

Attachment C

May 27, 2016 ICF Memorandum



Memorandum

Date:	May 27, 2016
To:	Peterson Z. Vollmann, City of Oakland
From:	ICF International
Subject:	2400 Valdez Project – Response to Appeal from Adams Broadwell Joseph & Cardozo

This memorandum provides responses to the appeal filed by Adams Broadwell Joseph & Cardozo (hereafter, "Adams Broadwell Letter") dated April 29, 2016, as well as the technical comments prepared by Matt Hagemann and Jessie Jaeger (hereafter, "SWAPE letter") dated April 27, 2016, which were attached to that letter, regarding the Oakland Planning Commission's April 20, 2016 decision to approve and adopt the CEQA findings for the 2400 Valdez Street Project (PLN15-336).

The responses to the Adams Broadwell letter are organized into the following topics, which correspond with the topics in the appeal letter:

- I) Reliance on CEQA Exemptions and Addendum for Project Approval
- II) Greenhouse Gas (GHG) Emissions analysis
- III) Heath Risk Assessment (HRA)
- IV) Project-specific hazards

Section I. Response to Comment Regarding the Reliance on CEQA Exemptions and Addendum for Project Approval

The Adams Broadwell letter asserts that the approval of the project cannot rely on exemptions or an addendum because the project has impacts peculiar to the project that are new or more significant than previously analyzed in the Broadway Valdez District Specific Plan Environmental Impact Report (BVDSP) EIR.¹

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,

¹ ESA (Environmental Science Associates). 2013. *Broadway Valdez District Specific Plan, Draft Environmental Impact Report*. SCH No. 2012052008. September.
ESA (Environmental Science Associates). 2014. *Broadway Valdez District Specific Plan, Responses to Comments and Final*. May.
(These documents can be obtained at the Bureau of Planning at 250 Frank Ogawa Plaza, #3115, or online at <http://www2.oaklandnet.com/Government/o/PBN/OurServices/Plans/DOWD008194>.)

such as the project. The City Council certified the BVDSP EIR in accordance with CEQA on June 7, 2014. There was no CEQA lawsuit challenging the certification of the BVDSP EIR 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 following applicable streamlining/tiering and addendum sections of CEQA:

- Community Plan Exemption—CEQA Guidelines Section 15183, which allows streamlined environmental review for projects that are “consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified, except as might be necessary to examine whether there are project specific significant effects which are peculiar to the project or its site.” Section 15183(c) specifies that “if an impact is not peculiar to the parcel or to the proposed project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards ... , then an EIR need not be prepared for the project solely on the basis of that impact.”
- Qualified Infill Exemption—CEQA Guidelines Section 15183.3 allows streamlining for certain qualified infill projects by limiting the topics subject to review at the project level, if the effects of infill development have been addressed in a planning level decision, or by uniformly applying development policies or standards. Infill projects are eligible if they are located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least 75 percent of the site's perimeter; satisfy the performance standards provided in CEQA Guidelines Appendix M; and are consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy. No additional environmental review is required if the infill project would not cause any new specific effects or more significant effects, or if uniformly applicable development policies or standards would substantially mitigate such effects.
- Addendum—CEQA Guidelines Section 15164 states that an addendum to a certified EIR is allowed when minor changes or additions are necessary and none of the conditions for preparation of a subsequent EIR or Negative Declaration pursuant to Section 15162 are satisfied.

The City has relied upon this BVDSP CEQA Analysis framework since 2014 for at least five projects—all of which have been approved and gone unchallenged. Therefore, not only is this the first comment letter of its kind on the City's CEQA Analysis for BVDSP projects, but the Adams Broadwell letter disregards the City's reliance on separate and independent bases for the project's CEQA compliance. As outlined in 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 the Adams Broadwell letter provide credible, persuasive, substantial evidence that the project would result in a new, peculiar, significant environmental impact or a substantial increase in the severity of an environmental impact than determined in the BVDSP EIR. In fact, the Adams Broadwell letter makes numerous misinterpretations of applicable CEQA thresholds for determining significance, and misrepresents many material facts about the project to justify its conclusions. Therefore, the conclusions in the CEQA Analysis are valid and preparation of an EIR is not warranted.

The Adams Broadwell letter also claims that the Addendum determination is improper because it is too long, in excess of 2,000 pages.

The length of the CEQA Analysis is not relevant to a determination of whether or not an Addendum is appropriate. The only relevant test is whether any provisions of CEQA Section 15162 can be satisfied. As the CEQA Analysis shows, none of these provisions requiring preparation of a subsequent EIR or Negative Declaration apply to the project. While the Addendum may have been “long,” it merely documents the project’s consistency with the BVDSP EIR and satisfies CEQA’s primary function as a disclosure document. Its length is primarily a result of the various air quality, GHG and transportation model runs and the document is only roughly 150 pages absent these model runs—which CEQA requires.

Section II. Response to Comment Regarding the Greenhouse Gas (GHG) Emissions Analysis

The Adams Broadwell letter and the SWAPE letter assert that the GHG analysis used flawed energy and natural gas values and that the discrepancy between the energy and natural gas usage values used within the two air models provided in the project’s CEQA Analysis must be explained. The letter also states that the City should prepare a revised CalEEMod model run to accurately assess the project’s GHG impacts.

SUMMARY RESPONSE: The following provides a response to SWAPE’s comments regarding the GHG calculations in the CEQA Analysis:

- Operational electricity and natural gas data provided by the project applicant was erroneous and not representative of typical energy use. (For electricity, the applicant provided Amps for the total residential demand instead of kilowatt hour/dwelling unit/year (kWhr/du/yr), and Amps for the total retail instead of kWhr/1,000 sf/yr. For Natural Gas, the applicant supplied peak gas loads for residential and retail, rather than estimated annual usage per du or per 1,000 sf.)
- ICF recognized this discrepancy in units given for energy and natural gas and elected to use CalEEMod default values instead of erroneous data.
- SWAPE’s analysis incorrectly applied the erroneous project-specific data into its CalEEMod analysis.
- The results in SWAPE’s analysis grossly overstate GHG emissions for any type of urban infill project.
- Table 1 illustrates that typical practice in the BVDSP area is to use the CalEEMod defaults.
- The project does not meet the conditions outlined in the City’s SCA 38 and, therefore, a GHG Reduction Plan is not required.

DETAILED RESPONSE: ICF determined that the CalEEMod analysis run by SWAPE utilized incorrect operational values from ICF’s construction analysis that vastly (and falsely) overstated the emissions impact of the project. The GHG and Climate Change Screening Analysis prepared for the project by ICF is included as Attachment F of the CEQA Analysis.

The BVDSP EIR evaluated impacts related to GHG emissions from construction and operation anticipated under the BVDSP. The EIR identified motor vehicle use, water, gas, electrical use, loss of vegetation, and construction activities as contributing to generation of GHG emissions under the

implementation of the BVDSP. Future projects and development implemented under the BVDSP would be required to be consistent with the City of Oakland Energy and Climate Action Plan, and with SCAs that would reduce GHG emissions during construction and operation of projects. Even with implementation of SCAs, the BVDSP EIR determined that GHG impacts would conservatively remain significant and avoidable.

In addition to receiving the construction data sheet from the project applicant, ICF also received operational inputs for energy uses from the project applicant. Although the project applicant's construction data appeared to be in-line with other similar projects, ICF determined that the operational inputs for energy uses were not representative of typical energy usage for a project of this type. Therefore, ICF used its professional judgment and elected to use standard CalEEMod default values, which would be more typical for urban infill development such as this, rather than the incorrect information provided by the project applicant. The use of the incorrect applicant-supplied data, which SWAPE did utilize, greatly overstates the GHG emissions. Thus, the Adams Broadwell letter inaccurately states that ICF "ignored Applicant-provided data on energy use."

