5300e- 003	0.0000	24.2298	24.2298	5.9000e- 004	0.0000	24.2445

3.7 Architectural Coating - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	1.0972					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.1428	0.1699	2.8000e- 004		8.8000e- 003	8.8000e- 003		8.8000e- 003	8.8000e- 003	0.0000	23.8729	23.8729	1.6400e- 003	0.0000	23.9139
Total	1.1177	0.1428	0.1699	2.8000e- 004		8.8000e- 003	8.8000e- 003		8.8000e- 003	8.8000e- 003	0.0000	23.8729	23.8729	1.6400e- 003	0.0000	23.9139

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### 3.7 Architectural Coating - 2021

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0144	9.9000e- 003	0.1049	3.5000e- 004	0.0369	2.4000e- 004	0.0372	9.8300e- 003	2.2000e- 004	0.0101	0.0000	31.2285	31.2285	7.0000e- 004	0.0000	31.2460
Total	0.0144	9.9000e- 003	0.1049	3.5000e- 004	0.0369	2.4000e- 004	0.0372	9.8300e- 003	2.2000e- 004	0.0101	0.0000	31.2285	31.2285	7.0000e- 004	0.0000	31.2460

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	1.0972					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.1428	0.1699	2.8000e- 004		8.8000e- 003	8.8000e- 003		8.8000e- 003	8.8000e- 003	0.0000	23.8729	23.8729	1.6400e- 003	0.0000	23.9139
Total	1.1177	0.1428	0.1699	2.8000e- 004		8.8000e- 003	8.8000e- 003		8.8000e- 003	8.8000e- 003	0.0000	23.8729	23.8729	1.6400e- 003	0.0000	23.9139

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### 3.7 Architectural Coating - 2021

### Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0144	9.9000e- 003	0.1049	3.5000e- 004	0.0369	2.4000e- 004	0.0372	9.8300e- 003	2.2000e- 004	0.0101	0.0000	31.2285	31.2285	7.0000e- 004	0.0000	31.2460
Total	0.0144	9.9000e- 003	0.1049	3.5000e- 004	0.0369	2.4000e- 004	0.0372	9.8300e- 003	2.2000e- 004	0.0101	0.0000	31.2285	31.2285	7.0000e- 004	0.0000	31.2460

# 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	1.0743	5.0672	10.9793	0.0371	3.1447	0.0341	3.1788	0.8441	0.0319	0.8760	0.0000	3,410.668 0	3,410.668 0	0.1339	0.0000	3,414.014 1
Unmitigated	1.1176	5.3828	11.9702	0.0416	3.5654	0.0380	3.6034	0.9570	0.0356	0.9926	0.0000	3,824.174 9	3,824.174 9	0.1454	0.0000	3,827.809 3

# 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,142.40	1,142.40	1142.40	2,638,495	2,327,153
Day-Care Center	123.00	123.00	123.00	168,824	148,903
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	3,433.85	3,433.85	3433.85	6,772,650	5,973,478
Total	4,699.25	4,699.25	4,699.25	9,579,970	8,449,533

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	33	67	0
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	61	39	0

CalEEMod Version: CalEEMod.2016.3.2

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# 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Day-Care Center	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Enclosed Parking with Elevator	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Parking Lot	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Regional Shopping Center	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768

# 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category tons/yr											MT	7/yr				
Electricity Mitigated			, , ,	, , ,		0.0000	0.0000		0.0000	0.0000	0.0000	307.3805	307.3805	0.0331	6.8400e- 003	310.2467
Electricity Unmitigated	n — — — — — — — — — — — — — — — — — — —			 - - - -		0.0000	0.0000		0.0000	0.0000	0.0000	307.3805	307.3805	0.0331	6.8400e- 003	310.2467
NaturalGas Mitigated	0.0111	0.0958	0.0458	6.1000e- 004		7.6800e- 003	7.6800e- 003		7.6800e- 003	7.6800e- 003	0.0000	110.0534	110.0534	2.1100e- 003	2.0200e- 003	110.7074
NaturalGas Unmitigated	0.0111	0.0958	0.0458	6.1000e- 004		7.6800e- 003	7.6800e- 003		7.6800e- 003	7.6800e- 003	0.0000	110.0534	110.0534	2.1100e- 003	2.0200e- 003	110.7074

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### 5.2 Energy by Land Use - NaturalGas

## <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Apartments Mid Rise	1.81428e +006	9.7800e- 003	0.0836	0.0356	5.3000e- 004		6.7600e- 003	6.7600e- 003	1 1 1	6.7600e- 003	6.7600e- 003	0.0000	96.8171	96.8171	1.8600e- 003	1.7700e- 003	97.3925
Day-Care Center	73760	4.0000e- 004	3.6200e- 003	3.0400e- 003	2.0000e- 005		2.7000e- 004	2.7000e- 004		2.7000e- 004	2.7000e- 004	0.0000	3.9361	3.9361	8.0000e- 005	7.0000e- 005	3.9595
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
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
Regional Shopping Center	174278	9.4000e- 004	8.5400e- 003	7.1800e- 003	5.0000e- 005		6.5000e- 004	6.5000e- 004		6.5000e- 004	6.5000e- 004	0.0000	9.3001	9.3001	1.8000e- 004	1.7000e- 004	9.3554
Total		0.0111	0.0958	0.0458	6.0000e- 004		7.6800e- 003	7.6800e- 003		7.6800e- 003	7.6800e- 003	0.0000	110.0534	110.0534	2.1200e- 003	2.0100e- 003	110.7074

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### 5.2 Energy by Land Use - NaturalGas

## Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Apartments Mid Rise	1.81428e +006	9.7800e- 003	0.0836	0.0356	5.3000e- 004		6.7600e- 003	6.7600e- 003		6.7600e- 003	6.7600e- 003	0.0000	96.8171	96.8171	1.8600e- 003	1.7700e- 003	97.3925
Day-Care Center	73760	4.0000e- 004	3.6200e- 003	3.0400e- 003	2.0000e- 005		2.7000e- 004	2.7000e- 004		2.7000e- 004	2.7000e- 004	0.0000	3.9361	3.9361	8.0000e- 005	7.0000e- 005	3.9595
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
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
Regional Shopping Center	174278	9.4000e- 004	8.5400e- 003	7.1800e- 003	5.0000e- 005		6.5000e- 004	6.5000e- 004		6.5000e- 004	6.5000e- 004	0.0000	9.3001	9.3001	1.8000e- 004	1.7000e- 004	9.3554
Total		0.0111	0.0958	0.0458	6.0000e- 004		7.6800e- 003	7.6800e- 003		7.6800e- 003	7.6800e- 003	0.0000	110.0534	110.0534	2.1200e- 003	2.0100e- 003	110.7074

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# 5.3 Energy by Land Use - Electricity

# <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e					
Land Use	kWh/yr	MT/yr								
Apartments Mid Rise	866954	105.9791	0.0114	2.3600e- 003	106.9673					
Day-Care Center	21560	2.6356	2.8000e- 004	6.0000e- 005	2.6601					
Enclosed Parking with Elevator	828838	101.3198	0.0109	2.2600e- 003	102.2646					
Parking Lot	11060	1.3520	1.5000e- 004	3.0000e- 005	1.3646					
Regional Shopping Center	786089	96.0940	0.0103	2.1400e- 003	96.9901					
Total		307.3805	0.0331	6.8500e- 003	310.2467					

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# 5.3 Energy by Land Use - Electricity

### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e					
Land Use	kWh/yr	MT/yr								
Apartments Mid Rise	866954	105.9791	0.0114	2.3600e- 003	106.9673					
Day-Care Center	21560	2.6356	2.8000e- 004	6.0000e- 005	2.6601					
Enclosed Parking with Elevator	828838	101.3198	0.0109	2.2600e- 003	102.2646					
Parking Lot	11060	1.3520	1.5000e- 004	3.0000e- 005	1.3646					
Regional Shopping Center	786089	96.0940	0.0103	2.1400e- 003	96.9901					
Total		307.3805	0.0331	6.8500e- 003	310.2467					

# 6.0 Area Detail

### 6.1 Mitigation Measures Area

No Hearths Installed

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												МТ	/yr		
Mitigated	1.3736	0.0180	1.5654	8.0000e- 005		8.6400e- 003	8.6400e- 003		8.6400e- 003	8.6400e- 003	0.0000	2.5557	2.5557	2.4800e- 003	0.0000	2.6177
Unmitigated	1.8581	0.0292	2.2326	1.4100e- 003		0.1040	0.1040		0.1040	0.1040	9.5738	6.4881	16.0620	0.0179	6.3000e- 004	16.6958

# 6.2 Area by SubCategory

### <u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr											MT	/yr			
Architectural Coating	0.1919					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1342			, , , , , , , , , , , , , , , , , , ,	,	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.4845	0.0112	0.6672	1.3300e- 003	,	0.0954	0.0954		0.0954	0.0954	9.5738	3.9324	13.5063	0.0154	6.3000e- 004	14.0780
Landscaping	0.0476	0.0180	1.5654	8.0000e- 005	, , , , , , , , , , , , , , , , , , ,	8.6400e- 003	8.6400e- 003	1 <b></b>	8.6400e- 003	8.6400e- 003	0.0000	2.5557	2.5557	2.4800e- 003	0.0000	2.6177
Total	1.8581	0.0292	2.2326	1.4100e- 003		0.1040	0.1040		0.1040	0.1040	9.5738	6.4882	16.0620	0.0179	6.3000e- 004	16.6958

