

MEMORANDUM

DATE: August 11, 2016

To:
PETERSON VOLLMANN, PLANNER IV
CITY OF OAKLAND, BUREAU OF PLANNING

FROM:
HANNAH YOUNG, AICP
JULIAN BOBILEV

Subject: 24th and Harrison Streets Project – Response to Comment Letter from Adams Broadwell Joseph and Cardozo

The California Environmental Quality Act (CEQA) Analysis for the 24th and Harrison Streets Project (Project) (PLN 16-080) was published on July 15, 2016. Adams Broadwell Joseph & Cardozo submitted comments on the above Project, dated August 3, 2016, as well as technical comments prepared by Matt Hagemann and Jessie Jaeger of SWAPE, which were attached to that letter as Exhibit A (hereafter, collectively “Adams Broadwell letter”). This memorandum provides responses to the letter, which are organized into the following topics corresponding to the topics in the comment letter:

- A. Consistency with CEQA Addendum and Exemption Requirements
- B. On-Site Hazards
- C. Health Risk Assessment (HRA)
- D. Greenhouse Gas (GHG) Emissions Analysis

The Adams Broadwell comments noted under the introduction to Section II, The City May Not Rely on Previous Environmental Analysis for Project Approval in their letter, are addressed under Section A below.

Section A. Consistency with CEQA Addendum and Exemption Requirement

Comment: *The Adams Broadwell letter argues the City inappropriately relied upon three provisions in CEQA in its CEQA Analysis without a new or subsequent EIR, including the Community Plan Exemption, Qualified Infill Exemption and an Addendum to the Broadway Valdez District Specific Plan Environmental Impact Report (BVDSP EIR). They argue that the City’s reliance on these provisions was inappropriate because the Project would have peculiar and more severe significant impacts than previously identified in the BVDSP EIR. They also claim that the Addendum here is improper because it includes a new substantive analysis for a large project not specifically analyzed in the BVDSP EIR.*

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Response: The BVDSP EIR analyzed the environmental impacts of the adoption and implementation of the BVDSP at full build out and provided project-level review for reasonably foreseeable development, such as the Project. The City Council certified the BVDSP EIR in accordance with CEQA on June 7, 2014 and the analysis now is presumptively valid under California law. Since that certification, the City has created and relied upon a framework for analyzing projects within the BVDSP area called “CEQA Analysis,” which separately and independently provides a basis for CEQA compliance. This framework relies on the applicable streamlining and tiering sections of CEQA: Community Plan Exemption, Qualified Infill Exemption and/or Addendum, as detailed in the CEQA section of the August 3, 2016 Planning Commission Report.

As outlined in exhausting detail, the assumptions and conclusions in the Project’s CEQA Analysis are supported by substantial evidence in accordance with CEQA, while none of the assertions presented by Adams Broadwell provide credible, persuasive, or substantial evidence that the Project would result in a new, peculiar, significant environmental impact or a substantial increase in the severity of a significant environmental impact than determined in the BVDSP EIR. In fact, they make numerous misinterpretations of applicable CEQA thresholds for determining significance and misrepresent many material facts about the Project to justify their conclusions.

The BVDSP EIR analyzed development on 95.5 acres in an area of the City known as “Auto Row,” an area known to have contaminants associated with automotive uses. The identification of contaminants related to automotive uses on development sites is therefore not peculiar as their existence is not “different from the usual or normal” (Merriam Webster Dictionary definition of “peculiar”). Instead they are normal, as further evidenced by Adams Broadwell raising the same issues on multiple development projects in the City. If they were “peculiar to” a particular site, they would not be repeatedly raised in comment letters by Adams Broadwell.

Significant impacts also are not “peculiar” to a project or property where uniform policies or standards apply that would mitigate the impact. Site specific analysis is not required where, like here, Standard Conditions of Approval (SCAs) apply to mitigate the impact identified and where, as indicated under Appendix M to the CEQA Guidelines, recommendations established by a qualified consultant are implemented. The Project has prepared a Phase I and Phase II Environmental Site Assessment (ESA), and will be required to comply with the recommendations in those reports as well as with SCA-HAZ-1 and SCA-HAZ-2 and condition of approval number 3, which requires compliance with all “federal, state, regional and local law/codes, requirement, regulations and guidelines.” Impacts identified by Adams Broadwell are therefore not peculiar and the Infill and Qualified Infill Exemption are appropriate.

Similarly, construction-related toxic air contaminants (TACs) are likewise not peculiar because the proposed project would use standard construction equipment such as loaders, backhoes, cranes, and haul trucks, similar to other projects under construction in the BVDSP. Moreover, the Project site’s proximity to sensitive receptors—the nearest sensitive receptor would be a resident located approximately 60 feet south of the Project site across 24th Street (see Figure 1 of Attachment G of the CEQA Analysis)—is typical of other project sites in the BVDSP area and other urban areas.

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In addition, contrary to Adams Broadwell's claim, the substantive nature of the CEQA Analysis prepared is not relevant to a determination of whether an Addendum is appropriate. An Addendum to previously certified EIRs is appropriate as long as the project changes, changed circumstances or new information does not require a subsequent EIR. CEQA makes clear that the only relevant test in whether to prepare an Addendum is whether the provision of CEQA Section 15162 can be satisfied. As the CEQA Analysis correctly concludes, none of these provisions requiring preparation of a supplemental or subsequent EIR apply to the Project. Therefore, an Addendum is appropriate.

The comment regarding the substantive nature and length of the Addendum is irrelevant.¹ Moreover, the discussion merely documents the Project's consistency with the BVDSP and its EIR and satisfies CEQA's primary function as a disclosure document. The detail and scope of the analysis is a result of the various air quality, GHG and transportation model runs and should not be criticized for being overly informative in the context of an Addendum.

Therefore, the conclusions in the CEQA Analysis are valid and preparation of an EIR is not warranted. The Planning staff can appropriately rely on the CEQA Analysis to support its recommended approval of the Project.