The construction and operational data for the GHG and Climate Change Screening Analysis was not received at one time. As a result, CalEEMod was run twice (the "Construction Emissions" CalEEMod run and the "Operational Emissions" CalEEMod run), which resulted in two output files due to the method by which CalEEMod exports data. The "Construction Emissions" CalEEMod output files in Appendix F-1 of the CEQA Analysis show unused "Operational Emissions" CalEEMod inputs, including the erroneous operational energy usage data provided by the project applicant. The erroneous operational energy usage data provided by the project applicant were not considered in the "Construction Emissions" CalEEMod run. Nevertheless, as stated in Attachment F of the CEQA Analysis, the results from both CalEEMod runs indicate that project emissions would be well below the Bay Area Air Quality Management District (BAAQMD) significance thresholds. One consolidated CalEEMod run using the same (unchanged) inputs as reported in the CEQA Analysis was prepared (see Attachment A to this memorandum) and the results of the consolidated CalEEMod are identical to the results included in Attachment F of the CEQA Analysis. In addition, as shown in Attachment A and discussed further below, the project's GHG emissions are well below the threshold that would trigger the requirement of a GHG Reduction Plan.

The GHG emission results presented in the Adams Broadwell letter, including the emissions per service population (SP) estimate of 45.1 metric tons (MT) carbon dioxide equivalent (CO₂e) per year, are highly unusual for any kind of urban infill project and, in our professional opinion, are grossly overstated when considering the appropriate BAAQMD methodology to establish significance. The CalEEMod model inputs used by SWAPE were compared to those used in the GHG analysis prepared by ICF, as well as with another comparable project in the BVDSP area in Table 1. As noted above, it was determined that the project applicant-supplied operational energy usage data was inaccurate and, therefore, not included in ICF's GHG analysis prepared for the project. This data, however, was incorrectly used as inputs in the SWAPE analysis, which skewed the results of their model run.

As shown in Table 1, the data with the greatest discrepancy between the CalEEMod default values used in the GHG analysis prepared by ICF and the GHG analysis prepared by SWAPE are the electricity and natural gas usage values for nonresidential land uses. Specifically, the CalEEMod default values used in ICF's GHG analysis for nonresidential electricity usage would total approximately 11.77 KWhr per 1,000

sf per year, whereas the inputs used in SWAPE's GHG analysis total 2,500 KWhr per 1,000 sf per year. Similarly, the CalEEMod default values used in ICF's GHG analysis for nonresidential natural gas usage would total approximately 4.8 KBTU (1,000 British thermal units) per 1,000 sf per year, whereas the inputs used in SWAPE's GHG analysis total 1,500 KBTU per 1,000 sf per year. With the exception of natural gas energy intensity for residential land uses, the SWAPE inputs used are substantially higher than the CalEEMod default values used in ICF's GHG analysis and, as a consequence, SWAPE's GHG emissions are grossly overstated for an urban infill development project.

The Adams Broadwell letter and the SWAPE letter assert that a GHG Reduction Plan must be prepared for the project in accordance with the SCAs identified in the BVDSP EIR.

The City's SCA 38 requires a project applicant to prepare a GHG Reduction Plan to increase energy efficiency and reduce GHG emissions to the greatest extent feasible if a project exceeds the BAAQMD CEQA thresholds. The City of Oakland has adopted the BAAQMD's CEQA thresholds of 1,100 MT CO₂e per year or 4.6 MT CO₂e per SP per year.

As stated in Attachment F to the CEQA Analysis, the project's GHG emissions would be below 4.6 MT CO₂e per SP per year, but would exceed the emissions threshold of 1,100 MT CO₂e per year. Thus, as outlined in Scenario B of SCA 38, provided below, the next step is to assess whether the project is considered a very large project.

- **Scenario B:** Projects that
 - a) Involve a land use development;
 - b) Exceed the GHG emissions screening criteria contained in the BAAQMD CEQA Guidelines;
 - c) After a GHG analysis is prepared would exceed at least one of the BAAQMD thresholds of significance (more than 1,100 metric tons of CO₂e annually OR more than 4.6 metric tons of CO₂e per service population annually); AND
 - d) Are considered to be "very large projects."

The project does not meet any of the City's "very large project" criteria. The proposed 225 residential units are below the City's "very large project" 500-dwelling-unit threshold. The retail component of the project would not employ 1,000 persons and would have less than 500,000 square feet of floor space (23,465 square feet of retail). The proposed project would not include commercial office uses, hotel/motel uses, or industrial/manufacturing uses. In addition, the combined project components would not result in equivalent GHG emissions from a very large project. Therefore, because the project would not be considered a very large project, Scenario B does not apply, and a GHG reduction plan would not be required under SCA 38, as suggested in the Adams Broadwell letter. This conclusion is reinforced in Attachment A to this memorandum, which includes a consolidated run of the CalEEMod model that confirms the project would be consistent with the City of Oakland's Energy and Climate Action Plan, as well as the BVDSP, rendering a GHG reduction plan unnecessary. Only if the project is of a certain minimum size and produces total GHG emissions that exceed one or both of the BAAQMD's CEQA thresholds discussed above would the project be required to prepare a GHG reduction plan. As discussed above and analyzed in Attachment F to the CEQA Analysis, the project would not be considered a very large project and, consequently, Scenario B (provided above) does not apply.

Based on the analysis above, the GHG analysis prepared for the project by ICF is accurate, adequate, and supported by substantial evidence.

In addition, it should be noted that the project's emissions likely are even less than what is shown in the CEQA Analysis and repeated in Attachment A to this memorandum. For example, Senate Bill 375 allows for CEQA streamlining via various targeted exemptions for qualifying projects. Specifically, Public Resources Code Section 21159.28 states that, if a residential or mixed-use residential project is consistent with the use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy; and if the project incorporates the mitigation measures required by an applicable prior environmental document (in this case, the BVDSP EIR), then any findings or other determinations for CEQA documentation shall not be required to reference, describe, or discuss specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network. Here, the project qualifies for SB 375 because it is classified as a residential or mixed-use residential project;² is consistent with the use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy; and because it incorporates the mitigation measures required by an applicable prior environmental document (in this case, the BVDSP EIR). As indicated in Table F-2 of the GHG and Climate Change Screening Analysis included as Attachment F of the CEQA Analysis, the project's SP emissions are 4.3 MT CO₂e per SP, which is below BAAQMD's threshold of 4.6 MT CO₂e per SP. Based on a rough estimate, it is anticipated that elimination of cars and light duty trucks from the project's emissions would result in SP emissions of approximately 1.72 MT CO₂e per SP. Even though this estimate is based on removal of all motor vehicle emissions and thus removes vehicles not exempt from the analysis under Senate Bill 375 (e.g., motorcycles, etc.), in all events, application of this exemption would result in the reporting of even lower emissions than what is currently reported in the CEQA Analysis.

² A residential or mixed-use residential project is a project where at least 75 percent of the total building square footage of the project consists of residential use. The project is approximately 83 percent residential, by square foot area.