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### 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	ry tons/yr										МТ	/yr				
Architectural Coating	0.1919			1 1 1		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1342					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0476	0.0180	1.5654	8.0000e- 005		8.6400e- 003	8.6400e- 003		8.6400e- 003	8.6400e- 003	0.0000	2.5557	2.5557	2.4800e- 003	0.0000	2.6177
Total	1.3736	0.0180	1.5654	8.0000e- 005		8.6400e- 003	8.6400e- 003		8.6400e- 003	8.6400e- 003	0.0000	2.5557	2.5557	2.4800e- 003	0.0000	2.6177

# 7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category		MT	/yr	
Mitigated	24.1972	0.6309	0.0153	44.5136
Unmitigated	24.1972	0.6309	0.0153	44.5136

# 7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e				
Land Use	Mgal	MT/yr							
Apartments Mid Rise	13.6823 / 8.62583	17.0816	0.4472	0.0108	31.4835				
Day-Care Center	0.171558/ 0.44115	0.3567	5.6200e- 003	1.4000e- 004	0.5386				
Enclosed Parking with Elevator	0/0	0.0000	0.0000	0.0000	0.0000				
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000				
Regional Shopping Center	5.44655 / 3.33821	6.7589	0.1780	4.3000e- 003	12.4915				
Total		24.1972	0.6309	0.0153	44.5136				

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### 7.2 Water by Land Use

### Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e					
Land Use	Mgal	MT/yr								
Apartments Mid Rise	13.6823 / 8.62583	17.0816	0.4472	0.0108	31.4835					
Day-Care Center	0.171558/ 0.44115	0.3567	5.6200e- 003	1.4000e- 004	0.5386					
Enclosed Parking with Elevator	0/0	0.0000	0.0000	0.0000	0.0000					
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000					
Regional Shopping Center	5.44655 / 3.33821	6.7589	0.1780	4.3000e- 003	12.4915					
Total		24.1972	0.6309	0.0153	44.5136					

# 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

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# Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	ī/yr	
Mitigated	36.3374	2.1475	0.0000	90.0244
Unmitigated	36.3374	2.1475	0.0000	90.0244

# 8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
Apartments Mid Rise	96.6	19.6089	1.1589	0.0000	48.5803
Day-Care Center	5.2	1.0556	0.0624	0.0000	2.6151
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	77.21	15.6729	0.9262	0.0000	38.8290
Total		36.3374	2.1475	0.0000	90.0244

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## Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Annual

### 8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e				
Land Use	tons		MT/yr						
Apartments Mid Rise	96.6	19.6089	1.1589	0.0000	48.5803				
Day-Care Center	5.2	1.0556	0.0624	0.0000	2.6151				
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000				
Parking Lot	0	0.0000	0.0000	0.0000	0.0000				
Regional Shopping Center	77.21	15.6729	0.9262	0.0000	38.8290				
Total		36.3374	2.1475	0.0000	90.0244				

# 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

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Annual

### **User Defined Equipment**

Equipment Type Number

11.0 Vegetation

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### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

### **Delta Fair Village - Unmitigated**

Bay Area AQMD Air District, Summer

# **1.0 Project Characteristics**

# 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	4.00	1000sqft	0.09	4,000.00	0
Enclosed Parking with Elevator	328.00	Space	0.00	141,440.00	0
Parking Lot	79.00	Space	0.90	31,600.00	0
Apartments Mid Rise	210.00	Dwelling Unit	3.00	210,000.00	601
Regional Shopping Center	73.53	1000sqft	1.69	73,535.00	0

### **1.2 Other Project Characteristics**

Urbanization Urban		Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Com	ipany			
CO2 Intensity (Ib/MWhr)	269.5	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

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

CalEEMod Version: CalEEMod.2016.3.2

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#### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

Project Characteristics - CO2 Intensity adjusted per PG&E's state-mandated progress towards RPS

Land Use - modified per site plans and as recommended by CalEEMod for Mixed-Use Development

Construction Phase - Construction schedule provided by applicant

#### Demolition -

Grading - per applicant provided construction information

Vehicle Trips - Proposed Project only from Traffic Report; Trip purpose updated per Traffic Report

Energy Use -

Mobile Land Use Mitigation - Based on site plans (inclusion of pedestrian facilities), and distance to nearest existing transit

Mobile Commute Mitigation -

Area Mitigation - Applicant provided information

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	10.00	24.00
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	230.00	327.00
tblConstructionPhase	NumDays	20.00	327.00
tblGrading	AcresOfGrading	11.50	4.00
tblGrading	MaterialExported	0.00	50.00
tblGrading	MaterialImported	0.00	100.00
tblLandUse	LandUseSquareFeet	131,200.00	141,440.00
tblLandUse	LandUseSquareFeet	73,530.00	73,535.00
tblLandUse	LotAcreage	2.95	0.00
tblLandUse	LotAcreage	0.71	0.90
tblLandUse	LotAcreage	5.53	3.00

tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblVehicleTrips	DV_TP	58.00	67.00
tblVehicleTrips	DV_TP	35.00	39.00
tblVehicleTrips	PB_TP	14.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	28.00	33.00
tblVehicleTrips	PR_TP	54.00	61.00
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	ST_TR	6.21	30.75
tblVehicleTrips	ST_TR	49.97	46.70
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	SU_TR	5.83	30.75
tblVehicleTrips	SU_TR	25.24	46.70
tblVehicleTrips	WD_TR	6.65	5.44
tblVehicleTrips	WD_TR	74.06	30.75
tblVehicleTrips	WD_TR	42.70	46.70

### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 2.0 Emissions Summary

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### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day								lb/day							
2020	15.3789	42.5268	28.4420	0.0721	18.2187	2.1986	20.4173	9.9711	2.0227	11.9939	0.0000	7,155.564 5	7,155.564 5	1.1965	0.0000	7,175.457 6
2021	15.0147	26.1346	27.2967	0.0711	2.8894	1.0825	3.9719	0.7762	1.0233	1.7995	0.0000	7,052.105 6	7,052.105 6	0.7751	0.0000	7,071.482 1
Maximum	15.3789	42.5268	28.4420	0.0721	18.2187	2.1986	20.4173	9.9711	2.0227	11.9939	0.0000	7,155.564 5	7,155.564 5	1.1965	0.0000	7,175.457 6

### Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day									lb/day						
2020	15.3789	42.5268	28.4420	0.0721	18.2187	2.1986	20.4173	9.9711	2.0227	11.9939	0.0000	7,155.564 5	7,155.564 5	1.1965	0.0000	7,175.457 5
2021	15.0147	26.1346	27.2967	0.0711	2.8894	1.0825	3.9719	0.7762	1.0233	1.7995	0.0000	7,052.105 6	7,052.105 6	0.7751	0.0000	7,071.482 1
Maximum	15.3789	42.5268	28.4420	0.0721	18.2187	2.1986	20.4173	9.9711	2.0227	11.9939	0.0000	7,155.564 5	7,155.564 5	1.1965	0.0000	7,175.457 5
	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Area	94.1590	2.1098	131.4982	0.2208		16.2948	16.2948		16.2948	16.2948	1,757.877 7	809.5373	2,567.415 0	2.4359	0.1243	2,665.340 5
Energy	0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421		0.0421	0.0421		664.7292	664.7292	0.0127	0.0122	668.6794
Mobile	7.0691	28.7536	67.7909	0.2422	20.3529	0.2083	20.5612	5.4453	0.1950	5.6403		24,502.39 95	24,502.39 95	0.8817		24,524.44 20
Total	101.2890	31.3881	199.5400	0.4662	20.3529	16.5452	36.8981	5.4453	16.5319	21.9773	1,757.877 7	25,976.66 61	27,734.54 38	3.3304	0.1364	27,858.46 19

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Area	7.7943	0.2005	17.3935	9.2000e- 004		0.0960	0.0960		0.0960	0.0960	0.0000	31.3020	31.3020	0.0304	0.0000	32.0614
Energy	0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421		0.0421	0.0421		664.7292	664.7292	0.0127	0.0122	668.6794
Mobile	6.8257	27.1207	61.6468	0.2159	17.9512	0.1870	18.1382	4.8028	0.1750	4.9778		21,848.79 35	21,848.79 35	0.8086	1	21,869.00 86
Total	14.6810	27.8458	79.2911	0.2201	17.9512	0.3251	18.2763	4.8028	0.3131	5.1159	0.0000	22,544.82 48	22,544.82 48	0.8517	0.0122	22,569.74 94

#### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	85.51	11.29	60.26	52.78	11.80	98.04	50.47	11.80	98.11	76.72	100.00	13.21	18.71	74.43	91.07	18.98

## **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	3/2/2020	3/16/2020	5	11	
2	Site Preparation	Site Preparation	3/17/2020	4/17/2020	5	24	
3	Grading	Grading	4/20/2020	5/20/2020	5	23	
4	Paving	Paving	5/21/2020	6/4/2020	5	11	
5	Building Construction	Building Construction	6/5/2020	9/6/2021	5	327	
6	Architectural Coating	Architectural Coating	6/19/2020	9/20/2021	5	327	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.9

Residential Indoor: 425,250; Residential Outdoor: 141,750; Non-Residential Indoor: 116,303; Non-Residential Outdoor: 38,768; Striped Parking Area: 10,382 (Architectural Coating – sqft)

OffRoad Equipment

### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Delta Fair	Village -	Unmitigated	- Bay	/ Area	AQMD	Air	District.	Summer
							,	