Section B. On-Site Hazards

The Adams Broadwell letter states three issues pertaining to hazards: 1) Project site contamination has not been adequately disclosed and mitigated; 2) the City may not rely solely on compliance with regulations or laws as reducing impacts without a full analysis of impacts or enforceable mitigation; and 3) dewatering impacts have not been adequately addressed.

Comment 1: *Regarding the first item, the letter states that the CEQA Analysis fails to adequately describe the Project site's soil contamination which it claims is significant, as well as the construction health risks to the surrounding community, which it claims are new or more severe than previously analyzed. Because the CEQA Analysis fails to adequately disclose the Project's significant levels of contamination, it also fails to analyze the potentially significant health effects of the Project. The letter asserts that the CEQA Analysis contains a mischaracterization of the sample results and of the Phase II conclusions and incorrectly portrays contamination at the Project site as insignificant.*

Response 1: The CEQA Analysis summarizes the findings of the Phase I and II ESAs prepared for the Project parcels. It describes the existing and previous uses of the site, which have included automotive service operations, a gasoline station, and an automobile dealership. Prior uses are described as handling common hazardous materials such as petroleum hydrocarbons, including gasoline, oil, waste oil, and degreasers and solvents. The CEQA Analysis summarizes the contaminant levels identified in the Phase II ESAs. The Phase II ESAs were completed for the site prior to the San Francisco Regional Water Quality

¹ See *Fund for Env't'l Defense v County of Orange* (1988) 204 CA3d 1538 where a lengthy and detailed addendum was prepared with comprehensive discussions and analysis.

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Control Board's (SFRWQCB) update to the Environmental Screening Levels (ESLs) in 2016, but the CEQA Analysis, which occurred after the update cites the current ESLs in reference to contamination levels.

The comment letter mischaracterizes the results of the Phase II ESAs and also references now outdated ESLs. It should be noted that regardless of what ESLs are used, ESLs are guides only and are not action levels nor are they definitions of significant contamination. ESLs are based on modeling with the use of conservative assumptions. In addition, the presence of a chemical at concentrations in excess of an ESL does not necessarily indicate an adverse effect on human health or the environment, rather that additional evaluation is warranted.²

Findings for the Phase II ESA completed for the 277 27th Street parcel with respect to the TPH-d (diesel) exceedance are misrepresented in the comment letter, which does not acknowledge that the Phase II ESA interprets the so-called "diesel" to be biogenic interference from naturally occurring organic materials.

Findings for the Phase II ESA completed for the 304 – 322 24th Street parcels indicate that there were no ESL exceedances in soil for petroleum hydrocarbons and only one exceedance for a metal, and no gasoline or diesel results above the 2016 ESLs. Note that the 2016 ESLs do not contain a value for motor oil, but state that it is insoluble in water, so a dissolved motor oil reading is likely to be a degradation product of diesel fuel, indicating biodegradation.

The CEQA Analysis summarizes the findings of the Phase I and II ESAs and states that no significant contamination was detected and the site will be managed in accordance with the recommendations of the Phase II ESA, including the preparation of a Site Management Plan, and the applicable SCAs that include SCA-HAZ-1 and SCA-HAZ-2, referred to in the CEQA Analysis.

The comment letter mischaracterizes SCA HAZ-1 and SCA-HAZ-2 by stating that they merely include general provisions to address "unexpected" contamination that is encountered after earth-moving activities have commenced. SCA HAZ-1 (*Hazardous Materials Related to Construction*) requires the use of best management practices and includes provisions in the event that soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities and SCA-HAZ-2 (*Site Contamination*) requires the implementation of Phase I and II ESA recommendations and a Health and Safety Plan to protect workers during construction. SCA-HAZ-2 would require implementation of specific sampling and handling and transport procedures for reuse or disposal in accordance with applicable local, state, and federal requirements. The exact method employed or plan to be implemented will be identified in a Site Management Plan, which will be prepared by the Project sponsor, consistent with the Phase II ESA recommendations and will require compliance with identified federal, state or local regulations or requirements and specific performance criteria and the Project sponsor has committed to developing measures that comply with the requirements and criteria

² San Francisco Bay Regional Water Quality Control Board, 2016. User's Guide: Derivation and Application of Environmental Screening Levels (ESLs), Interim Final 2016. February 22.

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identified. The Health and Safety Plan would adequately protect workers consistent with applicable worker health and safety standards.

In addition, SCA-HAZ-2 requires the implementation of best management practices for the handling of contaminated soil and groundwater discovered during construction activities to ensure their proper storage, treatment, transport, and disposal. Specifically, SCA-HAZ-2 would require that all suspect soil be stockpiled on-site in a secure and safe manner and adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Likewise, groundwater encountered will be staged and sampled prior to discharge to the sewer under permit, or offsite disposal at an appropriate location.

Comment 2: *Adams Broadwell asserts that the CEQA Analysis has erroneously relied on compliance with identified federal, state or local regulations or requirements in its analysis of site contamination and that further analysis of these issues is required.*

Response 2: Adams Broadwell cites three cases, each standing for a different proposition in support of its assertion. *Keep our Mountains Quiet v. County of Santa Clara* is cited for the proposition that a project may comply with a regulation but still have a significant impact. *Communities for a Better Env't v. California Res. Agency* is cited for the proposition that the City has not considered substantial evidence and analyzed and mitigated potentially significant impacts. *Leonoff v. County of Monterey Bd of Supervisors* is cited in support of its assertion that the CEQA Analysis only provides a bare assertion that the Project will comply with the applicable regulations (but see response below). Adams Broadwell, however, fails to cite the long-standing case law precedent in support of reliance on regulatory standards as mitigation. See the following cases: *Perley v Board of Supervisors* (1982) 137 CA3d 424, upholding reliance on compliance with environmental agency requirements as mitigation; *Sundstrom v County of Mendocino* (1988) 202 CA3d 296, finding that the County's reliance on compliance with air and water quality standards to mitigate air and water quality impacts was appropriate; *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 CA4th 214, finding the Department of Fish and Wildlife's reliance on compliance with federal regulations for a hatchery genetic management plan was appropriate; and even, *Leonoff v Monterey County Bd. of Supervisors* (1990) 222 CA3d 1337, finding that the County's reliance on compliance with environmental laws on registering hazardous materials and monitoring of underground tanks for leaks was appropriate.