Table 1. Comparison of GHG Analysis Inputs for Operation of the 2400 Valdez Project, 2315-2330 Webster Project, 3093 Project, Broadway & 27th Project, 23rd Street/Valdez Project, CalEEMod Default Values, and SWAPE Analysis

Land Use	GHG Analysis Prepared for the Project by ICF ^a	GHG Analysis Prepared for the 2315 Valdez - 2330 Webster Project by Another Firm ^b	GHG Analysis Prepared for the 3093 Broadway Project by Another Firm ^b	GHG Analysis Prepared for the Broadway & 27 th Project by ICF ^b	GHG Analysis Prepared for the 23rd Street/Valdez Project by ICF ^b	CalEEMod Default Values	Energy Usage Data Provided by Project Applicant (erroneous units)	GHG Analysis Prepared by SWAPE ^c	Notes Regarding Sources of SWAPE's data
Residential Land Use									
CalEEMod Land Use	Apartments Mid Rise	Apartments Mid Rise	Apartments Mid Rise	Apartments Mid Rise	Apartments Mid Rise			Apartments Mid Rise	
Number of Units	224	265	435	255	196			224	
Trip Rate	Weekday: 3.77 Saturday: 3.77 Sunday: 3.77 ^d	CalEEMod defaults	CalEEMod defaults	Weekday: 3.73 Saturday: 3.73 Sunday: 3.73 ^d	Weekday: 3.81 Saturday: 3.81 Sunday: 3.81 ^d	Weekday: 6.59 Saturday: 7.16 Sunday: 6.07		Weekday: 3.77 Saturday: 3.77 Sunday: 3.77 ^d	
Title-24 Electricity (KWhr/du/yr)	312.05	312.05	312.05	312.05	312.05	312.05	6,000	517.88	SWAPE used erroneous data provided by the project applicant that was not used in either the construction or operational GHG analysis prepared by ICF for the project. The electricity usage inputs in SWAPE's GHG analysis (i.e., 517.88, 4,251.64, and 1,230.49) total 6,000, which corresponds with the energy usage data provided by the project applicant. The natural gas usage inputs in SWAPE's GHG analysis (i.e., 2,680.53 and 619.47) total 3,300, which corresponds with the energy usage data provided by the project applicant.
NonTitle-24 Electricity Energy Intensity (KWhr/du/yr)	2,561.86	2,561.86	2,561.86	2,561.86	2,561.86	2,561.86		4,251.64	
Lighting Energy Intensity (KWhr/du/yr)	741.44	741.44	741.44	741.44	741.44	741.44	1,230.49		
Title-24 Natural Gas Energy Intensity (KBTU/du/yr)	7,191.67	7,191.67	7,191.67	7,191.67	7,191.67	7,191.67	3,300	2,680.53	
NonTitle-24 Natural Gas Energy Intensity (KBTU/du/yr)	1,662	1,662	1,662	1,662	1,662	1,662		619.47	
Non-Residential Land Use									
CalEEMod Land Use	Strip Mall	Strip Mall	Strip Mall	Regional Shopping Center	Regional Shopping Center			Strip Mall	
Size (1,000 sf)	23.46	18.00	24.00	37.71	31.50			23.46	
Trip Rate	Weekday: 24.26 Saturday: 24.26 Sunday: 24.26 ^d	CalEEMod defaults	CalEEMod defaults	Weekday: 24.74 Saturday: 24.74 Sunday: 24.74 ^d	Weekday: 24.34 Saturday: 24.34 Sunday: 24.34 ^d	Strip Mall Weekday: 44.32 Saturday: 42.04 Sunday: 20.43		Weekday: 24.26 Saturday: 24.26 Sunday: 24.26 ^d	

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Land Use	GHG Analysis Prepared for the Project by ICF ^a	GHG Analysis Prepared for the 2315 Valdez - 2330 Webster Project by Another Firm ^b	GHG Analysis Prepared for the 3093 Broadway Project by Another Firm ^b	GHG Analysis Prepared for the Broadway & 27 th Project by ICF ^b	GHG Analysis Prepared for the 23rd Street/Valdez Project by ICF ^b	CalEEMod Default Values	Energy Usage Data Provided by Project Applicant (erroneous units)	GHG Analysis Prepared by SWAPE ^c	Notes Regarding Sources of SWAPE's data
Title-24 Electricity (KWhr/1,000 sf/yr)	2.9	2.9	2.9	2.9	2.9	Strip Mall: 2.9	2,500	590.01	SWAPE used erroneous data provided by the project applicant that was not used in either the construction or operational GHG analysis prepared by ICF for the project. The electricity usage inputs in SWAPE's GHG analysis (i.e., 590.01, 723.51, and 1,186.48) total 2,500, which corresponds with the energy usage data provided by the project applicant. The natural gas usage inputs in SWAPE's GHG analysis (i.e., 1,281.25 and 218.75) total 1,500, which corresponds with the energy usage data provided by the project applicant.
NonTitle-24 Electricity Energy Intensity (KWhr/1,000 sf/yr)	3.36	3.36	3.36	3.36	3.36	Strip Mall: 3.36		723.51	
Lighting Energy Intensity (KWhr/1,000 sf/yr)	5.51	5.51	5.51	5.51	5.51	Strip Mall: 5.51		1,186.48	
Title-24 Natural Gas Energy Intensity (KBTU/1,000 sf/yr)	4.1	4.1	4.1	4.1	4.1	Strip Mall: 4.1	1,500	1,281.25	
NonTitle-24 Natural Gas Energy Intensity (KBTU/1,000 sf/yr)	0.7	0.7	0.7	0.7	0.7	Strip Mall: 0.7		218.75	

KWhr = kilowatt hour; du = dwelling unit; sf = square feet; yr = year; KBTU = 1,000 British thermal units

Notes:
^a CalEEMod default values for electricity and natural gas usage used as input into the "Operational Emissions" CalEEMod run used in the CEQA Analysis.
^b The electricity and natural gas usage values for the CEQA Analyses prepared for the 2315 Valdez - 2330 Webster Project, the 3093 Broadway Project, the Broadway & 27th Project, and the 23rd Street/Valdez Project, which were approved, other projects located in the BVDSF area, are included herein to provide a point of comparison for the values used in the GHG analysis prepared for the project and the analysis prepared by SWAPE.
^c SWAPE inputs are based on the inputs provided in the SWAPE letter dated April 27, 2016. These inputs correspond with the erroneous and unused operational energy usage data provided by the project applicant that were included in the Construction Emissions" CalEEMod output files in Appendix F-1 of the CEQA Analysis. The project applicant did not provide a unit of measure for these data.
^d Trip generation rates were provided by Fehr & Peers, the firm that prepared the transportation analysis for the project, and included in Section 13, Transportation and Circulation, in the CEQA Analysis. The project-specific trip generation rates were input into the "Operational Emissions" CalEEMod run to more accurately portray operational-related emissions associated with the project compared to default CalEEMod default values.
^e Electricity and natural gas usage values that SWAPE used for the residential and non-residential land use types in their analysis of the project are based on flawed electricity and natural gas usage values originally provided by the project applicant. CalEEMod default values for electricity and natural gas usage were subsequently used in the AQ/GHG analysis because of the flawed nature of the project applicant-provided data. The "Construction Emissions" CalEEMod output from the GHG analysis displays these flawed electricity and natural gas usage values because when CalEEMod is run, it outputs emissions from both construction- and operational-related sources, but ICF did not use the CalEEMod operational emissions from the "Construction Emissions" run as the data provided by the project applicant was flawed. SWAPE incorrectly used the flawed data provided by the project applicant to input into CalEEMod and produce wildly inaccurate GHG emissions for operation of the project.

Section III. Response to Comment Regarding the Health Risk Assessment

The Adams Broadwell letter asserts that the CEQA Analysis fails to assess the health risk impacts from construction-related diesel particulate matter (DPM) emissions. The letter further states that compliance with SCAs is not sufficient to justify the omission of an actual health risk assessment. The letter also states that the BVDSP EIR deferred the assessment of construction-related health risks to a stage where project-specific impacts and mitigation measures could be determined.

SUMMARY RESPONSE: The following provides a response to SWAPE's comments regarding the need for a construction HRA:

- The BVDSP EIR disclosed that construction-related health risks would be significant and unavoidable.
- Project construction would not result in a more severe impact than what was disclosed in the BVDSP EIR.
- The BVDSP EIR does not stipulate that a stand-alone HRA is necessary for construction-related impacts.
- There are no additional feasible control measures beyond SCA-AIR-1 available to further reduce construction-related diesel particulate matter emissions.
- Preparing an additional construction-related HRA would result in unnecessary and duplicative studies.
- The project complies with the streamlining/tiering provisions of CEQA.