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	335.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	6.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	13.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	249.00	64.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Fugitive Dust					6.5814	0.0000	6.5814	0.9965	0.0000	0.9965			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.704 9	3,747.704 9	1.0580		3,774.153 6
Total	3.3121	33.2010	21.7532	0.0388	6.5814	1.6587	8.2401	0.9965	1.5419	2.5383		3,747.704 9	3,747.704 9	1.0580		3,774.153 6

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.2 Demolition - 2020

## Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.2513	8.7235	1.7338	0.0242	0.5320	0.0285	0.5606	0.1458	0.0273	0.1731		2,591.022 6	2,591.022 6	0.1296		2,594.263 0
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0521	0.0316	0.4025	1.2400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		123.1165	123.1165	2.9700e- 003		123.1907
Total	0.3034	8.7551	2.1362	0.0255	0.6553	0.0293	0.6846	0.1785	0.0280	0.2065		2,714.139 1	2,714.139 1	0.1326		2,717.453 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Fugitive Dust		, , ,			6.5814	0.0000	6.5814	0.9965	0.0000	0.9965		1 1 1	0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.704 9	3,747.704 9	1.0580		3,774.153 6
Total	3.3121	33.2010	21.7532	0.0388	6.5814	1.6587	8.2401	0.9965	1.5419	2.5383	0.0000	3,747.704 9	3,747.704 9	1.0580		3,774.153 6

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.2 Demolition - 2020

### Mitigated Construction Off-Site

	ROG	NOx	co	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Hauling	0.2513	8.7235	1.7338	0.0242	0.5320	0.0285	0.5606	0.1458	0.0273	0.1731		2,591.022 6	2,591.022 6	0.1296		2,594.263 0
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0521	0.0316	0.4025	1.2400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		123.1165	123.1165	2.9700e- 003		123.1907
Total	0.3034	8.7551	2.1362	0.0255	0.6553	0.0293	0.6846	0.1785	0.0280	0.2065		2,714.139 1	2,714.139 1	0.1326		2,717.453 7

3.3 Site Preparation - 2020

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Fugitive Dust					18.0665	0.0000	18.0665	9.9307	0.0000	9.9307		1 1 1	0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.101 6	3,685.101 6	1.1918		3,714.897 5
Total	4.0765	42.4173	21.5136	0.0380	18.0665	2.1974	20.2639	9.9307	2.0216	11.9523		3,685.101 6	3,685.101 6	1.1918		3,714.897 5

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

### 3.3 Site Preparation - 2020

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	lb/day											lb/day							
Hauling	2.0600e- 003	0.0716	0.0142	2.0000e- 004	4.3700e- 003	2.3000e- 004	4.6000e- 003	1.2000e- 003	2.2000e- 004	1.4200e- 003		21.2696	21.2696	1.0600e- 003		21.2962			
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000			
Worker	0.0626	0.0379	0.4830	1.4800e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.8000e- 004	0.0401		147.7398	147.7398	3.5600e- 003		147.8288			
Total	0.0646	0.1095	0.4972	1.6800e- 003	0.1522	1.1900e- 003	0.1534	0.0404	1.1000e- 003	0.0415		169.0094	169.0094	4.6200e- 003		169.1250			

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e				
Category	lb/day												lb/day							
Fugitive Dust		, , ,			18.0665	0.0000	18.0665	9.9307	0.0000	9.9307		1 1 1	0.0000			0.0000				
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.101 6	3,685.101 6	1.1918		3,714.897 5				
Total	4.0765	42.4173	21.5136	0.0380	18.0665	2.1974	20.2639	9.9307	2.0216	11.9523	0.0000	3,685.101 6	3,685.101 6	1.1918		3,714.897 5				

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

### 3.3 Site Preparation - 2020

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e				
Category	lb/day												lb/day							
Hauling	2.0600e- 003	0.0716	0.0142	2.0000e- 004	4.3700e- 003	2.3000e- 004	4.6000e- 003	1.2000e- 003	2.2000e- 004	1.4200e- 003		21.2696	21.2696	1.0600e- 003		21.2962				
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000				
Worker	0.0626	0.0379	0.4830	1.4800e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.8000e- 004	0.0401		147.7398	147.7398	3.5600e- 003		147.8288				
Total	0.0646	0.1095	0.4972	1.6800e- 003	0.1522	1.1900e- 003	0.1534	0.0404	1.1000e- 003	0.0415		169.0094	169.0094	4.6200e- 003		169.1250				

3.4 Grading - 2020

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	lb/day											lb/day							
Fugitive Dust					6.2070	0.0000	6.2070	3.3302	0.0000	3.3302			0.0000			0.0000			
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.485 1	2,872.485 1	0.9290		2,895.710 6			
Total	2.4288	26.3859	16.0530	0.0297	6.2070	1.2734	7.4804	3.3302	1.1716	4.5018		2,872.485 1	2,872.485 1	0.9290		2,895.710 6			
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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.4 Grading - 2020

# Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	4.6600e- 003	0.1619	0.0322	4.5000e- 004	9.8700e- 003	5.3000e- 004	0.0104	2.7100e- 003	5.1000e- 004	3.2100e- 003		48.0878	48.0878	2.4100e- 003		48.1479
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0521	0.0316	0.4025	1.2400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		123.1165	123.1165	2.9700e- 003		123.1907
Total	0.0568	0.1935	0.4346	1.6900e- 003	0.1331	1.3300e- 003	0.1344	0.0354	1.2500e- 003	0.0366		171.2043	171.2043	5.3800e- 003		171.3386

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Fugitive Dust		1 1 1 1			6.2070	0.0000	6.2070	3.3302	0.0000	3.3302		1 1 1	0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.485 1	2,872.485 1	0.9290		2,895.710 6
Total	2.4288	26.3859	16.0530	0.0297	6.2070	1.2734	7.4804	3.3302	1.1716	4.5018	0.0000	2,872.485 1	2,872.485 1	0.9290		2,895.710 6

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.4 Grading - 2020

### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	4.6600e- 003	0.1619	0.0322	4.5000e- 004	9.8700e- 003	5.3000e- 004	0.0104	2.7100e- 003	5.1000e- 004	3.2100e- 003		48.0878	48.0878	2.4100e- 003		48.1479
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0521	0.0316	0.4025	1.2400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		123.1165	123.1165	2.9700e- 003		123.1907
Total	0.0568	0.1935	0.4346	1.6900e- 003	0.1331	1.3300e- 003	0.1344	0.0354	1.2500e- 003	0.0366		171.2043	171.2043	5.3800e- 003		171.3386

3.5 Paving - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.2144					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5709	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.5 Paving - 2020

# Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0521	0.0316	0.4025	1.2400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		123.1165	123.1165	2.9700e- 003		123.1907
Total	0.0521	0.0316	0.4025	1.2400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		123.1165	123.1165	2.9700e- 003		123.1907

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.2144	1 1 1 1				0.0000	0.0000		0.0000	0.0000		       	0.0000			0.0000
Total	1.5709	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.733 4	0.7140		2,225.584 1

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.5 Paving - 2020

### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	Jay							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0521	0.0316	0.4025	1.2400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		123.1165	123.1165	2.9700e- 003		123.1907
Total	0.0521	0.0316	0.4025	1.2400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		123.1165	123.1165	2.9700e- 003		123.1907

3.6 Building Construction - 2020

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171	;	1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.6 Building Construction - 2020

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2426	7.2936	1.7398	0.0176	0.4332	0.0358	0.4690	0.1247	0.0342	0.1589		1,866.931 5	1,866.931 5	0.0919		1,869.230 0
Worker	0.8655	0.5240	6.6808	0.0205	2.0455	0.0132	2.0587	0.5426	0.0122	0.5548		2,043.733 6	2,043.733 6	0.0493		2,044.964 8
Total	1.1081	7.8176	8.4206	0.0381	2.4787	0.0490	2.5277	0.6673	0.0464	0.7137		3,910.665 2	3,910.665 2	0.1412		3,914.194 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	Jay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.6 Building Construction - 2020

# Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2426	7.2936	1.7398	0.0176	0.4332	0.0358	0.4690	0.1247	0.0342	0.1589		1,866.931 5	1,866.931 5	0.0919		1,869.230 0
Worker	0.8655	0.5240	6.6808	0.0205	2.0455	0.0132	2.0587	0.5426	0.0122	0.5548		2,043.733 6	2,043.733 6	0.0493		2,044.964 8
Total	1.1081	7.8176	8.4206	0.0381	2.4787	0.0490	2.5277	0.6673	0.0464	0.7137		3,910.665 2	3,910.665 2	0.1412		3,914.194 8

3.6 Building Construction - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.6 Building Construction - 2021

# Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1985	6.6138	1.5596	0.0175	0.4332	0.0143	0.4476	0.1247	0.0137	0.1384		1,849.334 7	1,849.334 7	0.0868		1,851.504 6
Worker	0.8006	0.4679	6.1162	0.0198	2.0455	0.0129	2.0584	0.5426	0.0119	0.5544		1,971.979 2	1,971.979 2	0.0441		1,973.081 2
Total	0.9991	7.0817	7.6758	0.0372	2.4787	0.0272	2.5059	0.6673	0.0256	0.6928		3,821.313 9	3,821.313 9	0.1309		3,824.585 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.6 Building Construction - 2021

# Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1985	6.6138	1.5596	0.0175	0.4332	0.0143	0.4476	0.1247	0.0137	0.1384		1,849.334 7	1,849.334 7	0.0868		1,851.504 6
Worker	0.8006	0.4679	6.1162	0.0198	2.0455	0.0129	2.0584	0.5426	0.0119	0.5544		1,971.979 2	1,971.979 2	0.0441		1,973.081 2
Total	0.9991	7.0817	7.6758	0.0372	2.4787	0.0272	2.5059	0.6673	0.0256	0.6928		3,821.313 9	3,821.313 9	0.1309		3,824.585 8

3.7 Architectural Coating - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Archit. Coating	11.7350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	11.9771	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.7 Architectural Coating - 2020

# Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1738	0.1052	1.3415	4.1200e- 003	0.4107	2.6600e- 003	0.4134	0.1090	2.4500e- 003	0.1114		410.3883	410.3883	9.8900e- 003		410.6355
Total	0.1738	0.1052	1.3415	4.1200e- 003	0.4107	2.6600e- 003	0.4134	0.1090	2.4500e- 003	0.1114		410.3883	410.3883	9.8900e- 003		410.6355

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Archit. Coating	11.7350					0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	11.9771	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.7 Architectural Coating - 2020

# Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	Jay							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1738	0.1052	1.3415	4.1200e- 003	0.4107	2.6600e- 003	0.4134	0.1090	2.4500e- 003	0.1114		410.3883	410.3883	9.8900e- 003		410.6355
Total	0.1738	0.1052	1.3415	4.1200e- 003	0.4107	2.6600e- 003	0.4134	0.1090	2.4500e- 003	0.1114		410.3883	410.3883	9.8900e- 003		410.6355

3.7 Architectural Coating - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Archit. Coating	11.7350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	11.9539	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.7 Architectural Coating - 2021

# Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1608	0.0940	1.2282	3.9700e- 003	0.4107	2.5800e- 003	0.4133	0.1090	2.3800e- 003	0.1113		395.9798	395.9798	8.8500e- 003		396.2011
Total	0.1608	0.0940	1.2282	3.9700e- 003	0.4107	2.5800e- 003	0.4133	0.1090	2.3800e- 003	0.1113		395.9798	395.9798	8.8500e- 003		396.2011

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Archit. Coating	11.7350	1 1 1				0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	11.9539	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 3.7 Architectural Coating - 2021

## Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1608	0.0940	1.2282	3.9700e- 003	0.4107	2.5800e- 003	0.4133	0.1090	2.3800e- 003	0.1113		395.9798	395.9798	8.8500e- 003		396.2011
Total	0.1608	0.0940	1.2282	3.9700e- 003	0.4107	2.5800e- 003	0.4133	0.1090	2.3800e- 003	0.1113		395.9798	395.9798	8.8500e- 003		396.2011

# 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	6.8257	27.1207	61.6468	0.2159	17.9512	0.1870	18.1382	4.8028	0.1750	4.9778		21,848.79 35	21,848.79 35	0.8086		21,869.00 86
Unmitigated	7.0691	28.7536	67.7909	0.2422	20.3529	0.2083	20.5612	5.4453	0.1950	5.6403		24,502.39 95	24,502.39 95	0.8817		24,524.44 20

# 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,142.40	1,142.40	1142.40	2,638,495	2,327,153
Day-Care Center	123.00	123.00	123.00	168,824	148,903
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	3,433.85	3,433.85	3433.85	6,772,650	5,973,478
Total	4,699.25	4,699.25	4,699.25	9,579,970	8,449,533

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	33	67	0
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	61	39	0

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Day-Care Center	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Enclosed Parking with Elevator	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Parking Lot	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Regional Shopping Center	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768

# 5.0 Energy Detail

Historical Energy Use: N

# 5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
NaturalGas Mitigated	0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421		0.0421	0.0421		664.7292	664.7292	0.0127	0.0122	668.6794
NaturalGas Unmitigated	0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421		0.0421	0.0421		664.7292	664.7292	0.0127	0.0122	668.6794

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 5.2 Energy by Land Use - NaturalGas

# <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/o	day							lb/c	lay		
Apartments Mid Rise	4970.64	0.0536	0.4581	0.1949	2.9200e- 003		0.0370	0.0370		0.0370	0.0370		584.7815	584.7815	0.0112	0.0107	588.2565
Day-Care Center	202.082	2.1800e- 003	0.0198	0.0166	1.2000e- 004		1.5100e- 003	1.5100e- 003		1.5100e- 003	1.5100e- 003		23.7744	23.7744	4.6000e- 004	4.4000e- 004	23.9157
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
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
Regional Shopping Center	477.474	5.1500e- 003	0.0468	0.0393	2.8000e- 004		3.5600e- 003	3.5600e- 003		3.5600e- 003	3.5600e- 003		56.1734	56.1734	1.0800e- 003	1.0300e- 003	56.5072
Total		0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421		0.0421	0.0421		664.7292	664.7292	0.0128	0.0122	668.6794

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 5.2 Energy by Land Use - NaturalGas

### Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/o	day		
Apartments Mid Rise	4.97064	0.0536	0.4581	0.1949	2.9200e- 003		0.0370	0.0370		0.0370	0.0370		584.7815	584.7815	0.0112	0.0107	588.2565
Day-Care Center	0.202082	2.1800e- 003	0.0198	0.0166	1.2000e- 004		1.5100e- 003	1.5100e- 003		1.5100e- 003	1.5100e- 003		23.7744	23.7744	4.6000e- 004	4.4000e- 004	23.9157
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
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
Regional Shopping Center	0.477474	5.1500e- 003	0.0468	0.0393	2.8000e- 004		3.5600e- 003	3.5600e- 003		3.5600e- 003	3.5600e- 003		56.1734	56.1734	1.0800e- 003	1.0300e- 003	56.5072
Total		0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421		0.0421	0.0421		664.7292	664.7292	0.0128	0.0122	668.6794

# 6.0 Area Detail

# 6.1 Mitigation Measures Area

No Hearths Installed

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
Mitigated	7.7943	0.2005	17.3935	9.2000e- 004		0.0960	0.0960		0.0960	0.0960	0.0000	31.3020	31.3020	0.0304	0.0000	32.0614
Unmitigated	94.1590	2.1098	131.4982	0.2208		16.2948	16.2948		16.2948	16.2948	1,757.877 7	809.5373	2,567.415 0	2.4359	0.1243	2,665.340 5

# 6.2 Area by SubCategory

## <u>Unmitigated</u>

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/o	day							lb/c	day		
Architectural Coating	1.0513					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.2145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	86.3646	1.9093	114.1047	0.2198		16.1988	16.1988		16.1988	16.1988	1,757.877 7	778.2353	2,536.1130	2.4056	0.1243	2,633.279 1
Landscaping	0.5285	0.2005	17.3935	9.2000e- 004		0.0960	0.0960		0.0960	0.0960		31.3020	31.3020	0.0304		32.0614
Total	94.1590	2.1098	131.4982	0.2208		16.2949	16.2949		16.2949	16.2949	1,757.877 7	809.5373	2,567.415 0	2.4359	0.1243	2,665.340 5

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### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

# 6.2 Area by SubCategory

### **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	1.0513					0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000
Consumer Products	6.2145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.5285	0.2005	17.3935	9.2000e- 004		0.0960	0.0960		0.0960	0.0960		31.3020	31.3020	0.0304		32.0614
Total	7.7943	0.2005	17.3935	9.2000e- 004		0.0960	0.0960		0.0960	0.0960	0.0000	31.3020	31.3020	0.0304	0.0000	32.0614

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

# 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

# 9.0 Operational Offroad

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

# **10.0 Stationary Equipment**

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Summer

### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						
Equipment Type	Number					
11.0 Vegetation						

# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# **Delta Fair Village - Unmitigated**

Bay Area AQMD Air District, Winter

# **1.0 Project Characteristics**

# 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	4.00	1000sqft	0.09	4,000.00	0
Enclosed Parking with Elevator	328.00	Space	0.00	141,440.00	0
Parking Lot	79.00	Space	0.90	31,600.00	0
Apartments Mid Rise	210.00	Dwelling Unit	3.00	210,000.00	601
Regional Shopping Center	73.53	1000sqft	1.69	73,535.00	0

# **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Com	ipany			
CO2 Intensity (Ib/MWhr)	269.5	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

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

CalEEMod Version: CalEEMod.2016.3.2

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### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

Project Characteristics - CO2 Intensity adjusted per PG&E's state-mandated progress towards RPS

Land Use - modified per site plans and as recommended by CalEEMod for Mixed-Use Development

Construction Phase - Construction schedule provided by applicant

Demolition -

Grading - per applicant provided construction information

Vehicle Trips - Proposed Project only from Traffic Report; Trip purpose updated per Traffic Report

Energy Use -

Mobile Land Use Mitigation - Based on site plans (inclusion of pedestrian facilities), and distance to nearest existing transit

Mobile Commute Mitigation -

Area Mitigation - Applicant provided information

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	10.00	24.00
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	230.00	327.00
tblConstructionPhase	NumDays	20.00	327.00
tblGrading	AcresOfGrading	11.50	4.00
tblGrading	MaterialExported	0.00	50.00
tblGrading	MaterialImported	0.00	100.00
tblLandUse	LandUseSquareFeet	131,200.00	141,440.00
tblLandUse	LandUseSquareFeet	73,530.00	73,535.00
tblLandUse	LotAcreage	2.95	0.00
tblLandUse	LotAcreage	0.71	0.90
tblLandUse	LotAcreage	5.53	3.00

tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblVehicleTrips	DV_TP	58.00	67.00
tblVehicleTrips	DV_TP	35.00	39.00
tblVehicleTrips	PB_TP	14.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	28.00	33.00
tblVehicleTrips	PR_TP	54.00	61.00
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	ST_TR	6.21	30.75
tblVehicleTrips	ST_TR	49.97	46.70
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	SU_TR	5.83	30.75
tblVehicleTrips	SU_TR	25.24	46.70
tblVehicleTrips	WD_TR	6.65	5.44
tblVehicleTrips	WD_TR	74.06	30.75
tblVehicleTrips	WD_TR	42.70	46.70

# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# 2.0 Emissions Summary

# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# 2.1 Overall Construction (Maximum Daily Emission)

**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					lb/o	day							lb/d	day		
2020	15.4516	42.5375	28.2047	0.0698	18.2187	2.1986	20.4173	9.9711	2.0227	11.9939	0.0000	6,914.841 0	6,914.841 0	1.1969	0.0000	6,934.825 6
2021	15.0835	26.3237	27.0567	0.0688	2.8894	1.0830	3.9724	0.7762	1.0238	1.8000	0.0000	6,818.540 2	6,818.540 2	0.7786	0.0000	6,838.005 0
Maximum	15.4516	42.5375	28.2047	0.0698	18.2187	2.1986	20.4173	9.9711	2.0227	11.9939	0.0000	6,914.841 0	6,914.841 0	1.1969	0.0000	6,93 <mark>4.825</mark> 6

### **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	day							lb/	′day		
2020	15.4516	42.5375	28.2047	0.0698	18.2187	2.1986	20.4173	9.9711	2.0227	11.9939	0.0000	6,914.841 0	6,914.841 0	1.1969	0.0000	6,934.825 6
2021	15.0835	26.3237	27.0567	0.0688	2.8894	1.0830	3.9724	0.7762	1.0238	1.8000	0.0000	6,818.540 2	6,818.540 2	0.7786	0.0000	6,838.005 0
Maximum	15.4516	42.5375	28.2047	0.0698	18.2187	2.1986	20.4173	9.9711	2.0227	11.9939	0.0000	6,914.841 0	6,914.841 0	1.1969	0.0000	6,934.825 6
	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Area	94.1590	2.1098	131.4982	0.2208		16.2948	16.2948		16.2948	16.2948	1,757.877 7	809.5373	2,567.415 0	2.4359	0.1243	2,665.340 5
Energy	0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421		0.0421	0.0421		664.7292	664.7292	0.0127	0.0122	668.6794
Mobile	6.0872	30.0503	69.2021	0.2267	20.3529	0.2100	20.5629	5.4453	0.1967	5.6420		22,934.04 50	22,934.04 50	0.9064		22,956.70 40
Total	100.3071	32.6848	200.9512	0.4507	20.3529	16.5470	36.8998	5.4453	16.5336	21.9789	1,757.877 7	24,408.31 16	26,166.18 93	3.3550	0.1364	26,290.72 39

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Area	7.7943	0.2005	17.3935	9.2000e- 004		0.0960	0.0960		0.0960	0.0960	0.0000	31.3020	31.3020	0.0304	0.0000	32.0614
Energy	0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421	 , , , ,	0.0421	0.0421		664.7292	664.7292	0.0127	0.0122	668.6794
Mobile	5.8475	28.2475	63.7361	0.2020	17.9512	0.1887	18.1399	4.8028	0.1766	4.9794		20,444.57 81	20,444.57 81	0.8366		20,465.49 33
Total	13.7027	28.9726	81.3805	0.2063	17.9512	0.3268	18.2780	4.8028	0.3148	5.1175	0.0000	21,140.60 93	21,140.60 93	0.8797	0.0122	21,166.23 42

#### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	86.34	11.36	59.50	54.24	11.80	98.03	50.47	11.80	98.10	76.72	100.00	13.39	19.21	73.78	91.07	19.49

# **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	3/2/2020	3/16/2020	5	11	
2	Site Preparation	Site Preparation	3/17/2020	4/17/2020	5	24	
3	Grading	Grading	4/20/2020	5/20/2020	5	23	
4	Paving	Paving	5/21/2020	6/4/2020	5	11	
5	Building Construction	Building Construction	6/5/2020	9/6/2021	5	327	
6	Architectural Coating	Architectural Coating	6/19/2020	9/20/2021	5	327	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.9

Residential Indoor: 425,250; Residential Outdoor: 141,750; Non-Residential Indoor: 116,303; Non-Residential Outdoor: 38,768; Striped Parking Area: 10,382 (Architectural Coating – sqft)

OffRoad Equipment

# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Delta Fair V	'illage -	Unmitigated -	Bay	Area	AQMD	Air	District.	Winter

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	335.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	6.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	13.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	249.00	64.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

### 3.2 Demolition - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust		, , ,			6.5814	0.0000	6.5814	0.9965	0.0000	0.9965		1 1 1	0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.704 9	3,747.704 9	1.0580		3,774.153 6
Total	3.3121	33.2010	21.7532	0.0388	6.5814	1.6587	8.2401	0.9965	1.5419	2.5383		3,747.704 9	3,747.704 9	1.0580		3,774.153 6

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

## 3.2 Demolition - 2020

# Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.2582	8.9376	1.8665	0.0238	0.5320	0.0290	0.5611	0.1458	0.0278	0.1736		2,547.503 2	2,547.503 2	0.1361		2,550.906 5
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0390	0.3780	1.1400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		113.4098	113.4098	2.7700e- 003	,	113.4792
Total	0.3133	8.9766	2.2444	0.0250	0.6553	0.0298	0.6851	0.1785	0.0285	0.2070		2,660.913 0	2,660.913 0	0.1389		2,664.385 6

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust		1 1 1 1			6.5814	0.0000	6.5814	0.9965	0.0000	0.9965		1 1 1	0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.704 9	3,747.704 9	1.0580		3,774.153 6
Total	3.3121	33.2010	21.7532	0.0388	6.5814	1.6587	8.2401	0.9965	1.5419	2.5383	0.0000	3,747.704 9	3,747.704 9	1.0580		3,774.153 6

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# 3.2 Demolition - 2020

### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Hauling	0.2582	8.9376	1.8665	0.0238	0.5320	0.0290	0.5611	0.1458	0.0278	0.1736		2,547.503 2	2,547.503 2	0.1361		2,550.906 5
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0390	0.3780	1.1400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		113.4098	113.4098	2.7700e- 003		113.4792
Total	0.3133	8.9766	2.2444	0.0250	0.6553	0.0298	0.6851	0.1785	0.0285	0.2070		2,660.913 0	2,660.913 0	0.1389		2,664.385 6

3.3 Site Preparation - 2020

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					18.0665	0.0000	18.0665	9.9307	0.0000	9.9307		1 1 1	0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.101 6	3,685.101 6	1.1918		3,714.897 5
Total	4.0765	42.4173	21.5136	0.0380	18.0665	2.1974	20.2639	9.9307	2.0216	11.9523		3,685.101 6	3,685.101 6	1.1918		3,714.897 5

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# 3.3 Site Preparation - 2020

# Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	2.1200e- 003	0.0734	0.0153	2.0000e- 004	4.3700e- 003	2.4000e- 004	4.6100e- 003	1.2000e- 003	2.3000e- 004	1.4200e- 003		20.9123	20.9123	1.1200e- 003		20.9403
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0662	0.0468	0.4536	1.3700e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.8000e- 004	0.0401		136.0918	136.0918	3.3300e- 003		136.1750
Total	0.0683	0.1202	0.4689	1.5700e- 003	0.1522	1.2000e- 003	0.1534	0.0404	1.1100e- 003	0.0415		157.0041	157.0041	4.4500e- 003		157.1153

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust		, , ,			18.0665	0.0000	18.0665	9.9307	0.0000	9.9307		1 1 1	0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.101 6	3,685.101 6	1.1918		3,714.897 5
Total	4.0765	42.4173	21.5136	0.0380	18.0665	2.1974	20.2639	9.9307	2.0216	11.9523	0.0000	3,685.101 6	3,685.101 6	1.1918		3,714.897 5

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# 3.3 Site Preparation - 2020

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	2.1200e- 003	0.0734	0.0153	2.0000e- 004	4.3700e- 003	2.4000e- 004	4.6100e- 003	1.2000e- 003	2.3000e- 004	1.4200e- 003		20.9123	20.9123	1.1200e- 003		20.9403
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0662	0.0468	0.4536	1.3700e- 003	0.1479	9.6000e- 004	0.1488	0.0392	8.8000e- 004	0.0401		136.0918	136.0918	3.3300e- 003		136.1750
Total	0.0683	0.1202	0.4689	1.5700e- 003	0.1522	1.2000e- 003	0.1534	0.0404	1.1100e- 003	0.0415		157.0041	157.0041	4.4500e- 003		157.1153

3.4 Grading - 2020

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					6.2070	0.0000	6.2070	3.3302	0.0000	3.3302			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.485 1	2,872.485 1	0.9290		2,895.710 6
Total	2.4288	26.3859	16.0530	0.0297	6.2070	1.2734	7.4804	3.3302	1.1716	4.5018		2,872.485 1	2,872.485 1	0.9290		2,895.710 6

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# 3.4 Grading - 2020

# Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	4.7900e- 003	0.1659	0.0346	4.4000e- 004	9.8700e- 003	5.4000e- 004	0.0104	2.7100e- 003	5.2000e- 004	3.2200e- 003		47.2801	47.2801	2.5300e- 003		47.3432
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0390	0.3780	1.1400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		113.4098	113.4098	2.7700e- 003		113.4792
Total	0.0599	0.2049	0.4126	1.5800e- 003	0.1331	1.3400e- 003	0.1344	0.0354	1.2600e- 003	0.0366		160.6899	160.6899	5.3000e- 003		160.8224