Moreover, in *Oakland Heritage Alliance v. City of Oakland* (2011) 195 CA4th 884, 906, the Court of Appeals held that "a condition requiring compliance with regulations is a common and reasonable mitigation measure and may be proper where it is reasonable to expect compliance." As the City requires compliance with all applicable state, federal and regulatory requirements prior to commencing construction, as set forth under SCA-HAZ-1 and SCA-HAZ-2 and condition of approval # 3, it is reasonable to expect compliance with the regulatory standards and requirements established for contaminants.

CEQA and established case law also makes clear that the CEQA Analysis can wait to specify how the measures/conditions identified will be achieved provided a determination of impact has been made prior to approval and where known measures/conditions exist that are feasible for the impact identified. Here,

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the City has determined the impact of the Project will be less than significant. The City's determination was based on the detailed analysis regarding Hazards and Hazardous Materials prepared as part of the BVDSP EIR and the CEQA Analysis and technical studies prepared. The BVDSP EIR analysis included an overview of the regulatory scheme, evaluated potentially significant impacts associated with development in the BVDSP, analyzed applicable state, federal and local regulatory schemes that would apply, summarized a listing of known contaminated sites in the area and determined that compliance with the SCAs and/or Mitigation Measures would reduce any hazardous impact, and any cumulative hazardous impact, to a less than significant level. The regulations or requirements identified include specific performance criteria that must be met before starting construction and the Project must comply with the mitigation measures and regulatory schemes that were identified to reduce the impacts as identified in the CEQA Analysis and the accompanying technical studies. Additionally, the Project Sponsor has committed to devising measures to satisfy those requirements, but there is no requirement under CEQA to devise those measures now, where, as indicated in the BVDSP EIR and the CEQA Analysis a reasonable basis exists to conclude the impact will be adequately mitigated.³

Therefore, the conclusions in the CEQA Analysis are valid and preparation of an EIR is not warranted. The Planning staff can appropriately rely on the CEQA Analysis to support its recommended approval of the Project.

Comment 3: *The Adams Broadwell letter asserts that dewatering impacts have not been adequately addressed in the CEQA Analysis because it does not consider specific handling and disposal requirements when contaminated groundwater is encountered during dewatering, and SCA-HAZ-2 only provides general provisions for storage and disposal of water generated during dewatering. The Adams Broadwell letter asserts that an EIR must be prepared to identify the SFRWQCB's dewatering requirements.*

Response 3: The BVDSP EIR states that "construction in the Plan Area could potentially intercept and disturb impacted soil and/or groundwater." However, "construction and operation of the project would be subject to the stringent state and local policies regarding the handling of contaminated soils and groundwater" (Impact HAZ-3). The EIR lists the SFRWQCB as one of the local agencies with oversight over contaminated groundwater. Because of the established regulatory framework and specific performance standards established under it, the BVDSP EIR determined that the impact pertaining to exposure of hazardous materials in soil and groundwater would be less-than-significant. The commenter fails to demonstrate that the Project would have a new significant impact related to dewatering; in fact, the dewatering impact described by the commenter is identical to the impact disclosed in the EIR. The commenter even correctly states that contaminated groundwater would need to be handled and disposed in accordance with SFRWQCB requirements, as described in the BVDSP EIR, and also stated in the CEQA Analysis ("...any groundwater dewatering would be limited in duration and would be subject to permits from [East Bay Municipal Utility District] EBMUD or the RWQCB", pg. 61). Moreover, as required under SCA-HAZ-2, groundwater pumped from the subsurface shall be contained on-site in a secure and

³ See also *Sacramento Old City Ass'n v City Council* (1991) 229 CA3d 1011; *Defend the Bay v City of Irvine* (2004) 119 CA 4th 1261.

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safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. No rationale or substantial evidence is presented by the commenter as to why an EIR needs to be prepared to needlessly describe existing regulatory requirements which are mentioned in both the BVDSP EIR and the CEQA Analysis, and are readily available for public viewing online.

Section C. Health Risk Assessment (HRA)

The Adams Broadwell letter asserts three main issues related to the Health Risk Assessment: 1) that the air quality screening analysis prepared for the Project incorrectly failed to consider the health risk posed to nearby sensitive receptors from exposure to diesel particulate matter (DPM); 2) the CEQA Analysis is inconsistent with guidance set forth by the Office of Environmental Health Hazard Assessment (OEHHA); and 3) the analysis fails to incorporate applicable mitigation measures.

Comment 1: *The Adams Broadwell letter asserts that the Air Quality Screening Analysis prepared for the Project incorrectly failed to consider the health risk posed to nearby sensitive receptors from exposure to DPM.*

Response 1: The commenter incorrectly asserts that the BVDSP EIR deferred the assessment of health risks from construction activities to the project level stage. In fact, the BVDSP EIR concluded that construction health risks from DPM were conservatively determined to be significant and unavoidable (Impact AIR-4) and identified SCA-AIR-1 (former SCA A) on page 4.2-27 to minimize construction health risks and reduce DPM. The subsections of SCA-AIR-1 that would reduce DPM emissions from the proposed Project include: subsections (g) and (h) of SCA-AIR-1, which limit the idling time for diesel engines; subsection (i), which ensures that construction equipment is maintained in proper condition; subsection (j), which specifies the use of electricity, propane, and/or natural gas (if available) for portable equipment; subsection (u), which requires that off-road equipment meet California Air Resources Board's (CARB) fleet emissions and performance requirements; subsection (w), which requires that equipment and diesel trucks be equipped with Best Available Control Technology; and subsection (x), which requires that off-road heavy diesel engines meet the California Air Resources Board's most recent certification standard. The Project sponsor would ensure that construction equipment meet Tier 4 emissions standards in order to comply with subsections (w) and (x); this equipment is considered the best available technology. These are the most current, feasible control measures to reduce construction-related DPM emissions, but to be conservative the BVDSP EIR still conservatively found the impact to be significant and unavoidable.