DETAILED RESPONSE: Impact AIR-4 (construction health risks) was conservatively determined to be significant and unavoidable in the BVDSP EIR. As stated on page 4.2-27 of the BVDSP EIR,

[a]doption and development under the Specific Plan could generate substantial levels of Toxic Air Contaminants (TACs) resulting in (a) a cancer risk level greater than 10 in one million, (b) a non-cancer risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average PM_{2.5} concentration of greater than 0.3 micrograms per cubic meter or, under cumulative conditions, resulting in (a) a cancer risk level greater than 100 in a million, (b) a non-cancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average PM_{2.5} of greater than 0.8 micrograms per cubic meter as a result of construction activities or project operations (Criterion 4).

Construction associated with the project (and other projects in the BVDSP area) would not result in a more severe impact than what was previously disclosed in the BVDSP EIR. Further, as discussed below, there is no 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. 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 for construction-related impacts is required on a project-by-project basis. Preparing a construction-related HRA would result in unnecessary and duplicative studies that would ultimately reach the same conclusions and control measures established in the BVDSP EIR.

Page 4.2-27 of the BVDSP EIR specifies that the construction health risks would be minimized through application of SCA-AIR-1, which requires the following: exposed surfaces be watered; trucks hauling sand, soil, and other loose materials be covered; visible dirt track-out be removed daily; new roads, driveways, sidewalks be paved within one month of grading or as soon as possible, stockpiles be enclosed, covered, and watered twice daily; vehicle speeds on unpaved roads be limited; and idling time be limited. Diesel emissions would be minimized through the application of SCA-AIR-1. Specifically, subsections (g) and (h) of SCA-AIR-1 minimize idling; subsection (i) ensures that construction equipment is running in proper condition; subsection (j) specifies that portable equipment would be powered by electricity if available; subsection (u) requires that equipment meet emissions and performance requirements; subsection (v) requires the use of low volatile organic compound coatings; subsection (w) requires that equipment and diesel trucks be equipped with Best Available Control Technology; and subsection (x) 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 would meet Tier 4 emissions standards in order to comply with subsections (w) and (x); this equipment is considered the best available technology. Beyond SCA-AIR-1, according to ICF, there are no additional feasible control measures available to further reduce construction-related diesel particulate matter (DPM) emissions.

As stated on page 1-2 of the BVDSP EIR,

[t]he City intends to use the streamlining/tiering provisions of CEQA to the maximum feasible extent, so that future environmental review of specific projects are expeditiously undertaken without the need for repetition and redundancy, as provided in CEQA Guidelines section 15152 and elsewhere. Specifically, pursuant to CEQA Guidelines Section 15183, streamlined environmental review is allowed for projects that are consistent with the development density established by zoning, community plan, specific plan, or general plan policies for which an EIR was certified, unless such a project would have environmental impacts peculiar/unique to the project or the project site.

As discussed in Attachment B of the CEQA Analysis prepared for the project, the project is consistent with the land use designation for the site (Central Business District) and the zoning for the site (Broadway Valdez District Retail Priority Sites Commercial Zone 1 (D-BV-1), Retail Priority Site 4A. In addition, the development density of the project is substantially similar to what was considered in the BVDSP. Specifically, the project would be up to 84 feet in height, and would be compliant with the 85 foot height limit on the site as measured at grade. In addition, the project would provide 23,465 square feet of retail space and, thus, would be entitled to a "residential facilities bonus." In accordance with Section 15183.3 of the CEQA Guidelines, the project is consistent with the BVDSP EIR. Finally, based on the transfer of excess residential density from the Broadway & 27th Project located at 2630 Broadway, the 225 dwelling units proposed by the project would comply with the amount of residential density allowed under the Planning Code and fits within the residential assumptions of the BVDSP EIR. Therefore, based on the above, streamlined environmental review is allowed for the project.

More specifically, as discussed on page 2 of the CEQA Analysis, the applicable CEQA streamlining and/or tiering code sections are:

- Public Resources Code Section 21083.3 and State CEQA Guidelines Section 15183, which allow streamlined environmental review for projects that are "consistent with the development density established by existing zoning, community plan, or general plan policies for which an

EIR was certified, except as might be necessary to examine whether there are project-specific significant effects that are peculiar to the project or its site.”

- Public Resources Code Section 21094.5 and State CEQA Guidelines Section 15183.3 allow streamlining for certain qualified infill projects by limiting the topics that are subject to review at the project level, provided the effects of infill development have been addressed in a planning-level decision or by uniformly applicable development policies.
- Public Resources Code Section 21094.5 and State CEQA Guidelines Section 15183.3 allow streamlining for certain qualified infill projects by limiting the topics that are subject to review at the project level, provided the effects of infill development have been addressed in a planning-level decision or by uniformly applicable development policies.

Because the project is consistent with the CEQA streamlining provisions discussed above and the CEQA Analysis is appropriately tiered from the BVDSP EIR, no additional construction HRA is necessary and the control measures outlined in SCA-AIR-1 represent all feasible mitigation.

The Adams Broadwell letter also asserts that the guidance set forth by the Office of Environmental Health Hazard Assessment (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.

SWAPE 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. Regardless of the use of OEHHA’s recommended methodology, a stand-alone construction HRA for the project is not required for the abovementioned reasons.

Section IV. Response to Comment Regarding Project-Specific Hazards

The Adams Broadwell letter asserts that the City of Oakland failed to adequately mitigate and analyze the potential for hazardous conditions at the project site. Specifically, the Adams Broadwell letter asserts that an Environmental Impact Report, including a soil management plan, should be prepared for the project to ensure the protection of public health.

RESPONSE: The project applicant already must implement SCA-HAZ-2, which requires a Health and Safety Plan (the functional equivalent of a soil management plan) to protect project construction workers from risks associated with hazardous materials. This Health and Safety Plan will include, but not be limited to, measures related to personal protective equipment, exposure monitoring, emergency response plan, and a training program. These measures correspond to similar measures that are typically included soil management plans. Therefore, although a soil management plan is not required and does not need to be prepared for the project, public health would be protected through implementation of SCA-HAZ-2.

In addition, as discussed further in the letter prepared by ENGEO dated May 11, 2016 (see Attachment B to this memorandum), the Phase I Environmental Site Assessment (ESA)³ and Phase II ESA⁴ found no

³ ENGEO. 2015. *Phase I Environmental Site Assessment, 2412 Valdez Street, Oakland, California*. Project No. 12238.000.000. July 28. (See Attachment G to the CEQA Analysis)

evidence of significant environmental concerns associated with the site. Consequently, based on the results in the Phase I ESA and Phase II ESA, no regulatory oversight of the project is required that would trigger the need for preparation of a soil management plan.