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Fugitive Dust			1		6.2070	0.0000	6.2070	3.3302	0.0000	3.3302		1 1 1	0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.485 1	2,872.485 1	0.9290		2,895.710 6
Total	2.4288	26.3859	16.0530	0.0297	6.2070	1.2734	7.4804	3.3302	1.1716	4.5018	0.0000	2,872.485 1	2,872.485 1	0.9290		2,895.710 6

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# 3.4 Grading - 2020

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	4.7900e- 003	0.1659	0.0346	4.4000e- 004	9.8700e- 003	5.4000e- 004	0.0104	2.7100e- 003	5.2000e- 004	3.2200e- 003		47.2801	47.2801	2.5300e- 003		47.3432
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0390	0.3780	1.1400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		113.4098	113.4098	2.7700e- 003		113.4792
Total	0.0599	0.2049	0.4126	1.5800e- 003	0.1331	1.3400e- 003	0.1344	0.0354	1.2600e- 003	0.0366		160.6899	160.6899	5.3000e- 003		160.8224

3.5 Paving - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/c	lay		
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.2144					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5709	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# 3.5 Paving - 2020

# Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	lb/day										
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0390	0.3780	1.1400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		113.4098	113.4098	2.7700e- 003		113.4792
Total	0.0552	0.0390	0.3780	1.1400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		113.4098	113.4098	2.7700e- 003		113.4792

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.2144					0.0000	0.0000		0.0000	0.0000		 - - - -	0.0000			0.0000
Total	1.5709	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.733 4	0.7140		2,225.584 1

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# 3.5 Paving - 2020

### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lb/day										
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0390	0.3780	1.1400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		113.4098	113.4098	2.7700e- 003		113.4792
Total	0.0552	0.0390	0.3780	1.1400e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		113.4098	113.4098	2.7700e- 003		113.4792

3.6 Building Construction - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/c	lay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5

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# Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

# 3.6 Building Construction - 2020

## Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		lb/day														
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2553	7.3752	1.9903	0.0172	0.4332	0.0364	0.4696	0.1247	0.0348	0.1595		1,819.694 4	1,819.694 4	0.0994		1,822.180 4
Worker	0.9154	0.6474	6.2745	0.0189	2.0455	0.0132	2.0587	0.5426	0.0122	0.5548		1,882.602 9	1,882.602 9	0.0461		1,883.754 0
Total	1.1708	8.0226	8.2649	0.0361	2.4787	0.0496	2.5283	0.6673	0.0470	0.7142		3,702.297 2	3,702.297 2	0.1455		3,705.934 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
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## Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

### 3.6 Building Construction - 2020

## Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2553	7.3752	1.9903	0.0172	0.4332	0.0364	0.4696	0.1247	0.0348	0.1595		1,819.694 4	1,819.694 4	0.0994		1,822.180 4
Worker	0.9154	0.6474	6.2745	0.0189	2.0455	0.0132	2.0587	0.5426	0.0122	0.5548		1,882.602 9	1,882.602 9	0.0461		1,883.754 0
Total	1.1708	8.0226	8.2649	0.0361	2.4787	0.0496	2.5283	0.6673	0.0470	0.7142		3,702.297 2	3,702.297 2	0.1455		3,705.934 5

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3

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## Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

## 3.6 Building Construction - 2021

#### Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2102	6.6707	1.7926	0.0170	0.4332	0.0148	0.4481	0.1247	0.0142	0.1389		1,802.413 7	1,802.413 7	0.0939		1,804.761 3
Worker	0.8482	0.5780	5.7223	0.0182	2.0455	0.0129	2.0584	0.5426	0.0119	0.5544		1,816.546 2	1,816.546 2	0.0411		1,817.573 8
Total	1.0584	7.2487	7.5149	0.0352	2.4787	0.0277	2.5064	0.6673	0.0260	0.6933		3,618.960 0	3,618.960 0	0.1350		3,622.335 2

### Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3

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## Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

### 3.6 Building Construction - 2021

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2102	6.6707	1.7926	0.0170	0.4332	0.0148	0.4481	0.1247	0.0142	0.1389		1,802.413 7	1,802.413 7	0.0939		1,804.761 3
Worker	0.8482	0.5780	5.7223	0.0182	2.0455	0.0129	2.0584	0.5426	0.0119	0.5544		1,816.546 2	1,816.546 2	0.0411		1,817.573 8
Total	1.0584	7.2487	7.5149	0.0352	2.4787	0.0277	2.5064	0.6673	0.0260	0.6933		3,618.960 0	3,618.960 0	0.1350		3,622.335 2

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Archit. Coating	11.7350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	11.9771	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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## Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

### 3.7 Architectural Coating - 2020

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1838	0.1300	1.2599	3.7900e- 003	0.4107	2.6600e- 003	0.4134	0.1090	2.4500e- 003	0.1114		378.0327	378.0327	9.2500e- 003		378.2639
Total	0.1838	0.1300	1.2599	3.7900e- 003	0.4107	2.6600e- 003	0.4134	0.1090	2.4500e- 003	0.1114		378.0327	378.0327	9.2500e- 003		378.2639

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Archit. Coating	11.7350	, , ,				0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	11.9771	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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## Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

### 3.7 Architectural Coating - 2020

#### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1838	0.1300	1.2599	3.7900e- 003	0.4107	2.6600e- 003	0.4134	0.1090	2.4500e- 003	0.1114		378.0327	378.0327	9.2500e- 003		378.2639
Total	0.1838	0.1300	1.2599	3.7900e- 003	0.4107	2.6600e- 003	0.4134	0.1090	2.4500e- 003	0.1114		378.0327	378.0327	9.2500e- 003		378.2639

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Archit. Coating	11.7350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	11.9539	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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## Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

## 3.7 Architectural Coating - 2021

## Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1703	0.1161	1.1491	3.6600e- 003	0.4107	2.5800e- 003	0.4133	0.1090	2.3800e- 003	0.1113		364.7683	364.7683	8.2500e- 003		364.9747
Total	0.1703	0.1161	1.1491	3.6600e- 003	0.4107	2.5800e- 003	0.4133	0.1090	2.3800e- 003	0.1113		364.7683	364.7683	8.2500e- 003		364.9747

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Archit. Coating	11.7350	1 1 1				0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	11.9539	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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#### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

### 3.7 Architectural Coating - 2021

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1703	0.1161	1.1491	3.6600e- 003	0.4107	2.5800e- 003	0.4133	0.1090	2.3800e- 003	0.1113		364.7683	364.7683	8.2500e- 003		364.9747
Total	0.1703	0.1161	1.1491	3.6600e- 003	0.4107	2.5800e- 003	0.4133	0.1090	2.3800e- 003	0.1113		364.7683	364.7683	8.2500e- 003		364.9747

## 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

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## Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	5.8475	28.2475	63.7361	0.2020	17.9512	0.1887	18.1399	4.8028	0.1766	4.9794		20,444.57 81	20,444.57 81	0.8366		20,465.49 33
Unmitigated	6.0872	30.0503	69.2021	0.2267	20.3529	0.2100	20.5629	5.4453	0.1967	5.6420		22,934.04 50	22,934.04 50	0.9064		22,956.70 40

## 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,142.40	1,142.40	1142.40	2,638,495	2,327,153
Day-Care Center	123.00	123.00	123.00	168,824	148,903
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	3,433.85	3,433.85	3433.85	6,772,650	5,973,478
Total	4,699.25	4,699.25	4,699.25	9,579,970	8,449,533

## 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	33	67	0
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	61	39	0

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### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Day-Care Center	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Enclosed Parking with Elevator	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Parking Lot	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768
Regional Shopping Center	0.576985	0.039376	0.193723	0.112069	0.016317	0.005358	0.017943	0.025814	0.002614	0.002274	0.005874	0.000887	0.000768

# 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
NaturalGas Mitigated	0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421		0.0421	0.0421		664.7292	664.7292	0.0127	0.0122	668.6794
NaturalGas Unmitigated	0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421		0.0421	0.0421		664.7292	664.7292	0.0127	0.0122	668.6794

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## Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

### 5.2 Energy by Land Use - NaturalGas

## <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	day		
Apartments Mid Rise	4970.64	0.0536	0.4581	0.1949	2.9200e- 003		0.0370	0.0370		0.0370	0.0370		584.7815	584.7815	0.0112	0.0107	588.2565
Day-Care Center	202.082	2.1800e- 003	0.0198	0.0166	1.2000e- 004		1.5100e- 003	1.5100e- 003		1.5100e- 003	1.5100e- 003		23.7744	23.7744	4.6000e- 004	4.4000e- 004	23.9157
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
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
Regional Shopping Center	477.474	5.1500e- 003	0.0468	0.0393	2.8000e- 004		3.5600e- 003	3.5600e- 003		3.5600e- 003	3.5600e- 003		56.1734	56.1734	1.0800e- 003	1.0300e- 003	56.5072
Total		0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421		0.0421	0.0421		664.7292	664.7292	0.0128	0.0122	668.6794

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## Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