Therefore, the construction health risk has been adequately addressed by the planning-level review and the Project's conditions of approval. Furthermore, there is nothing in the BVDSP EIR indicating that a stand-alone health risk assessment (HRA) for construction-related impacts is required on a project-by-project basis.⁴ The Project site's proximity to sensitive receptors (See Figure 1 of Appendix G of the CEQA

⁴ As discussed in Attachment B of the CEQA Analysis prepared for the Project, the Project is consistent with the development density established by zoning, community plan, specific plan, or general plan policies. Contrary to commenter's assertion, construction associated with the Project (and other projects in the BVDSP area) would not

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Analysis) is typical of other project sites in the BVDSP area and other urban areas and there is nothing unique or peculiar about the Project's proximity to sensitive receptors. Consequently, the analysis and conclusions of the BVDSP EIR are still valid for this Project.

Comment 2: *The Adams Broadwell letter asserts that the guidance set forth by OEHHA, which recommends that all short-term projects lasting longer than two months be evaluated for cancer risks to nearby sensitive receptors, is applicable to the project.*

Response 2: The commenter incorrectly suggests that OEHHA's recommended methodology is a formal part of the BAAQMD's applicable guidance. In fact, the OEHHA has no binding authority on the Project that would require a stand-alone construction HRA for the Project.

OEHHA's recommended methodology does not represent substantial new information not known at the time the BVDSP EIR (or the other planning-level EIRs) or a substantial changes in circumstances under which the Project will be undertaken. Further, while BAAQMD may be in the process of adopting this methodology with respect to health risk assessments for proposed revisions to Regulation 2 Permits, Rule 1 General Requirements and Rule 5 New Source Review of Toxic Air Contaminants, BAAQMD has **not** formally adopted the methodology to sources outside of its permit authority, such as mobile construction equipment. Regardless of the use of OEHHA's recommended methodology, a stand-alone construction HRA for the Project is not required for the abovementioned reasons.

Comment 3: *The Adams Broadwell letter asserts that the CEQA analysis fails to incorporate Mitigation Measure AIR-4: Risk Reduction Plan to address the Project's use of an emergency generator.*

Response 3: Contrary to the commenter's assertion, the CEQA Analysis concludes that Mitigation Measure AIR-4 is applicable to the Project. Mitigation Measure AIR-4 provides several potential strategies to reduce localized cancer risks from the operation of backup generators, including the following: "Demonstration using screening analysis or a health risk assessment that project sources, when combined with local cancer risks from cumulative sources with 1,000 feet would be less than 100 in one million" (BVDSP EIR, pg. 4.2-28). This corresponds to the threshold of significance under Impact AIR-4 in the BVDSP EIR.

A screening analysis, incorporated into the CEQA Analysis as Attachment G, was performed per Mitigation Measure AIR-4 and found that "the health risks to existing sensitive receptors from the project's stationary source, when combined with health risks from existing and reasonably foreseeable future sources of TACs, would be less than the City's cumulative health risk thresholds" (CEQA Analysis, pg. 37).

result in a more severe impact than what was previously disclosed in the BVDSP EIR. Commenter offers no substantial or credible evidence that the Project would have peculiar or unusual impacts or impacts that are new or more significant than previously analyzed in the BVDSP EIR. Therefore, the Project is consistent with the applicable CEQA streamlining provisions (i.e., Public Resources Code Section 21083.3 and State CEQA Guidelines Section 15183, Public Resources Code Section 21094.5 and State CEQA Guidelines Section 15183.3, and Public Resources Code Section 21094.5 and State CEQA Guidelines Section 15183.3) and the CEQA Analysis is appropriately tiered from the BVDSP EIR and streamlined environmental review is allowed for the Project.

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Therefore, the Project has fully implemented Mitigation Measure AIR-4. Mitigation Measure AIR-4 is also fully incorporated into the Standard Conditions of Approval and Mitigation Monitoring and Reporting Program (SCAMMRP) for the Project, with the additional note that no further action is required because the Project is below the applicable threshold (cancer risk of less than 100 in one million).

Section D. Greenhouse Gases (GHGs) Emission Analysis

Comment: *SWAPE reviewed the input parameters used to estimate the Project's annual GHG emissions in CalEEMod from all the potential sources. Based on their review, SWAPE claims that the Project's emissions from mobile sources have not been correctly modeled because the default percentages for trip types and lengths utilized in CalEEMod do not accurately reflect the operational trips for the proposed Project.*

SWAPE recommended that 100 percent of the residential trips be allocated to "Home-Other"⁵ types and 100 percent of the retail trips be allocated to "Commercial-Nonwork"⁶ types. SWAPE also recommended that the average vehicle miles travelled for each land use type be based on 100 percent of the primary trip lengths utilized in CalEEMod and not include potential "pass-by" or "diverted" trips. Based on these recommendations, SWAPE claims that the Project's GHG emissions are underestimated and could potentially exceed one of the City's applicable thresholds, which would then require the Project to prepare a GHG Reduction Plan under SCA 38.

Response: As described in the GHG analysis for the proposed Project (Attachment H of the CEQA Analysis),⁷ the most current version of the California Emissions Estimator Model (CalEEMod) was used to estimate the operational emissions of GHGs. Sources of GHG emissions evaluated during operation of the proposed Project included construction, area, energy, mobile, waste, and water. In accordance with CEQA streamlining provisions described under Senate Bill 375, the Project's GHG analysis of mobile sources excluded emissions from cars and light-duty trucks and only evaluated trips associated with medium-duty trucks. As result, the estimated annual GHG emissions from mobile sources would contribute about 0.2% of the Project's total GHG emissions during operation.