⁴ ENGEO. 2015. *Phase II Environmental Site Assessment, 2412 Valdez Street, Oakland, California*. Project No. 12238.000.000. August 13. (See Attachment H to the CEQA Analysis)

Attachment A

CalEEMod Version: CalEEMod.2013.2.2

Page 1 of 1

Date: 5/16/2016 5:22 PM

2400 Valdez 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	231.00	Space	0.00	92,400.00	0
Apartments Mid Rise	224.00	Dwelling Unit	1.10	179,545.00	419
Strip Mall	23.46	1000sqft	0.00	23,465.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Project Description

Construction Phase - Per Data Needs Response

Off-road Equipment - Per Data Needs Response

Off-road Equipment - Per Data Needs Response

Off-road Equipment - Per Data Needs Response

Off-road Equipment -

Trips and VMT - 2 trips per worker per day is assumed; 42,000 cy of haul material assumed

Demolition - Used the SF from the PD

Vehicle Trips - Per 2400 Valdez Trip Gen document from Fehr & Peers
 Energy Use - CalEEMod defaults

Table Name	Column Name	Default Value	New Value
tbiConstructionPhase	NumDays	200.00	479.00
tbiConstructionPhase	NumDays	200.00	65.00
tbiConstructionPhase	NumDays	20.00	75.00
tbiConstructionPhase	NumDays	2.00	65.00
tbiConstructionPhase	PhaseEndDate	7/30/2018	7/28/2018
tbiConstructionPhase	PhaseEndDate	6/15/2018	6/14/2018
tbiConstructionPhase	PhaseEndDate	10/26/2018	3/16/2018
tbiConstructionPhase	PhaseStartDate	9/28/2016	9/27/2016
tbiConstructionPhase	PhaseStartDate	3/17/2018	3/16/2018
tbiConstructionPhase	PhaseStartDate	7/29/2018	12/16/2017
tbiLandUse	LandUseSquareFeet	224,000.00	179,545.00
tbiLandUse	LandUseSquareFeet	23,460.00	23,465.00
tbiLandUse	LotAcreage	2.08	0.00
tbiLandUse	LotAcreage	5.89	1.10
tbiLandUse	LotAcreage	0.54	0.00
tbiLandUse	Population	641.00	419.00
tbiOffRoadEquipment	HorsePower	162.00	81.00
tbiOffRoadEquipment	LoadFactor	0.38	0.73
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tbiProjectCharacteristics	OperationalYear	2014	2019
tbiTripsAndVMT	HaulingTripNumber	213.00	2,625.00
tbiTripsAndVMT	WorkerTripNumber	13.00	70.00
tbiTripsAndVMT	WorkerTripNumber	208.00	400.00
tbiTripsAndVMT	WorkerTripNumber	13.00	300.00
tbiVehicleTrips	CC_TTP	64.40	64.70
tbiVehicleTrips	CW_TTP	16.60	16.30
tbiVehicleTrips	DV_TP	40.00	35.00

Year	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
2016	0.4458	3.1841	3.3703	5.7700e-003	0.2039	0.1836	0.3875	0.0520	0.1764	0.2284	0.0000	491.1799	491.1799	0.0565	0.0000	492.3658
2017	0.9940	5.7534	7.2953	0.0133	0.7102	0.3611	1.0713	0.2356	0.3537	0.5893	0.0000	1,070.2554	1,070.2554	0.1083	0.0000	1,072.5299
2018	0.7394	4.6872	5.7952	0.0113	0.6269	0.2600	0.8869	0.2133	0.2516	0.4649	0.0000	900.8434	900.8434	0.1065	0.0000	903.0791
Total	2.1793	13.6247	16.4608	0.0304	1.5410	0.8047	2.3457	0.5008	0.7818	1.2826	0.0000	2,462.2787	2,462.2787	0.2712	0.0000	2,467.9747
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

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr											MT/yr				
Area	1.5656	0.0223	1.9224	3.0000e-004		0.0453	0.0453		0.0453	0.0453	3.6663	8.6443	12.3106	9.4900e-003	3.1000e-004	12.6046
Energy	0.0113	0.0969	0.0435	6.2000e-004		7.8100e-003	7.8100e-003		7.8100e-003	7.8100e-003	0.0000	607.8593	607.8593	0.0246	6.6900e-003	610.4495
Mobile	0.7687	2.0686	7.9705	0.0166	1.0784	0.0285	1.1069	0.2898	0.0262	0.3161	0.0000	1,223.8568	1,223.8568	0.0439	0.0000	1,224.7788
Waste						0.0000	0.0000		0.0000	0.0000	25.9159	0.0000	25.9159	1.5316	0.0000	58.0791
Water						0.0000	0.0000		0.0000	0.0000	5.1815	36.1616	41.3431	0.5338	0.0129	56.6537
Total	2.3457	2.1879	9.9365	0.0175	1.0784	0.0816	1.1600	0.2898	0.0794	0.3692	34.7636	1,876.5220	1,911.2857	2.1434	0.0199	1,962.4657

Mitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										M/yr					
Area	1.5656	0.0223	1.9224	3.0000e-004		0.0453	0.0453		0.0453	0.0453	3.6663	8.6443	12.3106	9.4900e-003	3.1000e-004	12.8046
Energy	0.0113	0.0969	0.0435	6.2000e-004		7.8100e-003	7.8100e-003		7.8100e-003	7.8100e-003	0.0000	607.8593	607.8593	0.0246	6.6900e-003	610.4495
Mobile	0.7687	2.0686	7.9705	0.0166	1.0784	0.0285	1.1069	0.2898	0.0262	0.3161	0.0000	1,223.8568	1,223.8568	0.0439	0.0000	1,224.7788
Waste						0.0000	0.0000		0.0000	0.0000	26.9159	0.0000	26.9159	1.5316	0.0000	58.0791
Water						0.0000	0.0000		0.0000	0.0000	5.1815	36.1616	41.3431	0.5337	0.0129	56.5454
Total	2.3457	2.1879	9.9365	0.0175	1.0784	0.0816	1.1600	0.2898	0.0794	0.3692	34.7636	1,876.5220	1,911.2857	2.1433	0.0199	1,962.4574

Percent Reduction	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	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	0.10	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/15/2016	9/27/2016	5	75	
2	Building Construction	Building Construction	9/27/2016	7/28/2018	5	479	
3	Site Improvements	Site Preparation	12/16/2017	3/16/2018	5	65	
4	Testing/Final Inspection	Building Construction	3/16/2018	6/14/2018	5	65	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	2	8.00	81	0.73
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Air Compressors	6	8.00	78	0.48
Building Construction	Generator Sets	1	8.00	84	0.74
Site Improvements	Off-Highway Trucks	2	8.00	400	0.36
Site Improvements	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	6.00	226	0.29
Testing/Final Inspection	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Testing/Final Inspection	Forklifts	1	6.00	89	0.20
Testing/Final Inspection	Generator Sets	1	8.00	84	0.74
Site Improvements	Graders	1	8.00	174	0.41
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Site Improvements	Rubber Tired Dozers	1	7.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Testing/Final Inspection	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Testing/Final Inspection	Welders	3	8.00	46	0.45

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	70.00	0.00	2,625.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	400.00	43.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Site Improvements	5	300.00	0.00	0.00	12.40	7.30	20.00 LD_Mix	HDT_Mix	HHDT
Testing/Final Inspection	7	208.00	43.00	0.00	12.40	7.30	20.00 LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					0.0231	0.0000	0.0231	3.4900e-003	0.0000	3.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1207	1.1838	0.9116	1.0600e-003		0.0735	0.0735		0.0687	0.0687	0.0000	98.1346	98.1346	0.0255	0.0000	98.6695	
Total	0.1207	1.1838	0.9116	1.0600e-003	0.0231	0.0735	0.0966	3.4900e-003	0.0687	0.0722	0.0000	98.1346	98.1346	0.0255	0.0000	98.6695	

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	0.0293	0.3938	0.3219	9.9000e-004	0.0222	5.1500e-003	0.0273	6.0900e-003	4.7400e-003	0.0108	0.0000	90.5708	90.5708	6.7000e-004	0.0000	90.5850
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	0.0100	0.0149	0.1434	2.8000e-004	0.0238	2.0000e-004	0.0240	6.3400e-003	1.9000e-004	6.5200e-003	0.0000	21.6730	21.6730	1.2300e-003	0.0000	21.6987
Total	0.0394	0.4086	0.4652	1.2700e-003	0.0460	5.3500e-003	0.0513	0.0124	4.9300e-003	0.0174	0.0000	112.2438	112.2438	1.9000e-003	0.0000	112.2837

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					0.0231	0.0000	0.0231	3.4900e-003	0.0000	3.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1207	1.1838	0.9116	1.0500e-003		0.0735	0.0735		0.0687	0.0687	0.0000	98.1345	98.1345	0.0255	0.0000	98.6694
Total	0.1207	1.1838	0.9116	1.0500e-003	0.0231	0.0735	0.0966	3.4900e-003	0.0687	0.0722	0.0000	98.1345	98.1345	0.0255	0.0000	98.6694