### 5.2 Energy by Land Use - NaturalGas

#### Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	day		
Apartments Mid Rise	4.97064	0.0536	0.4581	0.1949	2.9200e- 003		0.0370	0.0370		0.0370	0.0370		584.7815	584.7815	0.0112	0.0107	588.2565
Day-Care Center	0.202082	2.1800e- 003	0.0198	0.0166	1.2000e- 004		1.5100e- 003	1.5100e- 003		1.5100e- 003	1.5100e- 003		23.7744	23.7744	4.6000e- 004	4.4000e- 004	23.9157
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
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
Regional Shopping Center	0.477474	5.1500e- 003	0.0468	0.0393	2.8000e- 004		3.5600e- 003	3.5600e- 003		3.5600e- 003	3.5600e- 003		56.1734	56.1734	1.0800e- 003	1.0300e- 003	56.5072
Total		0.0609	0.5247	0.2509	3.3200e- 003		0.0421	0.0421		0.0421	0.0421		664.7292	664.7292	0.0128	0.0122	668.6794

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

No Hearths Installed

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## Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Mitigated	7.7943	0.2005	17.3935	9.2000e- 004		0.0960	0.0960		0.0960	0.0960	0.0000	31.3020	31.3020	0.0304	0.0000	32.0614
Unmitigated	94.1590	2.1098	131.4982	0.2208		16.2948	16.2948		16.2948	16.2948	1,757.877 7	809.5373	2,567.415 0	2.4359	0.1243	2,665.340 5

## 6.2 Area by SubCategory

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

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/c	lay		
Architectural Coating	1.0513					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.2145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	86.3646	1.9093	114.1047	0.2198		16.1988	16.1988		16.1988	16.1988	1,757.877 7	778.2353	2,536.1130	2.4056	0.1243	2,633.279 1
Landscaping	0.5285	0.2005	17.3935	9.2000e- 004		0.0960	0.0960		0.0960	0.0960		31.3020	31.3020	0.0304		32.0614
Total	94.1590	2.1098	131.4982	0.2208		16.2949	16.2949		16.2949	16.2949	1,757.877 7	809.5373	2,567.415 0	2.4359	0.1243	2,665.340 5

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#### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

### 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/o	day							lb/d	day		
Architectural Coating	1.0513					0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000
Consumer Products	6.2145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.5285	0.2005	17.3935	9.2000e- 004		0.0960	0.0960		0.0960	0.0960		31.3020	31.3020	0.0304		32.0614
Total	7.7943	0.2005	17.3935	9.2000e- 004		0.0960	0.0960		0.0960	0.0960	0.0000	31.3020	31.3020	0.0304	0.0000	32.0614

# 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

### 9.0 Operational Offroad

Equipment Type Number Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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# **10.0 Stationary Equipment**

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### Delta Fair Village - Unmitigated - Bay Area AQMD Air District, Winter

#### 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						

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## Delta Fair Village - Unmitigated

## Bay Area AQMD Air District, Mitigation Report

## **Construction Mitigation Summary**

Phase	ROG	NOx	со	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Percent Reduction											
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation** 

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	4	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	10	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

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-													
Equipment Type	BOC	NOv	<u> </u>	502	Exhaust BM10	Exhaust DM2 E	Ria CO2	NPio CO2	Total CO2		N2O	6026	
Equipment Type	RUG	NOX	00	502	Exhaust PMT0	Exhaust Pivi2.5	BI0- CO2	NBI0- CO2	Total CO2	CH4	N2O	COZe	
		U	nmitigated tons/yr				Unmitigated mt/yr						
Air Compressors	3.74200E-002	2.60630E-001	2.98140E-001	4.90000E-004	1.65600E-002	1.65600E-002	0.00000E+000	4.17457E+001	4.17457E+001	3.02000E-003	0.00000E+000	4.18213E+001	
Concrete/Industria I Saws	2.30000E-003	1.81400E-002	2.02800E-002	3.00000E-005	1.09000E-003	1.09000E-003	0.00000E+000	2.95711E+000	2.95711E+000	1.90000E-004	0.00000E+000	2.96179E+000	
Cranes	6.17300E-002	7.29340E-001	2.92370E-001	8.30000E-004	2.98300E-002	2.74500E-002	0.00000E+000	7.25185E+001	7.25185E+001	2.34500E-002	0.00000E+000	7.31048E+001	
Excavators	6.86000E-003	6.75500E-002	9.15000E-002	1.40000E-004	3.27000E-003	3.01000E-003	0.00000E+000	1.27036E+001	1.27036E+001	4.11000E-003	0.00000E+000	1.28063E+001	
Forklifts	6.67400E-002	6.05000E-001	5.75620E-001	7.50000E-004	4.39700E-002	4.04500E-002	0.00000E+000	6.58699E+001	6.58699E+001	2.13000E-002	0.00000E+000	6.64025E+001	
Generator Sets	6.15600E-002	5.41100E-001	6.04010E-001	1.08000E-003	2.95600E-002	2.95600E-002	0.00000E+000	9.24114E+001	9.24114E+001	4.94000E-003	0.00000E+000	9.25349E+001	
Graders	5.47000E-003	7.27400E-002	2.08700E-002	8.00000E-005	2.33000E-003	2.14000E-003	0.00000E+000	6.70524E+000	6.70524E+000	2.17000E-003	0.00000E+000	6.75946E+000	
Pavers	2.89000E-003	3.09100E-002	3.18800E-002	5.00000E-005	1.50000E-003	1.38000E-003	0.00000E+000	4.54317E+000	4.54317E+000	1.47000E-003	0.00000E+000	4.57991E+000	
Paving Equipment	2.28000E-003	2.35500E-002	2.78800E-002	4.00000E-005	1.18000E-003	1.08000E-003	0.00000E+000	3.93701E+000	3.93701E+000	1.27000E-003	0.00000E+000	3.96884E+000	
Rollers	2.29000E-003	2.28900E-002	2.08300E-002	3.00000E-005	1.46000E-003	1.34000E-003	0.00000E+000	2.53534E+000	2.53534E+000	8.20000E-004	0.00000E+000	2.55584E+000	
Rubber Tired Dozers	6.31500E-002	6.62940E-001	2.41700E-001	5.00000E-004	3.24700E-002	2.98700E-002	0.00000E+000	4.39073E+001	4.39073E+001	1.42000E-002	0.00000E+000	4.42623E+001	
Tractors/Loaders/ Backhoes	1.02040E-001	1.02854E+000	1.16197E+000	1.59000E-003	6.31600E-002	5.81000E-002	0.00000E+000	1.39643E+002	1.39643E+002	4.51600E-002	0.00000E+000	1.40772E+002	
Welders	5.24400E-002	2.51390E-001	2.84640E-001	4.20000E-004	1.30800E-002	1.30800E-002	0.00000E+000	3.07741E+001	3.07741E+001	4.26000E-003	0.00000E+000	3.08805E+001	

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Equipment Type	ROG	NOx	со	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
		M	itigated tons/yr						Mitigate	ed mt/yr		
Air Compressors	3.74200E-002	2.60630E-001	2.98140E-001	4.90000E-004	1.65600E-002	1.65600E-002	0.00000E+000	4.17457E+001	4.17457E+001	3.02000E-003	0.00000E+000	4.18212E+001
Concrete/Industrial Saws	2.30000E-003	1.81400E-002	2.02800E-002	3.00000E-005	1.09000E-003	1.09000E-003	0.00000E+000	2.95711E+000	2.95711E+000	1.90000E-004	0.00000E+000	2.96179E+000
Cranes	6.17300E-002	7.29340E-001	2.92370E-001	8.30000E-004	2.98300E-002	2.74500E-002	0.00000E+000	7.25184E+001	7.25184E+001	2.34500E-002	0.00000E+000	7.31047E+001
Excavators	6.86000E-003	6.75500E-002	9.15000E-002	1.40000E-004	3.27000E-003	3.01000E-003	0.00000E+000	1.27036E+001	1.27036E+001	4.11000E-003	0.00000E+000	1.28063E+001
Forklifts	6.67400E-002	6.05000E-001	5.75620E-001	7.50000E-004	4.39700E-002	4.04500E-002	0.00000E+000	6.58698E+001	6.58698E+001	2.13000E-002	0.00000E+000	6.64024E+001
Generator Sets	6.15600E-002	5.41100E-001	6.04010E-001	1.08000E-003	2.95600E-002	2.95600E-002	0.00000E+000	9.24113E+001	9.24113E+001	4.94000E-003	0.00000E+000	9.25348E+001
Graders	5.47000E-003	7.27400E-002	2.08700E-002	8.00000E-005	2.33000E-003	2.14000E-003	0.00000E+000	6.70523E+000	6.70523E+000	2.17000E-003	0.00000E+000	6.75945E+000
Pavers	2.89000E-003	3.09100E-002	3.18800E-002	5.00000E-005	1.50000E-003	1.38000E-003	0.00000E+000	4.54317E+000	4.54317E+000	1.47000E-003	0.00000E+000	4.57990E+000
Paving Equipment	2.28000E-003	2.35500E-002	2.78800E-002	4.00000E-005	1.18000E-003	1.08000E-003	0.00000E+000	3.93700E+000	3.93700E+000	1.27000E-003	0.00000E+000	3.96884E+000
Rollers	2.29000E-003	2.28900E-002	2.08300E-002	3.00000E-005	1.46000E-003	1.34000E-003	0.00000E+000	2.53533E+000	2.53533E+000	8.20000E-004	0.00000E+000	2.55583E+000
Rubber Tired Dozers	6.31500E-002	6.62940E-001	2.41700E-001	5.00000E-004	3.24700E-002	2.98700E-002	0.00000E+000	4.39073E+001	4.39073E+001	1.42000E-002	0.00000E+000	4.42623E+001
Tractors/Loaders/Ba ckhoes	1.02040E-001	1.02854E+000	1.16197E+000	1.59000E-003	6.31600E-002	5.81000E-002	0.00000E+000	1.39643E+002	1.39643E+002	4.51600E-002	0.00000E+000	1.40772E+002
Welders	5.24400E-002	2.51390E-001	2.84640E-001	4.20000E-004	1.30800E-002	1.30800E-002	0.00000E+000	3.07740E+001	3.07740E+001	4.26000E-003	0.00000E+000	3.08804E+001