The default percentages for trip types and lengths used in CalEEMod are based on a combination of information from specific Air Districts, Caltrans statewide surveys, and/or the Institute of Transportation Engineers Trip Generation Manual. According to the CalEEMod User's Guide, the default percentages of trip types and lengths can be overwritten if users can provide sufficient justification for alternative sources of data (e.g., project-specific traffic study) that demonstrate a different breakdown.

Since this level of information was not developed for the Project as part of the transportation analysis, changes to the default percentages of trip types and lengths in CalEEMod is not justified and these values

⁵ A "Home-Other" trip represents all trip types not related to working or shopping generated by a resident.

⁶ A "Commercial-Nonwork" trip represents a trip type associated with a commercial land use that is not generated by a customer or worker, such as trips made by delivery vehicles of goods associated with the land use.

⁷ BASELINE Environmental Consulting, 2016. *Greenhouse Gases and Climate Change Screening Analysis – 24th and Harrison*. July 11.

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were not modified in the Project’s original GHG analysis. Furthermore, modifying the Project’s default percentages of trip types and lengths in accordance with SWAPE’s recommendation would have a negligible effect on the Project’s overall GHG emissions, as discussed below.

As shown in Table 1 below, implementing SWAPE’s recommendations for modifying the Project’s default trip types and lengths in CalEEMod would increase the Project’s annual GHG emissions by about 0.9 metric tons of carbon dioxide equivalents annually. This proposed increase in GHG emissions would be negligible since the total GHG emissions for the Project would only increase by about 0.08%. Since the modified estimate of GHG emissions would not result in an exceedance of the City’s thresholds of significance, the Project would not need to prepare a GHG Reduction Plan under SCA 38.

Further, even if the Project were to exceed the metric tons GHG threshold (shown in the first column in Table 1) it would not be considered a significant impact, because the Project would still be below the City’s efficiency-based threshold (shown in the second column in Table 1). Therefore, this issue is not a CEQA-related issue and does not need to be addressed in the CEQA Analysis. Rather, if a GHG Reduction Plan is required, which it is not here, it would need to be submitted prior to approval of a construction-related permit, per the SCA.

Table 1: Summary of Average Greenhouse Gas Emissions from Operation of the Project

Emissions Scenario	Original Estimate* (MTCO2e/yr)	Original Estimate* (MTCO2e/yr/SP)	Modified Estimate (MTCO2e/yr)	Modified Estimate (MTCO2e/yr/SP)
Construction	27	0.027	27	0.027
Area	6	0.006	6	0.006
Energy	842	0.866	842	0.866
Mobile	2.0	0.002	2.9	0.003
Waste	125	0.129	125	0.129
Water	60	0.062	60	0.062
Total Project Emissions	1,061	1.09	1,062	1.09
City of Oakland's Thresholds	1,100	4.6	1,100	4.6
Threshold Exceedance?	No	No	No	No

Sources: Original estimates provided by BASELINE (2016).

Modified estimates from CalEEMod results provided in Attachment A.

Notes: MTCO2e/yr = metric tons of carbon dioxide equivalents per year

MTCO2e/yr/SP = metric tons of carbon dioxide equivalents per year per service population

* Original estimate shown in CEQA Analysis.

Attachment A

Modified CalEEMod Results

**24th and Harrison Project
Alameda County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	167.41	1000sqft	0.00	186,726.00	0
Apartments High Rise	450.00	Dwelling Unit	2.28	454,530.00	972
Regional Shopping Center	65.00	1000sqft	0.00	65,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	427	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor changed to the 2013 emission factor reported in PG&E's (2015) Greenhouse Gas Emission Factors: Guidance for PG&E Customers

Land Use - Lot acreage, building square footage, and residential population based on project design for max development scenario.

Non-residential acreages zeroed out since the project is a mixed-use development located on the same footprint.

Construction Phase - No site preparation included because the project site is devoid of vegetation.

Demolition - Building demo assumption: (Area of buildings)(CalEEMod conversion factor)=(63.740 KSF)(0.046 tons/SF)=2,932 tons

Parking Lot demo assumption:(Area of parking lot)(Depth of asphalt)(Density asphalt)=(38.612 KSF)(0.25 ft)(0.0725 tons/ft^3)=700 tons

Grading - 49,000 cubic yards is max amount of soil excavation based on project design.

Architectural Coating -

Vehicle Trips - In accordance with CEQA streamlining under SB 375, cars and light-duty truck trips excluded. Assumed 14 medium-duty truck trips per week for retail and 2 medium-duty truck trips per week for residential. Trip lengths adjusted.

Vehicle Emission Factors - Fleet mix evaluated only includes medium-duty trucks.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No woodstoves or fireplaces.

Energy Use - CO2 intensity factor changed to the 2013 emission factor reported in PG&E's (2015) Greenhouse Gas Emission Factors: Guidance for PG&E Customers.

Water And Wastewater - EBMUD services at the project site and applies 100 percent aerobic process and 100 percent cogeneration.

Energy Mitigation - Current 2013 Title 24 energy standards exceed 2008 Title 24 energy standards by 25%. These emission reductions are considered part of the project's unmitigated emissions.

Water Mitigation - CALGreen Code mandatory requirement. These emission reductions are considered part of the project's unmitigated emissions.