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	0.0293	0.3938	0.3219	9.9000e-004	0.0222	5.1500e-003	0.0273	6.0900e-003	4.7400e-003	0.0108	0.0000	90.5708	90.5708	6.7000e-004	0.0000	90.5850
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	0.0100	0.0149	0.1434	2.8000e-004	0.0238	2.0000e-004	0.0240	6.3400e-003	1.9000e-004	6.5200e-003	0.0000	21.6730	21.6730	1.2300e-003	0.0000	21.6987
Total	0.0394	0.4086	0.4652	1.2700e-003	0.0460	5.3500e-003	0.0513	0.0124	4.9300e-003	0.0174	0.0000	112.2438	112.2438	1.9000e-003	0.0000	112.2837

3.3 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2153	1.3636	1.0274	1.5800e-003		0.1014	0.1014		0.0997	0.0997	0.0000	134.5348	134.5348	0.0224	0.0000	135.0050
Total	0.2153	1.3636	1.0274	1.5800e-003		0.1014	0.1014		0.0997	0.0997	0.0000	134.5348	134.5348	0.0224	0.0000	135.0050

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	0.0178	0.1500	0.2124	3.6000e-004	9.5900e-003	2.2600e-003	0.0119	2.7600e-003	2.0800e-003	4.8300e-003	0.0000	32.3292	32.3292	2.6000e-004	0.0000	32.3347
Worker	0.0528	0.0781	0.7538	1.5000e-003	0.1253	1.0700e-003	0.1263	0.0333	9.8000e-004	0.0343	0.0000	113.9378	113.9378	6.4500e-003	0.0000	114.0732
Total	0.0706	0.2281	0.9662	1.8600e-003	0.1349	3.3300e-003	0.1382	0.0361	3.0600e-003	0.0391	0.0000	146.2670	146.2670	6.7100e-003	0.0000	146.4079

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	0.2153	1.3636	1.0274	1.5800e-003		0.1014	0.1014		0.0997	0.0997	0.0000	134.5346	134.5346	0.0224	0.0000	135.0048

Total	0.2153	1.3636	1.0274	1.5800e-003		0.1014	0.1014		0.0997	0.0997	0.0000	134.5346	134.5346	0.0224	0.0000	135.0048
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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										M1/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	0.0178	0.1500	0.2124	3.6000e-004	9.5900e-003	2.2600e-003	0.0119	2.7600e-003	2.0800e-003	4.8300e-003	0.0000	32.3292	32.3292	2.6000e-004	0.0000	32.3347
Worker	0.0528	0.0781	0.7538	1.5000e-003	0.1253	1.0700e-003	0.1263	0.0333	9.8000e-004	0.0343	0.0000	113.9378	113.9378	6.4500e-003	0.0000	114.0732
Total	0.0706	0.2281	0.9662	1.8600e-003	0.1349	3.3300e-003	0.1382	0.0361	3.0600e-003	0.0391	0.0000	146.2670	146.2670	6.7100e-003	0.0000	146.4079

3.3 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										M1/yr					
Off-Road	0.7297	4.7566	3.8032	5.9400e-003		0.3396	0.3396		0.3340	0.3340	0.0000	505.4499	505.4499	0.0784	0.0000	507.0958
Total	0.7297	4.7566	3.8032	5.9400e-003		0.3396	0.3396		0.3340	0.3340	0.0000	505.4499	505.4499	0.0784	0.0000	507.0958

Category	tons/yr										M/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
Vendor	0.0628	0.5064	0.7681	1.3400e-003	0.0361	7.3600e-003	0.0435	0.0104	6.7700e-003	0.0172	0.0000	119.7736	119.7736	9.3000e-004	0.0000	119.7932
Worker	0.1761	0.2633	2.5247	5.6300e-003	0.4720	3.8400e-003	0.4758	0.1256	3.5400e-003	0.1291	0.0000	412.9773	412.9773	0.0222	0.0000	413.4432
Total	0.2390	0.7697	3.2927	6.9700e-003	0.5081	0.0112	0.5193	0.1359	0.0103	0.1462	0.0000	532.7509	532.7509	0.0231	0.0000	533.2364

3.3 Building Construction - 2018
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										M/yr					
Off-Road	0.3729	2.5022	2.1502	3.4300e-003		0.1693	0.1693		0.1666	0.1666	0.0000	290.7302	290.7302	0.0422	0.0000	291.6158
Total	0.3729	2.5022	2.1502	3.4300e-003		0.1693	0.1693		0.1666	0.1666	0.0000	290.7302	290.7302	0.0422	0.0000	291.6158

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										M/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	0.0341	0.2647	0.4243	7.7000e-004	0.0209	3.9400e-003	0.0248	5.9900e-003	3.6200e-003	9.6100e-003	0.0000	67.9097	67.9097	5.3000e-004	0.0000	67.9208

Worker	0.0902	0.1366	1.2990	3.2500e-003	0.2723	2.1300e-003	0.2744	0.0724	1.9700e-003	0.0744	0.0000	229.4075	229.4075	0.0118	0.0000	229.6543
Total	0.1243	0.4013	1.7233	4.0200e-003	0.2932	6.0700e-003	0.2992	0.0784	5.5900e-003	0.0840	0.0000	297.3171	297.3171	0.0123	0.0000	297.5750

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	0.3729	2.5022	2.1502	3.4300e-003		0.1693	0.1693		0.1666	0.1666	0.0000	290.7298	290.7298	0.0422	0.0000	291.6155
Total	0.3729	2.5022	2.1502	3.4300e-003		0.1693	0.1693		0.1666	0.1666	0.0000	290.7298	290.7298	0.0422	0.0000	291.6155

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	0.0341	0.2647	0.4243	7.7000e-004	0.0209	3.9400e-003	0.0248	5.9800e-003	3.6200e-003	9.6100e-003	0.0000	67.9097	67.9097	5.3000e-004	0.0000	67.9208
Worker	0.0902	0.1366	1.2990	3.2500e-003	0.2723	2.1300e-003	0.2744	0.0724	1.9700e-003	0.0744	0.0000	229.4075	229.4075	0.0118	0.0000	229.6543
Total	0.1243	0.4013	1.7233	4.0200e-003	0.2932	6.0700e-003	0.2992	0.0784	5.5900e-003	0.0840	0.0000	297.3171	297.3171	0.0123	0.0000	297.5750

3.4 Site Improvements - 2017

Category	tons/yr									MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.1885	0.0000	0.1885	0.0960	0.0000	0.0960	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0203	0.2195	0.1265	2.2000e-004			0.0102	0.0102	9.3700e-003	9.3700e-003	0.0000	20.1424	20.1424	6.1700e-003	0.0000	20.2720
Total	0.0203	0.2195	0.1265	2.2000e-004	0.1885	0.0102	0.1987	0.0960	9.3700e-003	0.1064	0.0000	20.1424	20.1424	6.1700e-003	0.0000	20.2720

Mitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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	5.0800e-003	7.6000e-003	0.0728	1.6000e-004	0.0136	1.1000e-004	0.0137	3.6200e-003	1.0000e-004	3.7200e-003	0.0000	11.9128	11.9128	6.4000e-004	0.0000	11.9263
Total	5.0800e-003	7.6000e-003	0.0728	1.6000e-004	0.0136	1.1000e-004	0.0137	3.6200e-003	1.0000e-004	3.7200e-003	0.0000	11.9128	11.9128	6.4000e-004	0.0000	11.9263

3.4 Site Improvements - 2018

Unmitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.1885	0.0000	0.1885	0.0960	0.0000	0.0960	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0984	1.0379	0.6382	1.1900e-003			0.0476	0.0476	0.0438	0.0438	0.0000	108.9906	108.9906	0.0339	0.0000	109.7031