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Equipment Type	ROG	NOx	со	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
					Pe	rcent Reduction						
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19773E-006	1.19773E-006	0.00000E+000	0.00000E+000	1.19556E-006
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.24106E-006	1.24106E-006	0.00000E+000	0.00000E+000	1.09432E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	7.87179E-007	7.87179E-007	0.00000E+000	0.00000E+000	1.56173E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21452E-006	1.21452E-006	0.00000E+000	0.00000E+000	1.20477E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19033E-006	1.19033E-006	0.00000E+000	0.00000E+000	1.18874E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.49137E-006	1.49137E-006	0.00000E+000	0.00000E+000	1.47941E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.18345E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.54000E-006	2.54000E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.94424E-006	3.94424E-006	0.00000E+000	0.00000E+000	3.91261E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13876E-006	1.13876E-006	0.00000E+000	0.00000E+000	1.12963E-006
Tractors/Loaders/Ba ckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14578E-006	1.14578E-006	0.00000E+000	0.00000E+000	1.20763E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.74847E-007	9.74847E-007	0.00000E+000	0.00000E+000	9.71488E-007

# Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)

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No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00				
No	Clean Paved Road	% PM Reduction	0.00						

		Unm	itigated	ted Mitigated			Percent Reduction		
Phase	Source	PM10	PM2.5	PM10	PM10 PM2.5		PM2.5		
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00		
Architectural Coating	Roads	0.06	0.02	0.06	0.02	0.00	0.00		
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00		
Building Construction	Roads	0.39	0.11	0.39	0.11	0.00	0.00		
Demolition	Fugitive Dust	0.04	0.01	0.04	0.01	0.00	0.00		
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00		
Grading	Fugitive Dust	0.07	0.04	0.07	0.04	0.00	0.00		
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00		
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00		
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00		
Site Preparation	Fugitive Dust	0.22	0.12	0.22	0.12	0.00	0.00		
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00		

**Operational Percent Reduction Summary** 

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Category	ROG	NOx	со	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Percent Reduction											
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	3.88	5.86	8.28	10.81	10.21	10.23	0.00	10.81	10.81	7.92	0.00	10.81
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# **Operational Mobile Mitigation**

Project Setting: Suburban Center

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00	0.00	0.00	
No	Land Use	Increase Diversity	0.19	0.46		
No	Land Use	Improve Walkability Design	0.00	0.00		
No	Land Use	Improve Destination Accessibility	0.00	0.00		
Yes	Land Use	Increase Transit Accessibility	0.24	0.01		
No	Land Use	Integrate Below Market Rate Housing	0.00	0.00		
	Land Use	Land Use SubTotal	0.10			

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Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off- Site		
Neighborhood Enhancements	Provide Traffic Calming Measures	0.25	50.00	25.00	
Neighborhood Enhancements	Implement NEV Network	0.00			
Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02			
Parking Policy Pricing	Limit Parking Supply	0.00	0.00		
Parking Policy Pricing	Unbundle Parking Costs	0.00	0.00		
Parking Policy Pricing	On-street Market Pricing	0.00	0.00		
Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
Transit Improvements	Provide BRT System	0.00	0.00		
Transit Improvements	Expand Transit Network	0.00	0.00		
Transit Improvements	Increase Transit Frequency	0.00		0.00	
Transit Improvements	Transit Improvements Subtotal	0.00			
	Land Use and Site Enhancement Subtotal	0.12			
Commute	Implement Trip Reduction Program		0.00		
Commute	Transit Subsidy		0.00		
Commute	Implement Employee Parking "Cash Out"	4.50	0.00		
Commute	Workplace Parking Charge		0.00		
Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
Commute	Market Commute Trip Reduction Option	0.00	0.00		
Commute	Employee Vanpool/Shuttle	0.00	0.00	2.00	
Commute	Provide Ride Sharing Program	10.00	0.00		
Commute	Commute Subtotal	0.00			
	/ersion: CalEEMod.2016.3.2 Neighborhood Enhancements Neighborhood Enhancements Neighborhood Enhancements Neighborhood Enhancements Parking Policy Pricing Parking Policy Pricing Parking Policy Pricing Transit Improvements Transit Improvements Transit Improvements Transit Improvements Commute Commute Commute Commute Commute Commute Commute Commute Commute Commute Commute	/ersion: CalEEMod.2016.3.2   Page 8 of 11     Neighborhood Enhancements   Improve Pedestrian Network     Neighborhood Enhancements   Provide Traffic Calming Measures     Neighborhood Enhancements   Implement NEV Network     Neighborhood Enhancements   Neighborhood Enhancements     Neighborhood Enhancements   Neighborhood Enhancements     Neighborhood Enhancements   Neighborhood Enhancements Subtotal     Parking Policy Pricing   Limit Parking Supply     Parking Policy Pricing   On-street Market Pricing     Parking Policy Pricing   On-street Market Pricing     Parking Policy Pricing   Parking Policy Pricing Subtotal     Transit Improvements   Provide BRT System     Transit Improvements   Increase Transit Frequency     Transit Improvements   Increase Transit Frequency     Transit Improvements   Transit Improvements Subtotal     Land Use and Site Enhancement Subtotal   Land Use and Site Enhancement Subtotal     Commute   Implement Trip Reduction Program     Commute   Implement Employee Parking Charge     Commute   Market Commute Trip Reduction Option     Commute   Market Commute Trip Reduction Option     Commute   Market Commute	Version: CalEEMod.2016.3.2   Page 8 of 11     Neighborhood Enhancements   Improve Pedestrian Network   2.00     Neighborhood Enhancements   Implement NEV Network   0.00     Neighborhood Enhancements   Implement NEV Network   0.00     Neighborhood Enhancements   Implement NEV Network   0.00     Neighborhood Enhancements   Neighborhood Enhancements Subtotal   0.02     Parking Policy Pricing   Unbundle Parking Costs   0.00     Parking Policy Pricing   On-street Market Pricing   0.00     Parking Policy Pricing   Parking Policy Pricing   0.00     Parking Policy Pricing   Parking Policy Pricing Subtotal   0.00     Transit Improvements   Provide BRT System   0.00     Transit Improvements   Increase Transit Network   0.00     Transit Improvements   Increase Transit Frequency   0.00     Transit Improvements   Transit Improvements Subtotal   0.12     Commute   Implement Trip Reduction Program   0.12     Commute   Implement Employee Parking Cash Out"   4.50     Commute   Encourage Telecommuting and Alternative   0.00     Commute   Market Commute Trip Reducti	/ersion: CalEEMod.2016.3.2   Page 8 of 11   Date: 7/     Neighborhood Enhancements   Improve Pedestrian Network   2.00; Project Site and Connecting Off-Site     Neighborhood Enhancements   Provide Traffic Calming Measures   0.25   50.00     Neighborhood Enhancements   Implement NEV Network   0.00   0.00     Neighborhood Enhancements   Implement NEV Network   0.00   0.00     Neighborhood Enhancements   Neighborhood Enhancements   Neighborhood Enhancements   0.00   0.00     Parking Policy Pricing   Limit Parking Supply   0.00   0.00   0.00     Parking Policy Pricing   Unbundle Parking Costs   0.00   0.00   0.00     Parking Policy Pricing   Provide BRT System   0.00   0.00   0.00     Transit Improvements   Expand Transit Network   0.00   0.00   0.00     Transit Improvements   Increase Transit Network   0.00   0.00   0.00     Commute   Implement Trip Reduction Program   0.00   0.00   0.00   0.00     Commute   Implement Employee Parking 'Cash Out'   4.50   0.00   0.00     Commute   Market Commute Trip Re	Jersion: CalEEMod.2016.3.2 Page 8 of 11 Date: 7/15/2020 3:31 PM   Neighborhood Enhancements Improve Pedestrian Network 2:00[Project Site and Connecting Off- Site   Neighborhood Enhancements Provide Traffic Calming Measures 0.25 50.00 25.00   Neighborhood Enhancements Implement NEV Network 0.00 25.00   Neighborhood Enhancements Implement NEV Network 0.00 0.00   Neighborhood Enhancements Neighborhood Enhancements 0.02 0.00   Parking Policy Pricing Limit Parking Supply 0.00 0.00   Parking Policy Pricing On-street Market Pricing 0.00 0.00   Parking Policy Pricing On-street Market Pricing 0.00 0.00   Parking Policy Pricing On-street Market Pricing 0.00 0.00   Parking Policy Pricing Provide BRT System 0.00 0.00   Transit Improvements Increase Transit Frequency 0.00 0.00   Transit Improvements Increase Transit Subtotal 0.12 0.00   Commute Implement Trip Reduction Program 0.00 0.00   Commute Implement Employee Parking Cash Out* 4.50 0.00   Commute Implement Employee Parking Cash Out* 4.50 0.00 <td< td=""></td<>

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ſ	No	School Trip	Implement School Bus Program	0.00	0.00		]
			Total VMT Reduction	0.12		rr 1 1 1 1	

# Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
Yes	No Hearth	r
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

# Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

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Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator	r	15.00

## Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

# **Solid Waste Mitigation**

Mitigation Measures Input Value

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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

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