Operational Off-Road Equipment - Empty

Area Coating -

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	247.50	0.00
tblFireplaces	NumberNoFireplace	139.50	0.00
tblFireplaces	NumberWood	63.00	0.00
tblGrading	MaterialExported	0.00	49,000.00
tblLandUse	LandUseSquareFeet	167,410.00	186,726.00
tblLandUse	LandUseSquareFeet	450,000.00	454,530.00

tblLandUse	LotAcreage	3.84	0.00
tblLandUse	LotAcreage	7.26	2.28
tblLandUse	LotAcreage	1.49	0.00
tblLandUse	Population	1,287.00	972.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	427
tblProjectCharacteristics	OperationalYear	2014	2020
tblTripsAndVMT	VendorTripNumber	89.00	86.00
tblTripsAndVMT	WorkerTripNumber	423.00	415.00
tblTripsAndVMT	WorkerTripNumber	85.00	83.00
tblVehicleEF	HHD	0.05	0.00
tblVehicleEF	LDA	0.54	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LHD1	0.03	0.00
tblVehicleEF	LHD2	4.5640e-003	0.00
tblVehicleEF	MCY	5.6840e-003	0.00
tblVehicleEF	MDV	0.11	1.00
tblVehicleEF	MH	1.4180e-003	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	OBUS	1.7890e-003	0.00
tblVehicleEF	SBUS	1.9900e-004	0.00
tblVehicleEF	UBUS	3.6610e-003	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CNW_TTP	19.00	100.00
tblVehicleTrips	CW_TTP	16.30	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	HO_TTP	44.80	100.00

tblVehicleTrips	HS_TTP	29.10	0.00
tblVehicleTrips	HW_TTP	26.10	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	SU_TR	6.07	4.4000e-003
tblVehicleTrips	SU_TR	25.24	0.22
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	42.94	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	2.25	0.00

tblWoodstoves	NumberNoncatalytic	2.25	0.00
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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	2.5467	4.9137	6.4251	0.0128	0.5951	0.2141	0.8093	0.1602	0.2033	0.3635	0.0000	1,057.9003	1,057.9003	0.0845	0.0000	1,059.6749
2018	2.7090	7.1500e-003	0.0163	4.0000e-005	2.2600e-003	4.7000e-004	2.7300e-003	6.0000e-004	4.7000e-004	1.0700e-003	0.0000	2.6701	2.6701	1.7000e-004	0.0000	2.6736
Total	5.2557	4.9209	6.4414	0.0129	0.5974	0.2146	0.8120	0.1608	0.2037	0.3645	0.0000	1,060.5703	1,060.5703	0.0847	0.0000	1,062.3485

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	2.5467	4.9137	6.4250	0.0128	0.5951	0.2141	0.8093	0.1602	0.2033	0.3635	0.0000	1,057.8999	1,057.8999	0.0845	0.0000	1,059.6746
2018	2.7090	7.1500e-003	0.0163	4.0000e-005	2.2600e-003	4.7000e-004	2.7300e-003	6.0000e-004	4.7000e-004	1.0700e-003	0.0000	2.6701	2.6701	1.7000e-004	0.0000	2.6736
Total	5.2557	4.9209	6.4414	0.0129	0.5974	0.2146	0.8120	0.1608	0.2037	0.3645	0.0000	1,060.5700	1,060.5700	0.0847	0.0000	1,062.3482

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	3.3118	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741
Energy	0.0232	0.1989	0.0910	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	934.2861	934.2861	0.0523	0.0141	939.7580
Mobile	1.6700e-003	2.1500e-003	0.0170	4.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.8914	2.8914	1.6000e-004	0.0000	2.8948
Waste						0.0000	0.0000		0.0000	0.0000	55.8733	0.0000	55.8733	3.3020	0.0000	125.2156
Water						0.0000	0.0000		0.0000	0.0000	12.0767	46.9718	59.0485	0.0448	0.0269	68.3344
Total	3.3366	0.2398	3.4625	1.4800e-003	2.1900e-003	0.0345	0.0367	5.8000e-004	0.0345	0.0351	67.9499	989.6114	1,057.5614	3.4046	0.0410	1,141.7768

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3118	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741
Energy	0.0184	0.1583	0.0724	1.0100e-003		0.0127	0.0127		0.0127	0.0127	0.0000	836.6904	836.6904	0.0479	0.0125	841.5837
Mobile	1.6700e-003	2.1500e-003	0.0170	4.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.8914	2.8914	1.6000e-004	0.0000	2.8948
Waste						0.0000	0.0000		0.0000	0.0000	55.8733	0.0000	55.8733	3.3020	0.0000	125.2156
Water						0.0000	0.0000		0.0000	0.0000	9.6613	43.1492	52.8105	0.0362	0.0216	60.2715
Total	3.3319	0.1993	3.4439	1.2300e-003	2.1900e-003	0.0312	0.0334	5.8000e-004	0.0312	0.0318	65.5346	888.1931	953.7277	3.3916	0.0342	1,035.5397

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.14	16.91	0.54	16.89	0.00	9.49	8.92	0.00	9.49	9.33	3.55	10.25	9.82	0.38	16.74	9.30

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Grading	Grading	1/28/2017	2/6/2017	5	6	
3	Building Construction	Building Construction	2/7/2017	12/11/2017	5	220	
4	Paving	Paving	12/12/2017	12/25/2017	5	10	
5	Architectural Coating	Architectural Coating	12/26/2017	1/8/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 920,423; Residential Outdoor: 306,808; Non-Residential Indoor: 377,589; Non-Residential Outdoor: 125,863 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	359.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	6,125.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	415.00	86.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	83.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0389	0.0000	0.0389	5.8800e-003	0.0000	5.8800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4126
Total	0.0272	0.2659	0.2087	2.4000e-004	0.0389	0.0161	0.0549	5.8800e-003	0.0150	0.0209	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4126

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8400e-003	0.0483	0.0428	1.4000e-004	3.0300e-003	6.2000e-004	3.6500e-003	8.3000e-004	5.7000e-004	1.4000e-003	0.0000	12.1744	12.1744	9.0000e-005	0.0000	12.1763
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.6000e-004	6.3100e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0324	1.0324	6.0000e-005	0.0000	1.0336
Total	4.2800e-003	0.0489	0.0491	1.5000e-004	4.2100e-003	6.3000e-004	4.8400e-003	1.1400e-003	5.8000e-004	1.7200e-003	0.0000	13.2068	13.2068	1.5000e-004	0.0000	13.2099