Total	0.0984	1.0379	0.6382	1.1900e-003	0.1885	0.0476	0.2361	0.0960	0.0438	0.1398	0.0000	108.9906	108.9906	0.0339	0.0000	109.7031
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0248	0.0376	0.3572	8.9000e-004	0.0749	5.9000e-004	0.0755	0.0199	5.4000e-004	0.0205	0.0000	63.0871	63.0871	3.2300e-003	0.0000	63.1549
Total	0.0248	0.0376	0.3572	8.9000e-004	0.0749	5.9000e-004	0.0755	0.0199	5.4000e-004	0.0205	0.0000	63.0871	63.0871	3.2300e-003	0.0000	63.1549

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					0.1885	0.0000	0.1885	0.0960	0.0000	0.0960	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0984	1.0379	0.6382	1.1900e-003		0.0476	0.0476		0.0438	0.0438	0.0000	108.9905	108.9905	0.0339	0.0000	109.7030
Total	0.0984	1.0379	0.6382	1.1900e-003	0.1885	0.0476	0.2361	0.0960	0.0438	0.1398	0.0000	108.9905	108.9905	0.0339	0.0000	109.7030

Mitigated Construction Off-Site

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	0.0148	0.1147	0.1839	3.3000e-004	9.0400e-003	1.7100e-003	0.0107	2.6000e-003	1.5700e-003	4.1600e-003	0.0000	29.4275	29.4275	2.3000e-004	0.0000	29.4323
Worker	0.0203	0.0308	0.2927	7.3000e-004	0.0614	4.8000e-004	0.0618	0.0163	4.4000e-004	0.0168	0.0000	51.6932	51.6932	2.6500e-003	0.0000	51.7488
Total	0.0351	0.1455	0.4766	1.0600e-003	0.0704	2.1900e-003	0.0726	0.0189	2.0100e-003	0.0209	0.0000	81.1207	81.1207	2.8800e-003	0.0000	81.1811

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										M/yr					
Off-Road	0.0839	0.5628	0.4497	7.1000e-004		0.0342	0.0342		0.0331	0.0331	0.0000	59.5983	59.5983	0.0120	0.0000	59.8496
Total	0.0839	0.5628	0.4497	7.1000e-004		0.0342	0.0342		0.0331	0.0331	0.0000	59.5983	59.5983	0.0120	0.0000	59.8496

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										M/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	0.0148	0.1147	0.1839	3.3000e-004	9.0400e-003	1.7100e-003	0.0107	2.6000e-003	1.5700e-003	4.1600e-003	0.0000	29.4275	29.4275	2.3000e-004	0.0000	29.4323
Worker	0.0203	0.0308	0.2927	7.3000e-004	0.0614	4.8000e-004	0.0618	0.0163	4.4000e-004	0.0168	0.0000	51.6932	51.6932	2.6500e-003	0.0000	51.7488

Total	0.0351	0.1455	0.4766	1.0600e-003	0.0704	2.1900e-003	0.0726	0.0189	2.0100e-003	0.0209	0.0000	81.1207	81.1207	2.8800e-003	0.0000	81.1811
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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Mitigated	0.7687	2.0686	7.9705	0.0166	1.0784	0.0285	1.1069	0.2898	0.0262	0.3161	0.0000	1,223,856 ⁸	1,223,856 ⁸	0.0439	0.0000	1,224,778 ⁸
Unmitigated	0.7687	2.0686	7.9705	0.0166	1.0784	0.0285	1.1069	0.2898	0.0262	0.3161	0.0000	1,223,856 ⁸	1,223,856 ⁸	0.0439	0.0000	1,224,778 ⁸

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	844.48	844.48	844.48	1,885,188	1,885,188
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	569.14	569.14	569.14	997,875	997,875
Total	1,413.62	1,413.62	1,413.62	2,883,064	2,883,064

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.542590	0.062129	0.187184	0.110637	0.030730	0.004573	0.019109	0.050292	0.001784	0.003671	0.005678	0.000201	0.001421

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	496.0166	496.0166	0.0224	4.6400e-003	497.9261
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	496.0166	496.0166	0.0224	4.6400e-003	497.9261
NaturalGas Mitigated	0.0113	0.0969	0.0435	6.2000e-004	7.8100e-003	7.8100e-003	7.8100e-003	7.8100e-003	7.8100e-003	7.8100e-003	0.0000	111.8428	111.8428	2.1400e-003	2.0500e-003	112.5234
NaturalGas Unmitigated	0.0113	0.0969	0.0435	6.2000e-004	7.8100e-003	7.8100e-003	7.8100e-003	7.8100e-003	7.8100e-003	7.8100e-003	0.0000	111.8428	111.8428	2.1400e-003	2.0500e-003	112.5234

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	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
	kBtu/yr	tons/yr										MT/yr					
Strip Mall	112632	6.1000e-004	5.5200e-003	4.6400e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	6.0105	6.0105	1.2000e-004	1.1000e-004	6.0471
Apartments Mid Rise	1.98322e+006	0.0107	0.0914	0.0389	5.8000e-004		7.3900e-003	7.3900e-003		7.3900e-003	7.3900e-003	0.0000	105.8323	105.8323	2.0300e-003	1.9400e-003	106.4764

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	0.0000	0.0000
Total		0.0113	0.0969	0.0435	6.1000e-004		7.8100e-003	7.8100e-003		7.8100e-003	7.8100e-003	0.0000	111.8428	111.8428	2.1500e-003	2.0500e-003	112.5234

Mitigated

Land Use	Natural Gas 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										M/yr					
Strip Mall	112632	6.1000e-004	5.5200e-003	4.6400e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	6.0105	6.0105	1.2000e-004	1.1000e-004	6.0471
Apartments Mid Rise	1.98322e+006	0.0107	0.0914	0.0389	5.8000e-004		7.3900e-003	7.3900e-003		7.3900e-003	7.3900e-003	0.0000	105.8323	105.8323	2.0300e-003	1.9400e-003	106.4764
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
Total		0.0113	0.0969	0.0435	6.1000e-004		7.8100e-003	7.8100e-003		7.8100e-003	7.8100e-003	0.0000	111.8428	111.8428	2.1500e-003	2.0500e-003	112.5234

5.3 Energy by Land Use - Electricity

Unmitigated

Land Use	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	M/yr			
Apartments Mid Rise	809838	235.5913	0.0107	2.2000e-003	236.4982
Enclosed Parking with Elevator	622776	181.1727	8.1900e-003	1.6900e-003	181.8701
Strip Mall	272429	79.2526	3.5800e-003	7.4000e-004	79.5577
Total		496.0166	0.0224	4.6300e-003	497.9261

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	KWh/yr	MT/yr			
Apartments Mid Rise	809838	235.5913	0.0107	2.2000e-003	236.4982
Enclosed Parking with Elevator	622776	181.1727	8.1900e-003	1.6900e-003	181.8701
Strip Mall	272429	79.2526	3.5800e-003	7.4000e-004	79.5577
Total		496.0166	0.0224	4.5300e-003	497.9261

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	1.5656	0.0223	1.9224	3.0000e-004		0.0453	0.0453		0.0453	0.0453	3.6663	8.6443	12.3106	9.4900e-003	3.1000e-004	12.6046
Unmitigated	1.5656	0.0223	1.9224	3.0000e-004		0.0453	0.0453		0.0453	0.0453	3.6663	8.6443	12.3106	9.4900e-003	3.1000e-004	12.6046