3.2 Demolition - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0389	0.0000	0.0389	5.8800e-003	0.0000	5.8800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4125
Total	0.0272	0.2659	0.2087	2.4000e-004	0.0389	0.0161	0.0549	5.8800e-003	0.0150	0.0209	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4125

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8400e-003	0.0483	0.0428	1.4000e-004	3.0300e-003	6.2000e-004	3.6500e-003	8.3000e-004	5.7000e-004	1.4000e-003	0.0000	12.1744	12.1744	9.0000e-005	0.0000	12.1763
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.6000e-004	6.3100e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0324	1.0324	6.0000e-005	0.0000	1.0336
Total	4.2800e-003	0.0489	0.0491	1.5000e-004	4.2100e-003	6.3000e-004	4.8400e-003	1.1400e-003	5.8000e-004	1.7200e-003	0.0000	13.2068	13.2068	1.5000e-004	0.0000	13.2099

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0224	0.0000	0.0224	0.0105	0.0000	0.0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0900e-003	0.0845	0.0569	6.0000e-005		4.6700e-003	4.6700e-003		4.2900e-003	4.2900e-003	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646
Total	8.0900e-003	0.0845	0.0569	6.0000e-005	0.0224	4.6700e-003	0.0271	0.0105	4.2900e-003	0.0148	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0655	0.8238	0.7296	2.3100e-003	0.0517	0.0106	0.0623	0.0142	9.7600e-003	0.0240	0.0000	207.7109	207.7109	1.5100e-003	0.0000	207.7427
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.5000e-004	1.4600e-003	0.0000	2.7000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2383	0.2383	1.0000e-005	0.0000	0.2385
Total	0.0656	0.8239	0.7311	2.3100e-003	0.0520	0.0106	0.0626	0.0143	9.7600e-003	0.0240	0.0000	207.9492	207.9492	1.5200e-003	0.0000	207.9812

3.3 Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0224	0.0000	0.0224	0.0105	0.0000	0.0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0900e-003	0.0845	0.0569	6.0000e-005		4.6700e-003	4.6700e-003		4.2900e-003	4.2900e-003	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646
Total	8.0900e-003	0.0845	0.0569	6.0000e-005	0.0224	4.6700e-003	0.0271	0.0105	4.2900e-003	0.0148	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0655	0.8238	0.7296	2.3100e-003	0.0517	0.0106	0.0623	0.0142	9.7600e-003	0.0240	0.0000	207.7109	207.7109	1.5100e-003	0.0000	207.7427
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.5000e-004	1.4600e-003	0.0000	2.7000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2383	0.2383	1.0000e-005	0.0000	0.2385
Total	0.0656	0.8239	0.7311	2.3100e-003	0.0520	0.0106	0.0626	0.0143	9.7600e-003	0.0240	0.0000	207.9492	207.9492	1.5200e-003	0.0000	207.9812

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9955	232.9955	0.0518	0.0000	234.0829
Total	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9955	232.9955	0.0518	0.0000	234.0829

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1064	0.8570	1.2998	2.2700e-003	0.0612	0.0125	0.0736	0.0176	0.0115	0.0290	0.0000	202.6938	202.6938	1.5800e-003	0.0000	202.7270
Worker	0.1546	0.2312	2.2164	4.9500e-003	0.4144	3.3700e-003	0.4177	0.1102	3.1000e-003	0.1133	0.0000	362.5464	362.5464	0.0195	0.0000	362.9554
Total	0.2610	1.0882	3.5162	7.2200e-003	0.4755	0.0158	0.4913	0.1278	0.0146	0.1424	0.0000	565.2402	565.2402	0.0211	0.0000	565.6824

3.4 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9952	232.9952	0.0518	0.0000	234.0827
Total	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9952	232.9952	0.0518	0.0000	234.0827

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1064	0.8570	1.2998	2.2700e-003	0.0612	0.0125	0.0736	0.0176	0.0115	0.0290	0.0000	202.6938	202.6938	1.5800e-003	0.0000	202.7270
Worker	0.1546	0.2312	2.2164	4.9500e-003	0.4144	3.3700e-003	0.4177	0.1102	3.1000e-003	0.1133	0.0000	362.5464	362.5464	0.0195	0.0000	362.9554
Total	0.2610	1.0882	3.5162	7.2200e-003	0.4755	0.0158	0.4913	0.1278	0.0146	0.1424	0.0000	565.2402	565.2402	0.0211	0.0000	565.6824

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	3.8000e-004	3.6400e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.5956	0.5956	3.0000e-005	0.0000	0.5963
Total	2.5000e-004	3.8000e-004	3.6400e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.5956	0.5956	3.0000e-005	0.0000	0.5963

3.5 Paving - 2017**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	3.8000e-004	3.6400e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.5956	0.5956	3.0000e-005	0.0000	0.5963
Total	2.5000e-004	3.8000e-004	3.6400e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.5956	0.5956	3.0000e-005	0.0000	0.5963

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8049					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	4.3700e-003	3.7400e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	0.5107	0.5107	5.0000e-005	0.0000	0.5118
Total	1.8056	4.3700e-003	3.7400e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	0.5107	0.5107	5.0000e-005	0.0000	0.5118

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	8.4000e-004	8.0600e-003	2.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3184	1.3184	7.0000e-005	0.0000	1.3198
Total	5.6000e-004	8.4000e-004	8.0600e-003	2.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3184	1.3184	7.0000e-005	0.0000	1.3198

3.6 Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8049					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	4.3700e-003	3.7400e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	0.5107	0.5107	5.0000e-005	0.0000	0.5118
Total	1.8056	4.3700e-003	3.7400e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	0.5107	0.5107	5.0000e-005	0.0000	0.5118