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	0.1868					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1537					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1737	2.9500e-003	0.2486	2.1000e-004		0.0362	0.0362		0.0362	0.0362	3.6663	5.9229	9.5892	6.8100e-003	3.1000e-004	9.8269
Landscaping	0.0514	0.0194	1.6738	9.0000e-005		9.1700e-003	9.1700e-003		9.1700e-003	9.1700e-003	0.0000	2.7214	2.7214	2.6800e-003	0.0000	2.7777
Total	1.5656	0.0223	1.9224	3.0000e-004		0.0453	0.0453		0.0453	0.0453	3.6663	8.6443	12.3106	9.4900e-003	3.1000e-004	12.6046

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	0.1868					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1537					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1737	2.9500e-003	0.2486	2.1000e-004		0.0362	0.0362		0.0362	0.0362	3.6663	5.9229	9.5892	6.8100e-003	3.1000e-004	9.8269
Landscaping	0.0514	0.0194	1.6738	9.0000e-005		9.1700e-003	9.1700e-003		9.1700e-003	9.1700e-003	0.0000	2.7214	2.7214	2.6800e-003	0.0000	2.7777
Total	1.5656	0.0223	1.9224	3.0000e-004		0.0453	0.0453		0.0453	0.0453	3.6663	8.6443	12.3106	9.4900e-003	3.1000e-004	12.6046

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	41.3431	0.5337	0.0129	56.5454
Unmitigated	41.3431	0.5338	0.0129	56.5637

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	14.5945 / 9.20088	36.9719	0.4770	0.0115	50.5643
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	1.73774 / 1.06507	4.3712	0.0568	1.3700e-003	5.9895
Total		41.3431	0.5338	0.0129	56.5537

Mitigated

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

Apartments Mid Rise	14.5945 / 9.20088	36.9719	0.4769	0.0115	50.5569
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	1.73774 / 1.06507	4.3712	0.0668	1.3700e-003	5.9886
Total		41.3431	0.5337	0.0129	56.5454

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	25.9159	1.5316	0.0000	58.0791
Unmitigated	25.9159	1.5316	0.0000	58.0791

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
		MT/yr			
Land Use	Tons				
Apartments Mid Rise	103.04	20.9162	1.2361	0.0000	46.8745
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000

Strip Mall	24.63	4.9997	0.2955	0.0000	11.2046
Total		25.9159	1.5316	0.0000	58.0791

Mitigated

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
		M/yr			
Apartments Mid Rise	103.04	20.9162	1.2361	0.0000	46.8745
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	24.63	4.9997	0.2955	0.0000	11.2046
Total		25.9159	1.5316	0.0000	58.0791

9.0 Operational Offroad

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

Project No.
12238.000.000

May 26, 2016

Ms. Erin Efner
ICF International
620 Folsom Street, 2nd Floor
San Francisco, CA 94107

Subject: 2400 Valdez Street
Oakland, California

**RESPONSE TO ADAMS, BROADWELL, JOSEPH & CARDAZO
COMMENTS**

- References:
1. Adams, Broadwell, Joseph and Cardazo; 2400 Valdez Street Project (PLN15-336) Appeal to Oakland City Council Comments; April 29, 2016.
 2. SWAPE; Response to Comments on the 2400 Valdez Street Project; April 27, 2016.

Dear Ms. Efner:

As requested, we are providing our response to comments provided in the referenced Adams, Broadwell, Joseph & Cardazo (ABJC) and SWAPE letters regarding the subject site (Site).

The ABJC and SWAPE letters provide the following comments regarding hazardous materials:

*IV. THE CITY'S RESPONSE STILL FAILS TO ADEQUATELY ANALYZE AND
MITIGATE PROJECT-SPECIFIC HAZARDS*

The ABJC and SWAPE letter indicates that the City of Oakland failed to adequately mitigate and analyze the hazardous conditions on the Site. Specifically, ABJC cited concerns that no regulatory agencies were engaged to provide oversight of the phase I and phase II environmental site assessments, and therefore, the conclusions reached in the CEQA analysis are unreliable for decision-making.

The phase I and II site assessments prepared by ENGEO found no evidence of significant environmental concerns associated with the Site. The Phase I site assessment did not identify any current or prior onsite operations or issues as recognized environmental concerns. A Phase II environmental assessment was conducted to understand the subsurface conditions at the subject property for soil disposal purposes and to evaluate whether neighboring or nearby properties had caused any impact to the subject property. Contrary to the assertions made by ABJC, the analytes detected in the soil samples during the Phase II investigation were either statistically below

background concentrations observed in the San Francisco Bay Area^{1 2} or below the corresponding screening levels, with the exception of one isolated sample.³ This isolated soil sample, out of 21 soil samples collected during the Phase II investigation, had levels of lead above background concentrations and corresponding screening levels, yet were within a range commonly detected in urban soil. This isolated soil sample does not trigger regulatory oversight nor does it trigger a standalone soil management plan. The concentrations identified in onsite soil during the Phase II are typical of the area and are neither unique nor peculiar. Moreover, the CEQA Analysis specifically contemplates additional onsite soil characterization to ensure proper soil handling procedures and appropriate off-site disposal. Based on the results of the Phase I and II environmental site assessments, no regulatory review of the reports beyond that required under the CEQA process and the SCAs is required.

In addition, the ABJC letter states there are no specific provisions for the preparation of a soil management plan to ensure the safe excavation of soils at the project site under regulatory supervision. The SWAPE letter suggests that preparation of such plans is routine where there are concerns that the public or workers may come into contact with conditions that may pose a health hazard. As previously stated, the Phase I and II environmental site assessments did not identify any significant environmental conditions at the Site; therefore, a specific soil management plan for the Site is not warranted.

It is also important to note that, even though further regulatory involvement and a standalone soil management plan are not warranted based on the results of the Phase I and Phase II, the CEQA Analysis specifically incorporates several of the City's Standard Conditions of Approval (SCAs) that would require specific soil management and health and safety protocols. For instance, these SCAs require implementation of specific "best practices" with respect to handling contamination discovered during the construction process. SCA-HAZ-2, for instance, would require that all soil be "stockpiled onsite in a secure and safe manner" and "adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility." Additionally, this SCA would require implementation of "[s]pecific sampling and handling and transport procedures for reuse or disposal . . . in accordance with applicable local, state, and federal requirements" and "submit a Health and Safety Plan for review and approval by the City to protect project construction workers from risks associated with hazardous materials." Therefore, ABJC and SWAPE's concerns about safe soil handling are addressed through the incorporated SCAs.

¹ Kearney, Background Concentrations of Trace Metals and Major Elements in California Soils, March 1996.

² Lawrence Berkeley National Laboratory, University of California, Environmental Restoration Program. Protocol for Determining Background Concentrations of Metals in Soil at Lawrence Berkeley National Laboratory. August 1995.

³ The background cobalt concentrations in the Bay Area range from 6.5 to 25.5 mg/kg and the cobalt concentrations detected during the Phase II investigation ranged from less than 5 to 25 mg/kg. The background concentrations of lead in the San Francisco Bay Area range from 4.8 to 65 mg/kg. With the exception of one isolated sample collected in shallow soil during the Phase II investigation, the lead concentrations ranged from 2 to 25.5 milligrams per kilogram (mg/kg). Minor detections of motor oil were detected in shallow samples in limited areas of the Site. The concentrations of motor oil detected in soil are below the most recent soil exposure Environmental Screening Levels (ESLs)³ for residential land use established by the San Francisco Regional Water Quality Control Board (RWQCB).

ICF International
2400 Valdez Street, Oakland
RESPONSE TO ADAMS, BROADWELL, JOSEPH & CARDAZO COMMENTS

12238.000.000
May 26, 2016
Page 3

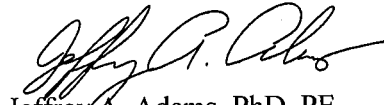
If you have any questions about the contents of this letter or require additional information, please do not hesitate to contact us.

Sincerely,

ENGEO Incorporated



Shawn Munger, CHG


Jeffrey A. Adams, PhD, PE