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	8.4000e-004	8.0600e-003	2.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3184	1.3184	7.0000e-005	0.0000	1.3198
Total	5.6000e-004	8.4000e-004	8.0600e-003	2.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3184	1.3184	7.0000e-005	0.0000	1.3198

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.7073					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0200e-003	5.5600e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.7660	0.7660	7.0000e-005	0.0000	0.7675
Total	2.7082	6.0200e-003	5.5600e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.7660	0.7660	7.0000e-005	0.0000	0.7675

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	1.1300e-003	0.0108	3.0000e-005	2.2600e-003	2.0000e-005	2.2800e-003	6.0000e-004	2.0000e-005	6.2000e-004	0.0000	1.9041	1.9041	1.0000e-004	0.0000	1.9061
Total	7.5000e-004	1.1300e-003	0.0108	3.0000e-005	2.2600e-003	2.0000e-005	2.2800e-003	6.0000e-004	2.0000e-005	6.2000e-004	0.0000	1.9041	1.9041	1.0000e-004	0.0000	1.9061

3.6 Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.7073					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0200e-003	5.5600e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.7660	0.7660	7.0000e-005	0.0000	0.7675
Total	2.7082	6.0200e-003	5.5600e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.7660	0.7660	7.0000e-005	0.0000	0.7675

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	1.1300e-003	0.0108	3.0000e-005	2.2600e-003	2.0000e-005	2.2800e-003	6.0000e-004	2.0000e-005	6.2000e-004	0.0000	1.9041	1.9041	1.0000e-004	0.0000	1.9061
Total	7.5000e-004	1.1300e-003	0.0108	3.0000e-005	2.2600e-003	2.0000e-005	2.2800e-003	6.0000e-004	2.0000e-005	6.2000e-004	0.0000	1.9041	1.9041	1.0000e-004	0.0000	1.9061

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6700e-003	2.1500e-003	0.0170	4.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.8914	2.8914	1.6000e-004	0.0000	2.8948
Unmitigated	1.6700e-003	2.1500e-003	0.0170	4.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.8914	2.8914	1.6000e-004	0.0000	2.8948

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	0.00	0.00	1.98	556	556
Enclosed Parking with Elevator	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	14.30	5,428	5,428
Total	0.00	0.00	16.28	5,984	5,984

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	12.40	4.30	5.40	0.00	0.00	100.00	100	0	0
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	0.00	0.00	100.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	654.1614	654.1614	0.0444	9.1900e-003	657.9439
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	705.0271	705.0271	0.0479	9.9100e-003	709.1037
NaturalGas Mitigated	0.0184	0.1583	0.0724	1.0100e-003		0.0127	0.0127		0.0127	0.0127	0.0000	182.5290	182.5290	3.5000e-003	3.3500e-003	183.6398
NaturalGas Unmitigated	0.0232	0.1989	0.0910	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.2590	229.2590	4.3900e-003	4.2000e-003	230.6542

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	312000	1.6800e-003	0.0153	0.0129	9.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	16.6495	16.6495	3.2000e-004	3.1000e-004	16.7508
Apartments High Rise	3.98415e+006	0.0215	0.1836	0.0781	1.1700e-003		0.0148	0.0148		0.0148	0.0148	0.0000	212.6095	212.6095	4.0800e-003	3.9000e-003	213.9034
Total		0.0232	0.1989	0.0910	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.2590	229.2590	4.4000e-003	4.2100e-003	230.6542

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	245375	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0941	13.0941	2.5000e-004	2.4000e-004	13.1738
Apartments High Rise	3.17509e+006	0.0171	0.1463	0.0623	9.3000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	169.4348	169.4348	3.2500e-003	3.1100e-003	170.4660
Total		0.0184	0.1583	0.0724	1.0000e-003		0.0127	0.0127		0.0127	0.0127	0.0000	182.5290	182.5290	3.5000e-003	3.3500e-003	183.6398

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.62691e+006	315.1059	0.0214	4.4300e-003	316.9279
Enclosed Parking with Elevator	1.25853e+006	243.7577	0.0166	3.4300e-003	245.1671
Regional Shopping Center	754650	146.1636	9.9300e-003	2.0500e-003	147.0087
Total		705.0271	0.0479	9.9100e-003	709.1037

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.5918e+006	308.3065	0.0209	4.3300e-003	310.0892
Enclosed Parking with Elevator	1.07554e+006	208.3152	0.0142	2.9300e-003	209.5197
Regional Shopping Center	710125	137.5398	9.3400e-003	1.9300e-003	138.3351
Total		654.1614	0.0444	9.1900e-003	657.9439

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.3118	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741
Unmitigated	3.3118	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.7583					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	0.1023	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741
Total	3.3118	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741

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	tons/yr										MT/yr					
Architectural Coating	0.4512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.7583					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	0.1023	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741
Total	3.3118	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	52.8105	0.0362	0.0216	60.2715
Unmitigated	59.0485	0.0448	0.0269	68.3344

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	29.3193 / 18.4839	50.7686	0.0385	0.0231	58.7451
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.81471 / 2.95095	8.2798	6.3100e-003	3.8000e-003	9.5894
Total		59.0485	0.0448	0.0269	68.3344

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	23.4554 / 18.4839	45.4106	0.0311	0.0186	51.8195
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.85177 / 2.95095	7.3999	5.1000e-003	3.0500e-003	8.4521
Total		52.8105	0.0362	0.0216	60.2715

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	55.8733	3.3020	0.0000	125.2156
Unmitigated	55.8733	3.3020	0.0000	125.2156

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	207	42.0191	2.4833	0.0000	94.1676
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	68.25	13.8541	0.8188	0.0000	31.0480
Total		55.8733	3.3020	0.0000	125.2156

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	207	42.0191	2.4833	0.0000	94.1676
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	68.25	13.8541	0.8188	0.0000	31.0480
Total		55.8733	3.3020	0.0000	125.2156

9.0 Operational Offroad

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